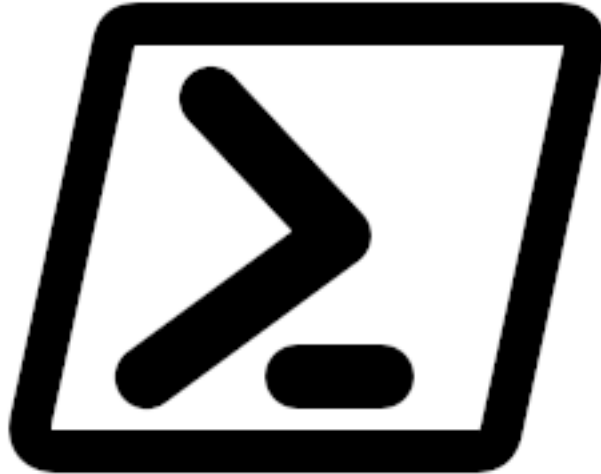


The Powershell Book Generator



PowerShell with ActiveDirectory

The PowerShell Book Generator - Andreas Nick 2019

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Cmdlet: Add-ADCentralAccessPolicyMember

Synops

Adds central access rules to a central access policy in Active Directory.

Syntax

```
Add-ADCentralAccessPolicyMember [-Identity]
<ADCentralAccessPolicy>
    [-Members] <ADCentralAccessRule[]> [-AuthType {Negotiate |
Basic}]
    [-Credential <PSCredential>] [-PassThru] [-Server <String>]
[-Confirm]
    [-WhatIf] [<CommonParameters>]
```

Description

The Add-ADCentralAccessPolicyMember cmdlet adds central access rules to a central access policy in Active Directory.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Manage ment.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Members

Description :Specifies a set of central access rule (CAR) objects in a comma-separated list to add to a central access policy (CAP). To identify each object, use one of the following property values. Note: The identifier in parentheses is the LDAP display name.

Required	true
Position	2
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PassThru

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A ADCentralAccessPolicy object is received by the Identity parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADCentralAccessPolicy

Outputs

Returns the modified ADCentralAccessPolicy object when the PassThru parameter is

specified. By default, this cmdlet does not generate any output.

Type : None or Microsoft.ActiveDirectory.ADCentralAccessPolicy

Notes

Examples

----- EXAMPLE 1 -----

Description

Adds the central access rules 'Finance Documents Rule' and 'Corporate Documents Rule' to the central access policy 'Finance Policy'.

```
C:\PS>Add-ADCentralAccessPolicyMember "Finance Policy" -Member  
"Finance Documents Rule","Corporate Documents Rule"
```

----- EXAMPLE 2 -----

Description

Demonstrates default behavior for this cmdlet (no parameters specified). Adds central access rules 'Finance Documents Rule' and 'Corporate Documents Rule' to the central access policy 'Finance Policy'.

```
C:\PS>Add-ADCentralAccessPolicyMember  
  
cmdlet Add-ADCentralAccessPolicyMember at command pipeline  
position 1  
Supply values for the following parameters:  
Identity: Finance Policy  
Members[0]: Finance Documents Rule  
Members[1]: Corporate Documents Rule  
Members[2]:
```

----- EXAMPLE 3 -----

Description

Gets all central access policies that have a name that starts with "Corporate" and then pipes it to Add-ADCentralAccessPolicyMember, which then adds the central access rule with the name 'Corporate Documents Rule' to it.

```
C:\PS>Get-ADCentralAccessPolicy -Filter { Name -like  
"Corporate*" } | Add-ADCentralAccessPolicyMember -Members  
"Corporate Documents Rule"
```


Cmdlet: Add-ADComputerServiceAccount

Synops

Adds one or more service accounts to an Active Directory computer.

Syntax

```
Add-ADComputerServiceAccount [-Identity] <ADComputer> [-  
ServiceAccount]  
    <ADServiceAccount[]> [-AuthType {Negotiate | Basic}] [-  
Credential  
    <PSCredential>] [-Partition <String>] [-PassThru] [-Server  
<String>]  
    [-Confirm] [-WhatIf] [<CommonParameters>]
```

Description

The Add-ADComputerServiceAccount cmdlet adds one or more computer service accounts to an Active Directory computer.

The Computer parameter specifies the Active Directory computer that will host the new service accounts. You can identify a computer by its distinguished name (DN), GUID, security identifier (SID) or Security Accounts Manager (SAM) account name. You can also set the Computer parameter to a computer object variable, such as \$<localComputerobject>, or pass a computer object through the pipeline to the Computer parameter. For example, you can use the Get-ADComputer cmdlet to retrieve a computer object and then pass the object through the pipeline to the Add-ADComputerServiceAccount cmdlet.

The ServiceAccount parameter specifies the service accounts to add. You can identify a service account by its distinguished name (DN), GUID, Security Identifier (SID) or Security Accounts Manager (SAM) account name. You can also specify service account object variables, such as \$<localServiceAccountObject>. If you are specifying more than one account, use a comma-separated list.

Note: Adding a service account is a different operation than installing the service account locally.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this

parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory computer object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Partition

Description :Specifies the distinguished name of an Active Directory partition. The distinguished name must be one of the naming contexts on the current directory server. The cmdlet searches this partition to find the object defined by the Identity parameter.

Required	false
----------	-------

Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PassThru

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ServiceAccount

Description :Specifies one or more Active Directory service accounts. You can identify a service account by using one of the following property values:

Required	true
Position	2
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A computer object is received by the Computer parameter.

Type : Microsoft.ActiveDirectory.Management.ADComputer

Outputs

Returns the modified computer object when the PassThru parameter is specified. By default, this cmdlet does not generate any output.

Type : None or Microsoft.ActiveDirectory.Management.ADComputer

Notes

Examples

----- EXAMPLE 1 -----

Description

Add the service account 'SvcAcct1' to a Computer Account 'ComputerAcct1'

```
C:\PS>Add-ADComputerServiceAccount -Computer ComputerAcct1 -
serviceAccount SvcAcct1
```

----- EXAMPLE 2 -----

Description

Add 2 service accounts 'SvcAcct1,SvcAcct2' to a Computer Account 'ComputerAcct1'.

```
C:\PS>Add-ADComputerServiceAccount -Computer ComputerAcct1 -  
serviceAccount SvcAcct1,SvcAcct2
```

Cmdlet: Add-ADDomainControllerPasswordReplicationPolicy

Synops

Adds users, computers, and groups to the allowed or denied list of a read-only domain controller password replication policy.

Syntax

```
Add-ADDomainControllerPasswordReplicationPolicy [-Confirm] [-WhatIf]  
    [<CommonParameters>]
```

Description

The Add-ADDomainControllerPasswordReplicationPolicy cmdlet adds one or more users, computers, and groups to the allowed or denied list of a read-only domain controller (RODC) password replication policy.

The Identity parameter specifies the RODC that uses the allowed and denied lists to apply the password replication policy. You can identify a domain controller by its GUID, IPV4Address, global IPV6Address, or DNS host name. You can also identify a domain controller by the name of the server object that represents the domain controller, the Distinguished Name (DN) of the NTDS settings object of the server object, the GUID of the NTDS settings object of the server object under the configuration partition, or the DN of the computer object that represents the domain controller. You can also set the Identity parameter to a domain controller object variable, such as \$<localDomainControllerObject>, or pass a domain controller object through the pipeline to the Identity parameter. For example, you can use the Get-ADDomainController cmdlet to get a domain controller object and then pass the object through the pipeline to the Add-ADDomainControllerPasswordReplicationPolicy cmdlet. You must specify a read-only domain controller. If you specify a writeable domain controller for this parameter, the cmdlet returns a non-terminating error.

The AllowedList parameter specifies the users, computers, and groups to add to the allowed list. Similarly, the DeniedList parameter specifies the users, computers, and groups to add to the denied list. You must specify either one or both of the AllowedList and DeniedList parameters. You can identify a user, computer, or group by distinguished name (DN), GUID, security identifier (SID) or Security Accounts Manager (SAM) account name. You can also specify user, computer, or group variables, such as \$<localUserObject>. If you are specifying more than one item, use a comma-separated

list. If a specified user, computer, or group is not on the allowed or denied list, the cmdlet does not return an error.

Parameters

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A read-only domain controller (RODC) object is received by the Identity parameter.

Type : Microsoft.ActiveDirectory.Management.ADDomainController

Notes

Examples

----- EXAMPLE 1 -----

Description

Adds user accounts to the Allowed list on a given RODC with the specified SamAccountNames.

```
C:\PS>Add-ADDomainControllerPasswordReplicationPolicy -  
Identity "FABRIKAM-RODC1" -AllowedList "JesperAaberg",  
"AdrianaAdams"
```

----- EXAMPLE 2 -----

Description

Adds user accounts to the Allowed list on a given RODC with the specified SamAccountNames.

```
C:\PS>Add-ADDomainControllerPasswordReplicationPolicy -  
Identity "FABRIKAM-RODC1" -DeniedList "MichaelAllen",  
"ElizabethAndersen"
```

Cmdlet: Add-ADFineGrainedPasswordPolicySubject

Synops

Applies a fine-grained password policy to one more users and groups.

Syntax

```
Add-ADFineGrainedPasswordPolicySubject [-Identity]
    <ADFineGrainedPasswordPolicy> [-Subjects] <ADPrincipal[]> [-
AuthType
    {Negotiate | Basic}] [-Credential <PSCredential>] [-Partition
<String>]
    [-PassThru] [-Server <String>] [-Confirm] [-WhatIf]
[<CommonParameters>]
```

Description

The Add-ADFineGrainedPasswordPolicySubject cmdlet applies a fine-grained password policy to one or more global security groups and users.

The Identity parameter specifies the fine-grained password policy to apply. You can identify a fine-grained password policy by its distinguished name, GUID or name. You can also set the Identity parameter to a fine-grained password policy object variable, such as \$<localPasswordPolicyObject>, or pass a fine-grained password policy object through the pipeline to the Identity parameter. For example, you can use the Get-ADFineGrainedPasswordPolicy cmdlet to get a fine-grained password policy object and then pass the object through the pipeline to the Add-ADFineGrainedPasswordPolicySubject cmdlet.

The Subjects parameter specifies the users and global security groups. You can identify a user or global security group by its distinguished name (DN), GUID, security identifier (SID) or Security Accounts Manager (SAM) account name. You can also specify user and global security group object variables, such as \$<localUserObject>. If you are specifying more than one user or group, use a comma-separated list. To pass user and global security group objects through the pipeline to the Subjects parameter, use the Get-ADUser or the Get-ADGroup cmdlets to retrieve the user or group objects, and then pass these objects through the pipeline to the Add-ADFineGrainedPasswordPolicySubject cmdlet.

Parameters

Parameter :AuthType

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory fine-grained password policy object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Partition

Description :Specifies the distinguished name of an Active Directory partition. The distinguished name must be one of the naming contexts on the current directory server. The cmdlet searches this partition to find the object defined by the Identity parameter.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PassThru

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Subjects

Description :Specifies one or more users or groups. To specify more than one user or group, use a comma-separated list. You can identify a user or group by one of the following property values.

Required	true
Position	2
Default value	
Accept pipeline input?	True (ByValue)

Accept wildcard characters?	false
-----------------------------	-------

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A fine-grained password policy object is received by the Identity parameter. One or more principal objects that represent users and security group objects are received by the Subjects parameter. Derived principal types, such as the following are also accepted by the Subjects parameter:

Microsoft.ActiveDirectory.Management.ADGroup

Microsoft.ActiveDirectory.Management.ADUser

Type : Microsoft.ActiveDirectory.Management.ADFineGrainedPasswordPolicy,
Microsoft.ActiveDirectory.Management.ADPrincipal

Outputs

Returns the modified fine-grained password policy object when the PassThru parameter is specified. By default, this cmdlet does not generate any output.

Type : None or Microsoft.ActiveDirectory.Management.ADFineGrainedPasswordPolicy

Notes

Examples

----- EXAMPLE 1 -----

Description

Apply the Fine-Grained Password Policy named DomainUsersPSO to a Global Security Group 'Domain Users'.

```
C:\PS>Add-ADFineGrainedPasswordPolicySubject DomainUsersPSO -  
Subjects 'Domain Users'
```

----- EXAMPLE 2 -----

Description

Apply the Fine-Grained Password Policy named DlgtdAdminsPSO to two users, with SamAccountNames BobKe and KimAb.

```
C:\PS>Add-ADFineGrainedPasswordPolicySubject DlgtdAdminsPSO -  
Subjects BobKe, KimAb
```

----- EXAMPLE 3 -----

Description

Apply the Fine-Grained Password Policy named DlgtdAdminsPSO to the group DlgtdAdminGroup.

```
C:\PS>Add-ADFineGrainedPasswordPolicySubject DlgtdAdminsPSO -  
Subjects DlgtdAdminGroup
```

----- EXAMPLE 4 -----

Description

Apply the Fine-Grained Password Policy named DlgtdAdminsPSO to any users whose last names is John.

```
C:\PS>Get-ADGroup -Filter {lastname -eq "John"} | Add-  
ADFineGrainedPasswordPolicySubject DlgtdAdminsPSO
```


Cmdlet: Add-ADGroupMember

Synops

Adds one or more members to an Active Directory group.

Syntax

```
Add-ADGroupMember [-Identity] <ADGroup> [-Members]
<ADPrincipal[]>
    [-AuthType {Negotiate | Basic}] [-Credential <PSCredential>]
[-Partition
    <String>] [-PassThru] [-Server <String>] [-Confirm] [-WhatIf]

    [<CommonParameters>]
```

Description

The Add-ADGroupMember cmdlet adds one or more users, groups, service accounts, or computers as new members of an Active Directory group.

The Identity parameter specifies the Active Directory group that receives the new members. You can identify a group by its distinguished name (DN), GUID, security identifier (SID) or Security Accounts Manager (SAM) account name. You can also specify group object variable, such as \$<localGroupObject>, or pass a group object through the pipeline to the Identity parameter. For example, you can use the Get-ADGroup cmdlet to get a group object and then pass the object through the pipeline to the Add-ADGroupMember cmdlet.

The Members parameter specifies the new members to add to a group. You can identify a new member by its distinguished name (DN), GUID, security identifier (SID) or SAM account name. You can also specify user, computer, and group object variables, such as \$<localUserObject>. If you are specifying more than one new member, use a comma-separated list. You cannot pass user, computer, or group objects through the pipeline to this cmdlet. To add user, computer, or group objects to a group by using the pipeline, use the Add-ADPrincipalGroupMembership cmdlet.

For AD LDS environments, the Partition parameter must be specified except in the following two conditions:

- The cmdlet is run from an Active Directory provider drive.
- A default naming context or partition is defined for the AD LDS environment. To specify a default naming context for an AD LDS environment, set the msDS-

defaultNamingContext property of the Active Directory directory service agent (DSA) object (nTDSDSA) for the AD LDS instance.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Identity**

Description :Specifies an Active Directory group object by providing one of the following values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :**Members**

Description :Specifies a set of user, group, and computer objects in a comma-separated list to add to a group. To identify each object, use one of the following property values.

Note: The identifier in parentheses is the LDAP display name.

Required	true
Position	2
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Partition**

Description :Specifies the distinguished name of an Active Directory partition. The distinguished name must be one of the naming contexts on the current directory server. The cmdlet searches this partition to find the object defined by the Identity parameter.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**PassThru**

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A group object is received by the Identity parameter.

Type : Microsoft.ActiveDirectory.Management.ADGroup

Outputs

Returns the modified group object when the PassThru parameter is specified. By default, this cmdlet does not generate any output.

Type : None or Microsoft.ActiveDirectory.Management.ADGroup

Notes

Examples

----- EXAMPLE 1 -----

Description

Adds the user accounts with SamAccountNames SQL01,SQL02 to the group SvcAccPSOGroup.

```
C:\PS>Add-ADGroupMember SvcAccPSOGroup SQL01,SQL02
```

----- EXAMPLE 2 -----

Description

Demonstrates default behavior for this cmdlet (no parameters specified). Adds user accounts with SamAccountNames JohnSmith and JeffPrice to the group RodcAdmins.

```
C:\PS>Add-ADGroupMember

cmdlet Add-ADGroupMember at command pipeline position 1
Supply values for the following parameters:
Identity: RodcAdmins
Members[0]: JohnSmith
Members[1]: JeffPrice
Members[2]:
```

----- EXAMPLE 3 -----

Description

Gets a group from the Organizational Unit "OU=AccountDeptOU,DC=AppNC" in the AD LDS instance localhost:60000 that has the name "AccountLeads" and then pipes it to Add-ADGroupMember, which then adds the user account with DistinguishedName "CN=SanjayPatel,OU=AccountDeptOU,DC=AppNC" to it.

```
C:\PS>Get-ADGroup -Server localhost:60000 -SearchBase
"OU=AccountDeptOU,DC=AppNC" -filter { name -like
"AccountLeads" } | Add-ADGroupMember -Members
"CN=SanjayPatel,OU=AccountDeptOU,DC=AppNC"
```

----- EXAMPLE 4 -----

Description

Adds the user "CN=Glen John,OU=UserAccounts" from the North America domain to the

group "CN=AccountLeads,OU=UserAccounts" in the Europe domain.

```
C:\PS>$user = Get-ADUser "CN=Glen  
John,OU=UserAccounts,DC=NORTHAMERICA,DC=FABRIKAM,DC=COM" -  
Server "northamerica.fabrikam.com";  
$group = Get-ADGroup  
"CN=AccountLeads,OU=UserAccounts,DC=EUROPE,DC=FABRIKAM,DC=COM"  
-Server "europe.fabrikam.com";  
Add-ADGroupMember $group -Member $user -Server  
"europe.fabrikam.com"
```

Cmdlet: Add-ADPrincipalGroupMembership

Synops

Adds a member to one or more Active Directory groups.

Syntax

```
Add-ADPrincipalGroupMembership [-Identity] <ADPrincipal> [-MemberOf]
    <ADGroup[]> [-AuthType {Negotiate | Basic}] [-Credential
    <PSCredential>]
    [-Partition <String>] [-PassThru] [-Server <String>] [-Confirm] [-WhatIf]
    [<CommonParameters>]
```

Description

The Add-ADPrincipalGroupMembership cmdlet adds a user, group, service account, or computer as a new member to one or more Active Directory groups.

The Identity parameter specifies the new user, computer, or group to add. You can identify the user, group, or computer by its distinguished name (DN), GUID, security identifier (SID), or SAM account name. You can also specify a user, group, or computer object variable, such as \$<localGroupObject>, or pass an object through the pipeline to the Identity parameter. For example, you can use the Get-ADGroup cmdlet to get a group object and then pass the object through the pipeline to the Add-ADPrincipalGroupMembership cmdlet. Similarly, you can use Get-ADUser or Get-ADComputer to get user and computer objects to pass through the pipeline.

This cmdlet collects all of the user, computer and group objects from the pipeline, and then adds these objects to the specified group by using one Active Directory operation.

The MemberOf parameter specifies the groups that receive the new member. You can identify a group by its distinguished name (DN), GUID, security identifier (SID), or Security Accounts Manager (SAM) account name. You can also specify group object variable, such as \$<localGroupObject>. To specify more than one group, use a comma-separated list. You cannot pass group objects through the pipeline to the MemberOf parameter. To add to a group by passing the group through the pipeline, use the Add-ADGroupMember cmdlet.

For AD LDS environments, the Partition parameter must be specified except in the following two conditions:

- The cmdlet is run from an Active Directory provider drive.
- A default naming context or partition is defined for the AD LDS environment. To specify a default naming context for an AD LDS environment, set the msDS-defaultNamingContext property of the Active Directory directory service agent (DSA) object (nTDSDSA) for the AD LDS instance.

Parameters

Parameter :AuthType

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory principal object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	

Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :**MemberOf**

Description :Specifies the Active Directory groups to add a user, computer, or group to as a member. You can identify a group by providing one of the following values. Note: The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	2
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Partition**

Description :Specifies the distinguished name of an Active Directory partition. The distinguished name must be one of the naming contexts on the current directory server. The cmdlet searches this partition to find the object defined by the Identity parameter.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**PassThru**

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by

providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A principal object (Microsoft.ActiveDirectory.Management.ADPrincipal) that represents a user, computer or group is received by the Identity parameter. Derived types, such as the following are also received by this parameter.

Microsoft.ActiveDirectory.Management.ADUser

Microsoft.ActiveDirectory.Management.ADComputer

Microsoft.ActiveDirectory.Management.ADServiceAccount

Microsoft.ActiveDirectory.Management.ADGroup

Type : Microsoft.ActiveDirectory.Management.ADPrincipal

Outputs

Returns a principal object that represents the modified user, computer or group object when the PassThru parameter is specified. By default, this cmdlet does not generate any output.

Type : None or Microsoft.ActiveDirectory.Management.ADPrincipal

Notes

Examples

----- EXAMPLE 1 -----

Description

Adds the user with SamAccountName "SQLAdmin1" to the group "DlgtdAdminsPSOGroup".

```
C:\PS>Add-ADPrincipalGroupMembership -Identity SQLAdmin1 -MemberOf DlgtdAdminsPSOGroup
```

----- EXAMPLE 2 -----

Description

Gets all users with "SvcAccount" in their name and adds it to the group "SvcAccPSOGroup".

```
C:\PS>Get-ADUser -Filter 'Name -like "*SvcAccount*"' | Add-ADPrincipalGroupMembership -MemberOf SvcAccPSOGroup
```

----- EXAMPLE 3 -----

Description

Demonstrates the default behavior of this cmdlet (no parameters specified).

```
C:\PS>Add-ADPrincipalGroupMembership
```

```
cmdlet Add-ADPrincipalGroupMembership at command pipeline  
position 1
```

```
Supply values for the following parameters:
```

```
Identity: JeffPrice
```

```
MemberOf[0]: RodcAdmins
```

```
MemberOf[1]: Allowed RODC Password Replication Group
```

```
MemberOf[2]:
```

----- EXAMPLE 4 -----

Description

Adds all employees in "Branch1" in the AD LDS instance "localhost:60000" whose title is "Account Lead" to the group with the DistinguishedName "CN=AccountLeads,OU=AccountDeptOU,DC=AppNC".

```
C:\PS>Get-ADUser -Server localhost:60000 -SearchBase  
"DC=AppNC" -filter { Title -eq "Account Lead" -and Office -eq  
"Branch1" } | Add-ADPrincipalGroupMembership -MemberOf  
"CN=AccountLeads,OU=AccountDeptOU,DC=AppNC"
```

Cmdlet: Add-ADResourcePropertyListMember

Synops

Adds one or more resource properties to a resource property list in Active Directory.

Syntax

```
Add-ADResourcePropertyListMember [-Identity]
<ADResourcePropertyList>
    [-Members] <ADResourceProperty[]> [-AuthType {Negotiate |
Basic}]
    [-Credential <PSCredential>] [-PassThru] [-Server <String>]
[-Confirm]
    [-WhatIf] [<CommonParameters>]
```

Description

The Add-ADResourcePropertyListMember adds one or more resource properties to a resource property list in Active Directory.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Manage ment.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Members

Description :Specifies a set of ADResourceProperty objects in a comma-separated list to add to a resource property list. To identify each object, use one of the following property values. Note: The identifier in parentheses is the LDAP display name.

Required	true
Position	2
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PassThru

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A ADClaimTypeList object is received by the Identity parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADClaimTypeList

Outputs

Returns the modified ADClaimTypeList object when the PassThru parameter is specified.

By default, this cmdlet does not generate any output.

Type : None or Microsoft.ActiveDirectory.Management.ADClaimTypeList

Notes

Examples

----- EXAMPLE 1 -----

Description

Adds the resource properties named "Country" and "Authors" to the global resource property list.

```
C:\PS>Add-ADResourcePropertyListMember "Global Resource  
Property List" -Members Country,Authors
```

----- EXAMPLE 2 -----

Description

Demonstrates default behavior for this cmdlet (no parameters specified). Adds the resource properties named "Country" and "Authors" to the resource property list named "Corporate Resource Property List".

```
C:\PS>Add-ADResourcePropertyListMember  
  
cmdlet Add-ADResourcePropertyListMember at command pipeline  
position 1  
Supply values for the following parameters:  
Identity: Corporate Resource Property List  
Members[0]: Country  
Members[1]: Authors  
Members[2]:
```

----- EXAMPLE 3 -----

Description

Gets any resource property list that has a name that begins with "Corporate" and then pipes it to Add-ADResourcePropertyListMember, which then adds the resource properties with the name 'Country' and 'Authors' to it.

```
C:\PS>Get-ADResourcePropertyList -Filter { Name -like  
"Corporate*" } | Add-ADResourcePropertyListMember -Members  
Country,Authors
```


Cmdlet: Clear-ADAccountExpiration

Synops

Clears the expiration date for an Active Directory account.

Syntax

```
Clear-ADAccountExpiration [-Identity] <ADAccount> [-AuthType  
{Negotiate |  
    Basic}] [-Credential <PSCredential>] [-Partition <String>] [-  
PassThru]  
    [-Server <String>] [-Confirm] [-WhatIf] [<CommonParameters>]
```

Description

The Clear-ADAccountExpiration cmdlet clears the expiration date for an Active Directory user or computer account. When you clear the expiration date for an account, the account does not expire.

The Identity parameter specifies the user or computer account to modify. You can identify a user or group by its distinguished name (DN), GUID, security identifier (SID), or Security Accounts Manager (SAM) account name. You can also set the Identity parameter to a user or computer object variable, such as \$<localUserObject>, or pass a user or computer object through the pipeline to the Identity parameter. For example, you can use the Get-ADUser, Get-ADComputer or Search-ADAccount cmdlet to retrieve an object and then pass the object through the pipeline to the Clear-ADAccountExpiration cmdlet.

For AD LDS environments, the Partition parameter must be specified except in the following two conditions:

- The cmdlet is run from an Active Directory provider drive.
- A default naming context or partition is defined for the AD LDS environment. To specify a default naming context for an AD LDS environment, set the msDS-defaultNamingContext property of the Active Directory directory service agent (DSA) object (nTDSDSA) for the AD LDS instance.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this

parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory account object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Partition

Description :Specifies the distinguished name of an Active Directory partition. The distinguished name must be one of the naming contexts on the current directory server. The cmdlet searches this partition to find the object defined by the Identity parameter.

Required	false
----------	-------

Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PassThru

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Confirm

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :WhatIf

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

An account object (Microsoft.ActiveDirectory.Management.ADAccount) is received by the Identity parameter.

Derived types, such as the following are also accepted:

Microsoft.ActiveDirectory.Management.ADUser

Microsoft.ActiveDirectory.Management.ADComputer

Microsoft.ActiveDirectory.Management.ADSERVICEACCOUNT

Type : Microsoft.ActiveDirectory.Management.ADAccount

Notes

Examples

----- EXAMPLE 1 -----

Description

Clears the account expiration date for the user with SamAccountName: JeffPrice.

```
C:\PS>Clear-ADAccountExpiration -Identity JeffPrice
```

----- EXAMPLE 2 -----

Description

Clears the account expiration date for the user with DistinguishedName:

"CN=JeffPrice,DC=AppNC" on the AD LDS instance: "FABRIKAM-SVR1:60000".

```
C:\PS>Clear-ADAccountExpiration -Identity  
"CN=JeffPrice,DC=AppNC" -server "FABRIKAM-SVR1:60000"
```


Cmdlet: Clear-ADClaimTransformLink

Synops

Removes a claims transformation from being applied to one or more cross-forest trust relationships in Active Directory.

Syntax

```
Clear-ADClaimTransformLink [-Identity] <ADTrust> [-AuthType  
{Negotiate |  
    Basic}] [-Credential <PSCredential>] [-PassThru] [-Policy  
    <ADClaimTransformPolicy>] [-Server <String>] [-TrustRole  
{Trusted |  
    Trusting}] [-Confirm] [-WhatIf] [<CommonParameters>]
```

Description

The Clear-ADClaimTransformLink cmdlet removes a claims transformation from being applied to one or more cross-forest trust relationships in Active Directory.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Manage ment.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory trust object by providing one of the following values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :PassThru

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Policy

Description :Removes the specified claim transformation policy from being applied to the trust relationship.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**TrustRole**

Description :Specifies the role of the current forest in the trust relationship specified by the Identity parameter. The allowable values for this parameter are as follows:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false

Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

An account object (Microsoft.ActiveDirectory.Management.ADTrust) is received by the Identity parameter.

Type : Microsoft.ActiveDirectory.Management.ADTrust

Examples

----- EXAMPLE 1 -----

Description

Remove the policy named 'DenyAllPolicy' from the 'corp.contoso.com' trust.

```
C:\PS>Clear-ADClaimTransformLink "corp.contoso.com" -Policy DenyAllPolicy
```

----- EXAMPLE 2 -----

Description

Remove any policies that are applied to where this forest acts as the trusted forest in the "corp.contoso.com" trust. Effectively, this cmdlet removes any policies that are applied to claims flowing out of this forest towards its trust partner.

```
C:\PS>Clear-ADClaimTransformLink "corp.contoso.com" -TrustRole Trusted
```

----- EXAMPLE 3 -----

Description

Remove "DenyAllPolicy" that is applied to where this forest acts as the trusted domain in the "corp.contoso.com" trust. Effectively, this cmdlet removes "DenyAllPolicy" from applying to claims coming into this from its trust partner.

```
C:\PS>Clear-ADClaimTransformLink "corp.contoso.com" -Policy DenyAllPolicy -TrustRole Trusting
```


Cmdlet: Disable-ADAccount

Synops

Disables an Active Directory account.

Syntax

```
Disable-ADAccount [-Identity] <ADAccount> [-AuthType {Negotiate |  
Basic}]  
    [-Credential <PSCredential>] [-Partition <String>] [-  
PassThru] [-Server  
    <String>] [-Confirm] [-WhatIf] [<CommonParameters>]
```

Description

The Disable-ADAccount cmdlet disables an Active Directory user, computer, or service account.

The Identity parameter specifies the Active Directory user, computer service account, or other service account that you want to disable. You can identify an account by its distinguished name (DN), GUID, security identifier (SID), or Security Accounts Manager (SAM) account name. You can also set the Identity parameter to an object variable such as \$<localADAccountObject>, or you can pass an account object through the pipeline to the Identity parameter. For example, you can use the Get-ADUser cmdlet to retrieve a user account object and then pass the object through the pipeline to the Disable-Account cmdlet. Similarly, you can use Get-ADComputer and Search-ADAccount to retrieve account objects.

For AD LDS environments, the Partition parameter must be specified except in the following two conditions:

- The cmdlet is run from an Active Directory provider drive.
- A default naming context or partition is defined for the AD LDS environment. To specify a default naming context for an AD LDS environment, set the msDS-defaultNamingContext property of the Active Directory directory service agent (DSA) object (nTDSDSA) for the AD LDS instance.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this

parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory account object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Partition

Description :Specifies the distinguished name of an Active Directory partition. The distinguished name must be one of the naming contexts on the current directory server. The cmdlet searches this partition to find the object defined by the Identity parameter.

Required	false
----------	-------

Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PassThru

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Confirm

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :WhatIf

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

An account object is received by the Identity parameter.

Derived types, such as the following are also accepted:

Microsoft.ActiveDirectory.Management.ADUser

Microsoft.ActiveDirectory.Management.ADComputer

Microsoft.ActiveDirectory.Management.ADServiceAccount

Type : Microsoft.ActiveDirectory.Management.ADAccount

Notes

Examples

----- EXAMPLE 1 -----

Description

Disables the account with SamAccountName: KimAB.

```
C:\PS>Disable-ADAccount -Identity KimAb
```

----- EXAMPLE 2 -----

Description

Disables the account with DistinguishedName: "CN=Kim

Abercrombie,OU=Finance,OU=UserAccounts,DC=FABRIKAM,DC=COM".

```
C:\PS>Disable-ADAccount -Identity "CN=Kim  
Abercrombie,OU=Finance,OU=UserAccounts,DC=FABRIKAM,DC=COM"
```

----- EXAMPLE 3 -----

Description

Disables all accounts in the OU:

"OU=Finance,OU=UserAccounts,DC=FABRIKAM,DC=COM".

```
C:\PS>Get-ADUser -Filter 'Name -like "*"' -SearchBase  
"OU=Finance,OU=UserAccounts,DC=FABRIKAM,DC=COM" | Disable-  
ADAccount
```

Cmdlet: Disable-ADOptionalFeature

Synops

Disables an Active Directory optional feature.

Syntax

```
Disable-ADOptionalFeature [-Identity] <ADOptionalFeature> [-  
Scope]  
    {Unknown | ForestOrConfigurationSet | Domain} [-Target]  
<ADEntity>  
    [-AuthType {Negotiate | Basic}] [-Credential <PSCredential>]  
[-PassThru]  
    [-Server <String>] [-Confirm] [-WhatIf] [<CommonParameters>]
```

Description

The Disable-ADOptionalFeature disables an Active Directory optional feature that is associated with a particular Domain Mode or Forest Mode.

The Identity parameter specifies the Active Directory optional feature that you want to disable. You can identify an optional feature by its distinguished name (DN), feature GUID, or object GUID. You can also set the parameter to an optional feature object variable, such as \$<localOptionalFeatureObject> or you can pass an optional feature object through the pipeline to the Identity parameter. For example, you can use the Get-ADOptionalFeature cmdlet to retrieve an optional feature object and then pass the object through the pipeline to the Disable-ADOptionalFeature cmdlet.

The Scope parameter specifies the scope at which the optional feature is disabled. Possible values for this parameter are Domain and Forest.

The Target parameter specifies the domain or forest on which the optional feature is disabled. You can identify the domain or forest by its fully-qualified domain name (FQDN), NetBIOS name, or the distinguished name (DN) of the domain naming context (domain NC).

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory optional feature object by providing one of the following values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :PassThru

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false

Accept wildcard characters?	false
-----------------------------	-------

Parameter :Scope

Description :Specifies the scope at which the feature is enabled or disabled. Possible values for this parameter include:

Required	true
Position	3
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Target

Description :Specifies the domain or forest in which to modify the optional feature. You can identify the target domain or forest by providing one of the following values:

Required	true
Position	4
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Confirm

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

An optional feature object is received by the Identity parameter.

Type : Microsoft.ActiveDirectory.Management.ADOptionalFeature

Notes

Examples

----- EXAMPLE 1 -----

Description

Disable the optional feature (name 'Feature 1') for the forest (NetBIOS name 'fabrikam'). This operation should be performed against the DC that holds the naming master FSMO role.

```
C:\PS>Disable-ADOptionalFeature 'Feature 1' -Scope
ForestOrConfigurationSet -Target 'fabrikam' -Server DC1
```

----- EXAMPLE 2 -----

Description

Disable the optional feature (dn 'CN=Feature 1,CN=Optional Features,CN=Directory Service,CN=Windows NT,CN=Services,CN=Configuration,DC=fabrikam,DC=com') for

the forest (FQDN name 'fabrikam.com'). This operation should be performed against the DC that holds the naming master FSMO role.

```
C:\PS>Disable-ADOptionalFeature -Identity 'CN=Feature
1,CN=Optional Features,CN=Directory Service,CN=Windows
NT,CN=Services,CN=Configuration,DC=fabrikam,DC=com' -Scope
ForestOrConfigurationSet -Target 'fabrikam.com' -Server DC1
```

----- EXAMPLE 3 -----

Description

Disable the optional feature (feature GUID '54ec6e43-75a8-445b-aa7b-346a1e096659') for the domain (dn 'DC=ntdev,DC=fabrikam,DC=com'). This operation should be performed against the DC that holds the naming master FSMO role.

```
C:\PS>Disable-ADOptionalFeature -Identity '54ec6e43-75a8-445b-
aa7b-346a1e096659' -Scope Domain -Target 'DC=fabrikam,DC=com'
-Server DC1
```

----- EXAMPLE 4 -----

Description

Disable the optional feature (name 'Feature 1') for the AD LDS instance (dn 'CN=Configuration,CN={0241853A-6BBF-48AA-8AE0-9C35D0C91B7B}'). This operation should be performed against the AD LDS instance that holds the naming master FSMO role.

```
C:\PS>Disable-ADOptionalFeature 'Feature 1' -Scope
ForestOrConfigurationSet -Target
'CN=Configuration,CN={0241853A-6BBF-48AA-8AE0-9C35D0C91B7B}' -
server server1:50000
```

Cmdlet: Enable-ADAccount

Synops

Enables an Active Directory account.

Syntax

```
Enable-ADAccount [-Identity] <ADAccount> [-AuthType {Negotiate |  
Basic}]  
    [-Credential <PSCredential>] [-Partition <String>] [-  
PassThru] [-Server  
    <String>] [-Confirm] [-WhatIf] [<CommonParameters>]
```

Description

The Enable-ADAccount cmdlet enables an Active Directory user, computer or service account.

The Identity parameter specifies the Active Directory user, computer or service account that you want to enable. You can identify an account by its distinguished name (DN), GUID, security identifier (SID) or Security Accounts Manager (SAM) account name. You can also set the Identity parameter to an object variable such as \$<localADAccountObject>, or you can pass an account object through the pipeline to the Identity parameter. For example, you can use the Get-ADUser cmdlet to retrieve an account object and then pass the object through the pipeline to the Enable-ADAccount cmdlet. Similarly, you can use Get-ADComputer and Search-ADAccount to retrieve account objects.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Manage ment.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory account object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Partition

Description :Specifies the distinguished name of an Active Directory partition. The distinguished name must be one of the naming contexts on the current directory server. The cmdlet searches this partition to find the object defined by the Identity parameter.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PassThru

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

An account object is received by the Identity parameter.

Derived types, such as the following are also accepted:

Microsoft.ActiveDirectory.Management.ADUser

Microsoft.ActiveDirectory.Management.ADComputer

Microsoft.ActiveDirectory.Management.ADSERVICEACCOUNT

Type : Microsoft.ActiveDirectory.Management.ADAccount

Notes

Examples

----- EXAMPLE 1 -----

Description

Enables the account with SamAccountName: KimAb.

```
C:\PS>Enable-ADAccount -Identity KimAb
```

----- EXAMPLE 2 -----

Description

Enables the account with DistinguishedName: "CN=Kim Abercrombie,OU=Finance,OU=UserAccounts,DC=FABRIKAM,DC=COM".

```
C:\PS>Enable-ADAccount -Identity "CN=Kim Abercrombie,OU=Finance,OU=UserAccounts,DC=FABRIKAM,DC=COM"
```

----- EXAMPLE 3 -----

Description

Disables all accounts in the OU:

"OU=Finance,OU=UserAccounts,DC=FABRIKAM,DC=COM".

```
C:\PS>Get-ADUser -Filter 'Name -like "*" ' -SearchBase "OU=Finance,OU=UserAccounts,DC=FABRIKAM,DC=COM" | Enable-ADAccount
```


Cmdlet: Enable-ADOptionalFeature

Synops

Enables an Active Directory optional feature.

Syntax

```
Enable-ADOptionalFeature [-Identity] <ADOptionalFeature> [-Scope]
{Unknown
    | ForestOrConfigurationSet | Domain} [-Target] <ADEntity> [-
AuthType
    {Negotiate | Basic}] [-Credential <PSCredential>] [-PassThru]
[-Server
    <String>] [-Confirm] [-WhatIf] [<CommonParameters>]
```

Description

The Enable-ADOptionalFeature enables an Active Directory optional feature that is associated with a particular Domain mode or Forest mode. Active Directory optional features that depend on a specified domain mode or Forest mode must be explicitly enabled after the domain mode or forest mode is set.

The Identity parameter specifies the Active Directory optional feature that you want to enable. You can identify an optional feature by its distinguished name (DN), feature GUID, or object GUID. You can also set the parameter to an optional feature object variable, such as \$<localOptionalFeatureObject> or you can pass an optional feature object through the pipeline to the Identity parameter. For example, you can use the Get-ADOptionalFeature cmdlet to retrieve an optional feature object and then pass the object through the pipeline to the Enable-ADOptionalFeature cmdlet.

The Scope parameter specifies the scope at which the optional feature will be enabled. Possible values for this parameter are Domain and Forest.

The Target parameter specifies the domain or forest on which the optional feature will be enabled. You can identify the domain or forest by its fully-qualified domain name (FQDN), NetBIOS name, or distinguished name (DN) of the domain naming context (domain NC).

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory optional feature object by providing one of the following values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :PassThru

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false

Accept wildcard characters?	false
-----------------------------	-------

Parameter :Scope

Description :Specifies the scope at which the feature is enabled or disabled. Possible values for this parameter include:

Required	true
Position	3
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Target

Description :Specifies the domain or forest in which to modify the optional feature. You can identify the target domain or forest by providing one of the following values:

Required	true
Position	4
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Confirm

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

An optional feature object is received by the Identity parameter.

Type : Microsoft.ActiveDirectory.Management.ADOptionalFeature

Notes

Examples

----- EXAMPLE 1 -----

Description

Enable the optional feature 'Recycle Bin Feature' for the forest 'fabrikam.com'. This operation must be performed on the Domain Controller that holds the naming master FSMO role.

```
C:\PS>Enable-ADOptionalFeature 'Recycle Bin Feature' -Scope
ForestOrConfigurationSet -Target 'fabrikam.com' -server dc1
```

----- EXAMPLE 2 -----

Description

Enable the optional feature 'Recycle Bin Feature' for the AD LDS instance lds.fabrikam.com. This operation must be performed on the AD LDS instance that holds

the naming master FSMO role.

```
C:\PS>Enable-ADOptionalFeature 'Feature 1' -Scope  
ForestOrConfigurationSet -Target  
'CN=Configuration,CN={0241853A-6BBF-48AA-8AE0-9C35D0C91B7B}' -  
server lds.fabrikam.com:50000
```

----- EXAMPLE 3 -----

Description

Sets the ForestMode (Forest Functional Level) to Windows2008R2Forest on an AD LDS instance. The ForestMode must be Windows2008R2Forest or higher in order to enable the Recycle Bin Feature for AD LDS.

```
C:\PS>Set-ADObject -Identity  
"CN=Partitions,CN=Configuration,CN={4F971828-5BE4-4E94-B532-  
58F2BFB6A3A5}" -replace @{"msDS-Behavior-Version"=4}
```

Cmdlet: Get-ADAccountAuthorizationGroup

Synops

Gets the accounts token group information.

Syntax

```
Get-ADAccountAuthorizationGroup [-Identity] <ADAccount> [-AuthType
    {Negotiate | Basic}] [-Credential <PSCredential>] [-Partition
    <String>]
    [-Server <String>] [<CommonParameters>]
```

Description

The Get-ADAuthorizationGroup cmdlet gets the security groups from the specified user, computer or service accounts token. This cmdlet requires a global catalog to perform the group search. If the forest that contains the account does not have a global catalog, the cmdlet returns a non-terminating error.

The Identity parameter specifies the user, computer, or service account. You can identify a user, computer, or service account object by its distinguished name (DN), GUID, security identifier (SID), Security Account Manager (SAM) account name or user principal name. You can also set the Identity parameter to an account object variable, such as \$<localAccountobject>, or pass an account object through the pipeline to the Identity parameter. For example, you can use the Get-ADUser, Get-ADComputer, Get-ADServiceAccount or Search-ADAccount cmdlets to retrieve an account object and then pass the object through the pipeline to the Get-ADAccountAuthorizationGroup cmdlet.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false

Accept wildcard characters?	false
-----------------------------	-------

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory account object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Partition

Description :Specifies the distinguished name of an Active Directory partition. The distinguished name must be one of the naming contexts on the current directory server. The cmdlet searches this partition to find the object defined by the Identity parameter.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

An account object that represents the user, computer or service account is received by the Identity parameter. Derived types, such as the following are also accepted:

Microsoft.ActiveDirectory.Management.ADUser

Microsoft.ActiveDirectory.Management.ADComputer

Microsoft.ActiveDirectory.Management.ADSERVICEACCOUNT

Type : Microsoft.ActiveDirectory.Management.ADAccount

Outputs

Returns group objects that represent the security groups for the account.

Type : Microsoft.ActiveDirectory.Management.ADGroup

Notes

Examples

----- EXAMPLE 1 -----

Description

Returns all security groups for the specified account with SamAccountName: GlenJohn.

```
C:\PS>Get-ADAccountAuthorizationGroup GlenJohn
```

```
GroupScope      : DomainLocal
objectGUID      : 00000000-0000-0000-0000-000000000000
GroupCategory   : Security
SamAccountName  : Everyone
name            : Everyone
objectClass     :
SID             : S-1-1-0
distinguishedName :

GroupScope      : DomainLocal
objectGUID      : 00000000-0000-0000-0000-000000000000
GroupCategory   : Security
SamAccountName  : Authenticated Users
name            : Authenticated Users
objectClass     :
SID             : S-1-5-11
distinguishedName :

GroupScope      : Global
objectGUID      : 86c0f0d5-8b4d-4f35-a867-85a006b92902
GroupCategory   : Security
SamAccountName  : Domain Users
name            : Domain Users
objectClass     : group
SID             : S-1-5-21-41432690-3719764436-1984117282-513
distinguishedName : CN=Domain
Users,CN=Users,DC=Fabrikam,DC=com

GroupScope      : DomainLocal
objectGUID      : 869fb7ad-8cf2-4dd0-ac0f-4bd3bf324669
GroupCategory   : Security
SamAccountName  : Pre-Windows 2000 Compatible Access
name            : Pre-Windows 2000 Compatible Access
objectClass     : group
SID             : S-1-5-32-554
distinguishedName : CN=Pre-Windows 2000 Compatible
Access,CN=Builtin,DC=Fabrikam,DC=com

GroupScope      : DomainLocal
objectGUID      : c1e397c5-1e44-4270-94d1-88d6c4b78ee6
GroupCategory   : Security
SamAccountName  : Users
name            : Users
objectClass     : group
SID             : S-1-5-32-545
distinguishedName : CN=Users,CN=Builtin,DC=Fabrikam,DC=com
```

----- EXAMPLE 2 -----

Description

Returns all security groups for the specified account with DistinguishedName:

"cn=GlenJohn,dc=AppNC" in the AD LDS instance: <Server>:50000.

```
C:\PS>Get-ADAccountAuthorizationGroup "cn=GlenJohn,dc=AppNC" -
Server <Server>:50000

distinguishedName : CN=AdminGroup,DC=AppNC
GroupCategory     : Security
GroupScope        : Global
name              : AdminGroup
objectClass        : group
objectGUID        : 4d72873f-fe09-4834-9ada-a905636d10df
SamAccountName     :
SID               : S-1-510474493-936115905-4021890855-
1253703389-3958791574-3542197427
```

----- EXAMPLE 3 -----

Description

Returns a filtered list of built-in security groups which do not have an empty or null setting for objectclass (such as Everyone or Authenticated Users). (Note: This type of filtering of groups in output can be useful when piping the output of this cmdlet to be used as input to other Active Directory cmdlets.)

```
C:\PS>Get-ADAccountAuthorizationGroup -Server <Server>:50000 -
Identity Administrator | where { $_.objectClass -ne $null } |
ft name, objectClass

name
objectClass
----
-----
Domain Users
group
Administrators
group
Users
group
Pre-Windows 2000 Compatible Access
group
Group Policy Creator Owners
group
Domain Admins
group
Enterprise Admins
group
Schema Admins
group
Denied RODC Password Replication Group
group
```

Cmdlet: Get-ADAccountResultantPasswordReplicationPolicy

Synops

Gets the resultant password replication policy for an Active Directory account.

Syntax

```
Get-ADAccountResultantPasswordReplicationPolicy [-Identity]
<ADAccount>
    [-DomainController] <ADDomainController> [-AuthType
{Negotiate | Basic}]
    [-Credential <PSCredential>] [-Partition <String>] [-Server
<String>]
    [<CommonParameters>]
```

Description

The Get-ADAccountResultantPasswordReplicationPolicy gets the resultant password replication policy for a user, computer or service account on the specified read-only domain controller.

The policy will be one of the following values:

Allow or 1

DenyExplicit or 0

DenyImplicit or 2

Unknown or -1

The Identity parameter specifies the account. You can identify a user, computer, or service account object by its distinguished name (DN), GUID, security identifier (SID) or Security Account Manager (SAM) account name. You can also set the Identity parameter to an account object variable, such as \$<localAccountobject>, or pass an account object through the pipeline to the Identity parameter. For example, you can use the Get-ADUser, Get-ADComputer, Get-ADServiceAccount or Search-ADAccount cmdlets to retrieve an account object and then pass the object through the pipeline to the Get-ADAccountResultantPasswordReplicationPolicy cmdlet.

The DomainController parameter specifies the read-only domain controller. You can identify a domain controller by its IPV4Address, global IPV6Address, or DNS host name. You can also identify a domain controller by the Distinguished Name (DN) of the NTDS settings object or the server object, the GUID of the NTDS settings object or the server

object under the configuration partition, or the DN, SamAccountName, GUID, SID of the computer object that represents the domain controller. You can also set the DomainController parameter to a domain controller object variable, such as \$<localDomainControllerObject>.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**DomainController**

Description :Specifies a read-only domain controller (RODC). The cmdlet returns the password replication policy of the account for this RODC. You can identify the domain controller by providing one of the following values.

Required	true
Position	2
Default value	
Accept pipeline input?	false

Accept wildcard characters?	false
-----------------------------	-------

Parameter :Identity

Description :Specifies an Active Directory account object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Partition

Description :Specifies the distinguished name of an Active Directory partition. The distinguished name must be one of the naming contexts on the current directory server. The cmdlet searches this partition to find the object defined by the Identity parameter.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

An account object is received by the Identity parameter.

Derived types, such as the following are also accepted:

Microsoft.ActiveDirectory.Management.ADUser

Microsoft.ActiveDirectory.Management.ADComputer

Microsoft.ActiveDirectory.Management.ADSERVICEACCOUNT

Type : Microsoft.ActiveDirectory.Management.ADAccount

Outputs

Returns an ADResultantPasswordReplicationPolicy enum value that represents the resultant password replication policy for an account on the specified domain controller.

Type : Microsoft.ActiveDirectory.Management.ADResultantPasswordReplicationPolicy

Notes

Examples

----- EXAMPLE 1 -----

Description

Get the resultant password replication policy on the domain for a given user account.

```
C:\PS>Get-ADAccountResultantPasswordReplicationPolicy BradSu  
"FABRIKAM-RODC1"
```

----- EXAMPLE 2 -----

Description

Get the resultant password replication policy on a specific domain controller for a given user account.

```
C:\PS>Get-ADAccountResultantPasswordReplicationPolicy BobKe -  
DomainController "FABRIKAM-RODC1"
```

----- EXAMPLE 3 -----

Description

Get the resultant password replication policy on a specific domain controller for a given

user account DN.

```
C:\PS>Get-ADAccountResultantPasswordReplicationPolicy  
"CN=Jordao  
Moreno,OU=Europe,OU=Sales,OU=UserAccounts,DC=FABRIKAM,DC=COM"  
"FABRIKAM-RODC1"
```

Cmdlet: Get-ADAuthenticationPolicy

Synops

Gets one or more Active Directory Domain Services authentication policies.

Syntax

```
Get-ADAuthenticationPolicy [-AuthType {Negotiate | Basic}] [-Credential
    <PSCredential>] [-Properties <String[]>] [-ResultPageSize
<Int32>]
    [-ResultSetSize <Int32>] [-Server <String>] -Filter <String>
    [<CommonParameters>]
```

```
Get-ADAuthenticationPolicy [-Identity] <ADAuthenticationPolicy>
[-AuthType
    {Negotiate | Basic}] [-Credential <PSCredential>] [-
Properties <String[]>]
    [-Server <String>] [<CommonParameters>]
```

```
Get-ADAuthenticationPolicy [-AuthType {Negotiate | Basic}] [-Credential
    <PSCredential>] [-Properties <String[]>] [-ResultPageSize
<Int32>]
    [-ResultSetSize <Int32>] [-Server <String>] -LDAPFilter
<String>
    [<CommonParameters>]
```

Description

The Get-ADAuthenticationPolicy cmdlet gets an authentication policy or performs a search to get authentication policies.

The Identity parameter specifies the Active Directory Domain Services authentication policy to get. You can identify an authentication policy by its distinguished name (DN), GUID or name. You can also use the Identity parameter to specify a variable that contains an authentication policy object, or you can use the pipeline operator to pass an authentication policy object to the Identity parameter.

You can search for and use multiple authentication policies by specifying the Filter parameter or the LDAPFilter parameter. The Filter parameter uses the Windows PowerShell® expression language to write query strings for Active Directory Domain Services. Windows PowerShell expression language syntax provides rich type conversion support for value types received by the Filter parameter. For more information about the Filter parameter syntax, see about_ActiveDirectory_Filter. If you have existing LDAP query strings, you can use the LDAPFilter parameter.

Parameters

Parameter :AuthType

Description :Specifies the authentication method to use. The acceptable values for this parameter are:

--Negotiate or 0

--Basic or 1

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Manage ment.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies a user account that has permission to perform the task. The default is the current user. Type a user name, such as "User01" or "Domain01\User01", or enter a PSCredential object, such as one generated by the Get-Credential cmdlet.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Filter

Description :Specifies a query string that retrieves Active Directory Domain Services objects. This string uses the Windows PowerShell expression language syntax. The Windows PowerShell expression language syntax provides rich type-conversion support

for value types received by the Filter parameter.

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory Domain Services authentication policy object. Specify the authentication policy object in one of the following formats:

--Distinguished Name

--GUID

--Name

Required	true
Position	0
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :LDAPFilter

Description :Specifies an LDAP query string used to filter Active Directory Domain Services objects. Use this parameter to run your existing LDAP queries.

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Properties

Description :Specifies the properties of the output object to get from the server. Use this parameter to get properties that are not included in the default set.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**ResultPageSize**

Description :Specifies the number of objects to include in one page for an Active Directory Domain Services query. The default value is 256 objects per page.

Required	false
Position	named
Default value	256
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**ResultSetSize**

Description :Specifies the maximum number of objects to return for an Active Directory Domain Services query. If you want to get all of the objects, set this parameter to \$Null. You can use Ctrl+C to stop the query and the return of objects.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to which to connect, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

This cmdlet accepts an authentication policy object.

Type : None or Microsoft.ActiveDirectory.Management.ADAuthenticationPolicy

Outputs

Returns one or more authentication policy objects. This cmdlet returns a default set of ADAuthenticationPolicy property values. To retrieve additional ADAuthenticationPolicy properties, use the Properties parameter.

Type : Microsoft.ActiveDirectory.Management.ADAuthenticationPolicy

Examples

Example 1: Get an authentication policy

This command gets an authentication policy object by specifying the object name.

```
PS C:\> Get-ADAuthenticationPolicy -Identity  
AuthenticationPolicy01
```

Example 2: Get an authentication policy by using an LDAP filter

This command gets all authentication policies that match the LDAP filter specified by the LDAPFilter parameter.

```
PS C:\> Get-ADAuthenticationPolicy -LDAPFilter  
"(name=AuthenticationPolicy*)" -Server Server01.Contoso.com
```

Example 3: Get an authentication policy by using a filter

This command gets all authentication policies that match the filter specified by the Filter parameter.

```
PS C:\> Get-ADAuthenticationPolicy -Filter "Name -like  
'AuthenticationPolicy*'" -Server Server02.Contoso.com
```

Example 4: Get all authentication policy objects that match a filter

This command gets all the authentication policies available. The output is then passed to the Format-Table cmdlet to display the name of the policy and the value for Enforce on each policy.

```
PS C:\> Get-ADAuthenticationPolicy -Filter * | Format-Table
Name, Enforce -AutoSize
Name           Enforce
-----
AuthenticationPolicy1  False
AuthenticationPolicy2  False
```

Example 5: Get all properties for an authentication policy

This command gets all properties of the authentication policy specified by the Identity parameter.

```
PS C:\> Get-ADAuthenticationPolicy -Identity
"AuthenticationPolicy01" -Properties "*"
```

Cmdlet: Get-ADAuthenticationPolicySilo

Synops

Gets one or more Active Directory Domain Services authentication policy silos.

Syntax

```
Get-ADAuthenticationPolicySilo [-AuthType {Negotiate | Basic}]  
    [-Credential <PSCredential>] [-Properties <String[]>] [-  
ResultPageSize  
    <Int32>] [-ResultSetSize <Int32>] [-Server <String>] -Filter  
<String>  
    [<CommonParameters>]
```

```
Get-ADAuthenticationPolicySilo [-Identity  
<ADAuthenticationPolicySilo>  
    [-AuthType {Negotiate | Basic}] [-Credential <PSCredential>]  
[-Properties  
    <String[]>] [-Server <String>] [<CommonParameters>]
```

```
Get-ADAuthenticationPolicySilo [-AuthType {Negotiate | Basic}]  
    [-Credential <PSCredential>] [-Properties <String[]>] [-  
ResultPageSize  
    <Int32>] [-ResultSetSize <Int32>] [-Server <String>] -  
LDAPFilter <String>  
    [<CommonParameters>]
```

Description

The Get-ADAuthenticationPolicySilo cmdlet gets an authentication policy silo or performs a search to get authentication policy silos.

The Identity parameter specifies the Active Directory Domain Services authentication policy silo to get. You can identify an authentication policy silo by its distinguished name (DN), GUID or name. You can also use the Identity parameter to specify a variable that contains an authentication policy silo object, or you can use the pipeline operator to pass an authentication policy silo object to the Identity parameter.

You can search for and use multiple authentication policies by specifying the Filter

parameter or the LDAPFilter parameter. The Filter parameter uses the Windows PowerShell® expression language to write query strings for Active Directory Domain Services. Windows PowerShell expression language syntax provides rich type conversion support for value types received by the Filter parameter. For more information about the Filter parameter syntax, see about_ActiveDirectory_Filter. If you have existing LDAP query strings, you can use the LDAPFilter parameter.

Parameters

Parameter :AuthType

Description :Specifies the authentication method to use. The acceptable values for this parameter are:

--Negotiate or 0

--Basic or 1

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies a user account that has permission to perform the task. The default is the current user. Type a user name, such as "User01" or "Domain01\User01", or enter a PSCredential object, such as one generated by the Get-Credential cmdlet.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Filter

Description :Specifies a query string that retrieves Active Directory Domain Services objects. This string uses the Windows PowerShell expression language syntax. The Windows PowerShell expression language syntax provides rich type-conversion support for value types received by the Filter parameter.

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Identity**

Description :Specifies an Active Directory Domain Services authentication policy silo object. Specify the authentication policy silo object in one of the following formats:

--Distinguished Name

--GUID

--Name

Required	true
Position	0
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :**LDAPFilter**

Description :Specifies an LDAP query string used to filter Active Directory Domain Services objects. Use this parameter to run your existing LDAP queries.

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Properties**

Description :Specifies the properties of the output object to get from the server. Use this parameter to get properties that are not included in the default set.

Required	false
----------	-------

Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ResultPageSize

Description :Specifies the number of objects to include in one page for an Active Directory Domain Services query. The default value is 256 objects per page.

Required	false
Position	named
Default value	256
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ResultSetSize

Description :Specifies the maximum number of objects to return for an Active Directory Domain Services query. If you want to get all of the objects, set this parameter to \$Null. You can use Ctrl+C to stop the query and the return of objects.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to which to connect, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

This cmdlet accepts an authentication policy silo object.

Type : None or Microsoft.ActiveDirectory.Management.ADAuthenticationPolicySilo

Outputs

Returns one or more authentication policy silo objects. This cmdlet returns a default set of ADAuthenticationPolicySilo property values. To retrieve additional ADAuthenticationPolicySilo properties, use the Properties parameter.

Type : Microsoft.ActiveDirectory.Management.ADAuthenticationPolicySilo

Examples

Example 1: Get an authentication policy silo object

This command gets an authentication policy silo object named AuthenticationPolicySilo01.

```
PS C:\>Get-ADAuthenticationPolicySilo -Identity
AuthenticationPolicySilo01
```

Example 2: Get all authentication policy silo objects that match a filter

This command gets all the authentication policy silos that match the filter specified by the Filter parameter. The output is then passed to the Format-Table cmdlet to display the name of the policy and the value for Enforce on each policy.

```
PS C:\>Get-ADAuthenticationPolicySilo -Filter 'Name -like
"*AuthenticationPolicySilo*"' | Format-Table Name, Enforce
-AutoSize
Name    Enforce
----    -
silo     True
silos    False
```

Example 3: Get all properties of a specific authentication policy silo

This command gets all properties for the authentication policy silo named AuthenticationPolicySilo02.

```
PS C:\>Get-ADAuthenticationPolicySilo -Identity
AuthenticationPolicySilo02 -Properties *
```


Cmdlet: Get-ADCentralAccessPolicy

Synops

Retrieves central access policies from Active Directory.

Syntax

```
Get-ADCentralAccessPolicy [-AuthType {Negotiate | Basic}] [-  
Credential  
    <PSCredential>] [-Properties <String[]>] [-ResultPageSize  
<Int32>]  
    [-ResultSetSize <Int32>] [-Server <String>] -Filter <String>  
    [<CommonParameters>]
```

```
Get-ADCentralAccessPolicy [-Identity] <ADCentralAccessPolicy> [-  
AuthType  
    {Negotiate | Basic}] [-Credential <PSCredential>] [-  
Properties <String[]>]  
    [-Server <String>] [<CommonParameters>]
```

```
Get-ADCentralAccessPolicy [-AuthType {Negotiate | Basic}] [-  
Credential  
    <PSCredential>] [-Properties <String[]>] [-ResultPageSize  
<Int32>]  
    [-ResultSetSize <Int32>] [-Server <String>] -LDAPFilter  
<String>  
    [<CommonParameters>]
```

Description

The Get-ADCentralAccessPolicy cmdlet retrieves central access policies from Active Directory.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this

parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Filter**

Description :Specifies a query string that retrieves Active Directory objects. This string uses the PowerShell Expression Language syntax. The PowerShell Expression Language syntax provides rich type-conversion support for value types received by the Filter parameter. The syntax uses an in-order representation, which means that the operator is placed between the operand and the value. For more information about the Filter parameter, see [about_ActiveDirectory_Filter](#).

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Identity**

Description :Specifies an Active Directory object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :LDAPFilter

Description :Specifies an LDAP query string that is used to filter Active Directory objects. You can use this parameter to run your existing LDAP queries. The Filter parameter syntax supports the same functionality as the LDAP syntax. For more information, see the Filter parameter description and the about_ActiveDirectory_Filter.

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Properties

Description :Specifies the properties of the output object to retrieve from the server. Use this parameter to retrieve properties that are not included in the default set.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ResultPageSize

Description :Specifies the number of objects to include in one page for an Active Directory Domain Services query.

Required	false
Position	named
Default value	256
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**ResultSetSize**

Description :Specifies the maximum number of objects to return for an Active Directory Domain Services query. If you want to receive all of the objects, set this parameter to \$null (null value). You can use Ctrl+c to stop the query and return of objects.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A ADCentralAccessPolicy object is received by the Identity parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADCentralAccessPolicy

Outputs

Returns one or more ADCentralAccessPolicy objects.

The Get-ADCentralAccessPolicy cmdlet returns a default set of ADCentralAccessPolicy property values. To retrieve additional ADCentralAccessPolicy properties, use the Properties parameter of the cmdlet.

To view the properties for an ADCentralAccessPolicy object, see the following examples. To run these examples, replace <object> with an Active Directory object identifier.

To get a list of the default set of properties of an ADCentralAccessPolicy object, use the following command:

Get-ADCentralAccessPolicy <object>

To get a list of all the properties of an ADCentralAccessPolicy object, use the following command:

Get-ADCentralAccessPolicy <object> -Properties *

Type : Microsoft.ActiveDirectory.Management.ADCentralAccessPolicy

Examples

----- EXAMPLE 1 -----

Description

Retrieves a list of all central access policies.

```
C:\PS>Get-ADCentralAccessPolicy -Filter *
```

----- EXAMPLE 2 -----

Description

Get the central access policies that have the central access rule 'Finance Documents Rule' as its members.

```
C:\PS>Get-ADCentralAccessPolicy -Filter {Members -eq 'Finance Documents Rule'}
```

----- EXAMPLE 3 -----

Description

Gets information for a central access policy named "Finance Policy".

```
C:\PS>Get-ADCentralAccessPolicy "Finance Policy"
```

Cmdlet: Get-ADCentralAccessRule

Synops

Retrieves central access rules from Active Directory.

Syntax

```
Get-ADCentralAccessRule [-AuthType {Negotiate | Basic}] [-  
Credential  
    <PSCredential>] [-Properties <String[]>] [-ResultPageSize  
<Int32>]  
    [-ResultSetSize <Int32>] [-Server <String>] -Filter <String>  
    [<CommonParameters>]
```

```
Get-ADCentralAccessRule [-Identity] <ADCentralAccessRule> [-  
AuthType  
    {Negotiate | Basic}] [-Credential <PSCredential>] [-  
Properties <String[]>]  
    [-Server <String>] [<CommonParameters>]
```

```
Get-ADCentralAccessRule [-AuthType {Negotiate | Basic}] [-  
Credential  
    <PSCredential>] [-Properties <String[]>] [-ResultPageSize  
<Int32>]  
    [-ResultSetSize <Int32>] [-Server <String>] -LDAPFilter  
<String>  
    [<CommonParameters>]
```

Description

The Get-ADCentralAccessRule cmdlet retrieves central access rules from Active Directory.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this

parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Filter**

Description :Specifies a query string that retrieves Active Directory objects. This string uses the PowerShell Expression Language syntax. The PowerShell Expression Language syntax provides rich type-conversion support for value types received by the Filter parameter. The syntax uses an in-order representation, which means that the operator is placed between the operand and the value. For more information about the Filter parameter, see [about_ActiveDirectory_Filter](#).

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Identity**

Description :Specifies an Active Directory object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :**LDAPFilter**

Description :Specifies an LDAP query string that is used to filter Active Directory objects. You can use this parameter to run your existing LDAP queries. The Filter parameter syntax supports the same functionality as the LDAP syntax. For more information, see the Filter parameter description and the about_ActiveDirectory_Filter.

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Properties**

Description :Specifies the properties of the output object to retrieve from the server. Use this parameter to retrieve properties that are not included in the default set.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**ResultPageSize**

Description :Specifies the number of objects to include in one page for an Active Directory Domain Services query.

Required	false
Position	named
Default value	256
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**ResultSetSize**

Description :Specifies the maximum number of objects to return for an Active Directory Domain Services query. If you want to receive all of the objects, set this parameter to \$null (null value). You can use Ctrl+c to stop the query and return of objects.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A ADCentralAccessPolicyEntry object is received by the Identity parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADCentralAccessPolicyEntry

Outputs

Returns one or more ADCentralAccessRule objects.

The Get-ADCentralAccessRule cmdlet returns a default set of ADCentralAccessRule property values. To retrieve additional ADCentralAccessRule properties, use the Properties parameter of the cmdlet.

To view the properties for an ADCentralAccessRule object, see the following examples.

To run these examples, replace <object> with an Active Directory object identifier.

To get a list of the default set of properties of an ADCentralAccessRule object, use the following command:

Get-ADCentralAccessRule <object>

To get a list of all the properties of an ADCentralAccessRule object, use the following command:

Get-ADCentralAccessRule <object> -Properties *

Type : Microsoft.ActiveDirectory.Management.ADCentralAccessRule

Examples

----- EXAMPLE 1 -----

Description

Retrieves a list of all central access rules.

```
C:\PS>Get-ADCentralAccessRule -Filter *
```

----- EXAMPLE 2 -----

Description

Retrieve the central access rules that have "Department" in its resource condition.

```
C:\PS>Get-ADCentralAccessRule -Filter { ResourceCondition -
like "*Department*" }
```

----- EXAMPLE 3 -----

Description

Retrieve a central access rule named "Finance Documents Rule".

```
C:\PS>Get-ADCentralAccessRule "Financial Documents Rule"
```

Cmdlet: Get-ADClaimTransformPolicy

Synops

Returns one or more Active Directory claim transform objects based on a specified filter.

Syntax

```
Get-ADClaimTransformPolicy [-AuthType {Negotiate | Basic}] [-Credential
    <PSCredential>] [-Properties <String[]>] [-Server <String>] -
Filter
    <String> [<CommonParameters>]
```

```
Get-ADClaimTransformPolicy [[-Identity] <ADClaimTransformPolicy>]

    [-AuthType {Negotiate | Basic}] [-Credential <PSCredential>]
[-Properties
    <String[]>] [-Server <String>] [<CommonParameters>]
```

```
Get-ADClaimTransformPolicy [-AuthType {Negotiate | Basic}] [-Credential
    <PSCredential>] [-Properties <String[]>] [-Server <String>] -
LDAPFilter
    <String> [<CommonParameters>]
```

Description

The Get-ADClaimTransformPolicy cmdlet returns one or more Active Directory claim transform objects based on a specified filter.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
----------	-------

Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Filter

Description :Specifies a query string that retrieves Active Directory objects. This string uses the PowerShell Expression Language syntax. The PowerShell Expression Language syntax provides rich type-conversion support for value types received by the Filter parameter. The syntax uses an in-order representation, which means that the operator is placed between the operand and the value. For more information about the Filter parameter, see [about_ActiveDirectory_Filter](#).

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	false
Position	1

Default value	All Sites (Filter *)
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :**LDAPFilter**

Description :Specifies an LDAP query string that is used to filter Active Directory objects. You can use this parameter to run your existing LDAP queries. The Filter parameter syntax supports the same functionality as the LDAP syntax. For more information, see the Filter parameter description and the about_ActiveDirectory_Filter.

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Properties**

Description :Specifies the properties of the output object to retrieve from the server. Use this parameter to retrieve properties that are not included in the default set.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A claim transform policy object is received by the Identity parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADClaimTransformPolicy

Examples

----- EXAMPLE 1 -----

Description

Retrieves a list of all claims transformation policies.

```
C:\PS>Get-ADClaimTransformPolicy -Filter *
```

----- EXAMPLE 2 -----

Description

Gets all the claims transformation policies that are applied to trusts made with 'corp.contoso.com'.

```
C:\PS>$contoso = Get-ADTrust "corp.contoso.com";  
Get-ADClaimTransformPolicy -Filter {IncomingTrust -eq $contoso  
-or OutgoingTrust -eq $contoso}
```

----- EXAMPLE 3 -----

Description

Get the claims transformation policy with the name 'DenyAllPolicy'

```
C:\PS>Get-ADClaimTransformPolicy DenyAllPolicy
```

----- EXAMPLE 4 -----

Description

Gets information on any claims transformation policies using an LDAP-based query filter that looks for matches where policies have a name that starts with the word "DenyAll".

```
C:\PS>Get-ADClaimTransformPolicy -LDAPFilter "(name=DenyAll*)"
```


Cmdlet: Get-ADClaimType

Synops

Returns a claim type from Active Directory.

Syntax

```
Get-ADClaimType [-AuthType {Negotiate | Basic}] [-Credential
    <PSCredential>] [-Properties <String[]>] [-ResultPageSize
<Int32>]
    [-ResultSetSize <Int32>] [-Server <String>] -Filter <String>
    [<CommonParameters>]
```

```
Get-ADClaimType [-Identity] <ADClaimType> [-AuthType {Negotiate |
Basic}]
    [-Credential <PSCredential>] [-Properties <String[]>] [-
Server <String>]
    [<CommonParameters>]
```

```
Get-ADClaimType [-AuthType {Negotiate | Basic}] [-Credential
    <PSCredential>] [-Properties <String[]>] [-ResultPageSize
<Int32>]
    [-ResultSetSize <Int32>] [-Server <String>] -LDAPFilter
<String>
    [<CommonParameters>]
```

Description

The Get-ADClaimType cmdlet returns a claim type defined in Active Directory.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
----------	-------

Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Filter

Description :Specifies a query string that retrieves Active Directory objects. This string uses the PowerShell Expression Language syntax. The PowerShell Expression Language syntax provides rich type-conversion support for value types received by the Filter parameter. The syntax uses an in-order representation, which means that the operator is placed between the operand and the value. For more information about the Filter parameter, see [about_ActiveDirectory_Filter](#).

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1

Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :LDAPFilter

Description :Specifies an LDAP query string that is used to filter Active Directory objects. You can use this parameter to run your existing LDAP queries. The Filter parameter syntax supports the same functionality as the LDAP syntax. For more information, see the Filter parameter description and the about_ActiveDirectory_Filter.

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Properties

Description :Specifies the properties of the output object to retrieve from the server. Use this parameter to retrieve properties that are not included in the default set.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ResultPageSize

Description :Specifies the number of objects to include in one page for an Active Directory Domain Services query.

Required	false
Position	named
Default value	256
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ResultSetSize

Description :Specifies the maximum number of objects to return for an Active Directory Domain Services query. If you want to receive all of the objects, set this parameter to \$null (null value). You can use Ctrl+c to stop the query and return of objects.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Examples

----- EXAMPLE 1 -----

Description

Retrieves a list of all claim types.

```
C:\PS>Get-ADClaimType -Filter *
```

----- EXAMPLE 2 -----

Description

Get all the claim types that are sourced from the attribute 'title'.

```
C:\PS>Get-ADClaimType -Filter {SourceAttribute -eq 'title'}
```

----- EXAMPLE 3 -----

Description

Get the claim type with display name 'Employee Type'.

```
C:\PS>Get-ADClaimType "Employee Type"
```

----- EXAMPLE 4 -----

Description

Get all properties of the claim type with display name 'Employee Type'.

```
C:\PS>Get-ADClaimType "Employee Type" -Properties *
```

Cmdlet: Get-ADComputer

Synops

Gets one or more Active Directory computers.

Syntax

```
Get-ADComputer [-AuthType {Negotiate | Basic}] [-Credential  
    <PSCredential>] [-Properties <String[]>] [-ResultPageSize  
<Int32>]  
    [-ResultSetSize <Int32>] [-SearchBase <String>] [-SearchScope  
{Base |  
    OneLevel | Subtree}] [-Server <String>] -Filter <String>  
    [<CommonParameters>]
```

```
Get-ADComputer [-Identity] <ADComputer> [-AuthType {Negotiate |  
Basic}]  
    [-Credential <PSCredential>] [-Partition <String>] [-  
Properties  
    <String[]>] [-Server <String>] [<CommonParameters>]
```

```
Get-ADComputer [-AuthType {Negotiate | Basic}] [-Credential  
    <PSCredential>] [-Properties <String[]>] [-ResultPageSize  
<Int32>]  
    [-ResultSetSize <Int32>] [-SearchBase <String>] [-SearchScope  
{Base |  
    OneLevel | Subtree}] [-Server <String>] -LDAPFilter <String>  
    [<CommonParameters>]
```

Description

The Get-ADComputer cmdlet gets a computer or performs a search to retrieve multiple computers.

The Identity parameter specifies the Active Directory computer to retrieve. You can identify a computer by its distinguished name (DN), GUID, security identifier (SID) or Security Accounts Manager (SAM) account name. You can also set the parameter to a computer object variable, such as \$<localComputerObject> or pass a computer object

through the pipeline to the Identity parameter.

To search for and retrieve more than one computer, use the Filter or LDAPFilter parameters. The Filter parameter uses the PowerShell Expression Language to write query strings for Active Directory. PowerShell Expression Language syntax provides rich type conversion support for value types received by the Filter parameter. For more information about the Filter parameter syntax, see about_ActiveDirectory_Filter. If you have existing LDAP query strings, you can use the LDAPFilter parameter.

This cmdlet retrieves a default set of computer object properties. To retrieve additional properties use the Properties parameter. For more information about the how to determine the properties for computer objects, see the Properties parameter description.

Parameters

Parameter :AuthType

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Filter

Description :Specifies a query string that retrieves Active Directory objects. This string uses the PowerShell Expression Language syntax. The PowerShell Expression

Language syntax provides rich type-conversion support for value types received by the Filter parameter. The syntax uses an in-order representation, which means that the operator is placed between the operand and the value. For more information about the Filter parameter, see about_ActiveDirectory_Filter.

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory computer object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :LDAPFilter

Description :Specifies an LDAP query string that is used to filter Active Directory objects. You can use this parameter to run your existing LDAP queries. The Filter parameter syntax supports the same functionality as the LDAP syntax. For more information, see the Filter parameter description and the about_ActiveDirectory_Filter.

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Partition

Description :Specifies the distinguished name of an Active Directory partition. The distinguished name must be one of the naming contexts on the current directory server. The cmdlet searches this partition to find the object defined by the Identity parameter.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Properties

Description :Specifies the properties of the output object to retrieve from the server. Use this parameter to retrieve properties that are not included in the default set.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ResultPageSize

Description :Specifies the number of objects to include in one page for an Active Directory Domain Services query.

Required	false
Position	named
Default value	256
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ResultSetSize

Description :Specifies the maximum number of objects to return for an Active Directory Domain Services query. If you want to receive all of the objects, set this parameter to \$null (null value). You can use Ctrl+c to stop the query and return of objects.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**SearchBase**

Description :Specifies an Active Directory path to search under.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**SearchScope**

Description :Specifies the scope of an Active Directory search. Possible values for this parameter are:

Required	false
Position	named
Default value	Subtree
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A computer object is received by the Identity parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADComputer

Outputs

Returns one or more computer objects.

This Get-ADComputer cmdlet returns a default set of ADComputer property values. To retrieve additional ADComputer properties, use the Properties parameter of this cmdlet.

To view the properties for an ADComputer object, see the following examples. To run these examples, replace <computer> with a computer identifier such as the SAM account name of your local computer.

To get a list of the default set of properties of an ADComputer object, use the following command:

```
Get-ADComputer <computer> | Get-Member
```

To get a list of all the properties of an ADComputer object, use the following command:

```
Get-ADComputer <computer> -Properties ALL | Get-Member
```

Type : Microsoft.ActiveDirectory.Management.ADComputer

Notes

Examples

----- EXAMPLE 1 -----

Description

Get a specific computer showing all the properties.

```

C:\PS>Get-ADComputer "Fabrikam-SRV1" -Properties *

AccountExpirationDate      :
accountExpires              : 9223372036854775807
AccountLockoutTime         :
AccountNotDelegated        : False
AllowReversiblePasswordEncryption : False
BadLogonCount              :
CannotChangePassword       : False
CanonicalName              :
Fabrikam.com/Computers/fabrikam-srv1
Certificates                : {}
CN                          : fabrikam-srv1
codePage                   : 0
countryCode                : 0
Created                    : 3/16/2009 4:15:00 PM
createTimeStamp            : 3/16/2009 4:15:00 PM
Deleted                    :
Description                 :
DisplayName                 :
DistinguishedName          : CN=fabrikam-
srv1,CN=Computers,DC=Fabrikam,
DC=com
DNSHostName                :
DoesNotRequirePreAuth      : False
dScorePropagationData      : {3/16/2009 4:21:51 PM,
12/31/1600 4:00:01
PM}
Enabled                    : True
HomedirRequired            : False
HomePage                   :
instanceType               : 0
IPv4Address                :
IPv6Address                :
isCriticalSystemObject     : False
isDeleted                  :
LastBadPasswordAttempt     :
LastKnownParent            :
LastLogonDate              :
localPolicyFlags           : 0
Location                   : NA/HQ/Building A
LockedOut                  : False
ManagedBy                 : CN=SQL Administrator
01,OU=UserAccounts,OU
=Managed,DC=Fabrikam,DC=com
MemberOf                   : {}
MNSLogonAccount            : False
Modified                   : 3/16/2009 4:23:01 PM
modifyTimeStamp            : 3/16/2009 4:23:01 PM
msDS-User-Account-Control-Computed : 0
Name                       : fabrikam-srv1
nTSecurityDescriptor       :
System.DirectoryServices.ActiveDirectorySe
curity
ObjectCategory             :
CN=Computer,CN=Schema,CN=Configuration,DC=
Fabrikam,DC=com
ObjectClass                 : computer
ObjectGUID                 : 828306a3-8ccd-410e-9537-
e6616662c0b0
objectSid                  : S-1-5-21-41432690-

```

```

3719764436 -1984117282 -11
30
OperatingSystem : 
OperatingSystemHotfix : 
OperatingSystemServicePack : 
OperatingSystemVersion : 
PasswordExpired : False
PasswordLastSet : 
PasswordNeverExpires : False
PasswordNotRequired : False
PrimaryGroup : CN=Domain
Computers,CN=Users,DC=Fabrikam,DC=com
primaryGroupID : 515
ProtectedFromAccidentalDeletion : False
pwdLastSet : 0
SamAccountName : fabrikam-srv1$
sAMAccountType : 805306369
sDRightsEffective : 0
ServiceAccount : {}
servicePrincipalName : {MSOLAPSVC.3/FABRIKAM-SRV1.FABRIKAM.COM:analyze, MSSQLSVC/FABRIKAM-SRV1.FABRIKAM.COM:1456}
ServicePrincipalNames : {MSOLAPSVC.3/FABRIKAM-SRV1.FABRIKAM.COM:analyze, MSSQLSVC/FABRIKAM-SRV1.FABRIKAM.COM:1456}
SID : S-1-5-21-41432690-3719764436 -1984117282 -11
30
SIDHistory : {}
TrustedForDelegation : False
TrustedToAuthForDelegation : False
UseDESKeyOnly : False
userAccountControl : 4096
userCertificate : {}
UserPrincipalName : 
uSNChanged : 36024
uSNCreated : 35966
whenChanged : 3/16/2009 4:23:01 PM
whenCreated : 3/16/2009 4:15:00 PM

```

----- EXAMPLE 2 -----

Description

Get all the computers with a name starting by a particular string and showing the name, dns hostname and IPv4 address.

```
C:\PS>Get-ADComputer -Filter 'Name -like "Fabrikam*"' -
Properties IPv4Address | FT Name,DNSHostName,IPv4Address -A
```

name	dnshostname	ipv4address
----	-----	-----
FABRIKAM-SRV1	FABRIKAM-SRV1.Fabrikam.com	10.194.99.181
FABRIKAM-SRV2	FABRIKAM-SRV2.Fabrikam.com	10.194.100.37

----- EXAMPLE 3 -----

Description

Get all the computers that have changed their password in the last 90 days.

```
C:\PS>$d = [DateTime]::Today.AddDays(-90); Get-ADComputer -
Filter 'PasswordLastSet -ge $d' -Properties PasswordLastSet |
FT Name,PasswordLastSet
```

Name	PasswordLastSet
----	----
-----	-----
FABRIKAM-SRV4	
3/12/2009 6:40:37 PM	
FABRIKAM-SRV5	
3/12/2009 7:05:45 PM	

----- EXAMPLE 4 -----

Description

Get the computer accounts in the location: "CN=Computers,DC=Fabrikam,DC=com" that are listed as laptops (using an LDAPFilter)

```
C:\PS>Get-ADComputer -LDAPFilter "(name=*laptop*)" -SearchBase
"CN=Computers,DC=Fabrikam,DC=com"
```

name

saradavi-laptop
jeffpr-laptop

----- EXAMPLE 5 -----

Description

Get all computer accounts.

```
C:\PS>Get-ADComputer -Filter *
```

Cmdlet: Get-ADComputerServiceAccount

Synops

Gets the service accounts hosted by a computer.

Syntax

```
Get-ADComputerServiceAccount [-Identity] <ADComputer> [-AuthType  
    {Negotiate | Basic}] [-Credential <PSCredential>] [-Partition  
<String>]  
    [-Server <String>] [<CommonParameters>]
```

Description

The Get-ADComputerServiceAccount cmdlet gets all of the service accounts that are hosted by the specified computer.

The Computer parameter specifies the Active Directory computer that hosts the service accounts. You can identify a computer by its distinguished name (DN), GUID, security identifier (SID) or Security Accounts Manager (SAM) account name. You can also set the Computer parameter to a computer object variable, such as \$<localComputerobject>, or pass a computer object through the pipeline to the Computer parameter. For example, you can use the Get-ADComputer cmdlet to retrieve a computer object and then pass the object through the pipeline to the Get-ADComputerServiceAccount cmdlet.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Manage ment.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Identity**

Description :Specifies an Active Directory computer object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :**Partition**

Description :Specifies the distinguished name of an Active Directory partition. The distinguished name must be one of the naming contexts on the current directory server. The cmdlet searches this partition to find the object defined by the Identity parameter.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A computer object is received by the Computer parameter.

Type : Microsoft.ActiveDirectory.Management.ADComputer

Outputs

Returns one or more objects that represent the service accounts hosted by the specified computer.

Type : Microsoft.ActiveDirectory.Management.ADServiceAccount

Notes

Cmdlet: Get-ADDCCloningExcludedApplicationList

Synops

Returns the list of installed programs and services present on this domain controller that are not in the default or user defined inclusion list.

Syntax

```
Get-ADDCCloningExcludedApplicationList [-Force] [-Path <String>]  
-GenerateXml [<CommonParameters>]
```

Description

The Get-ADDCCloningExcludedApplicationList cmdlet searches the local domain controller for programs and services in the installed programs database, the services control manager that are not specified in the default and user defined inclusion list. The applications in the resulting list can be added to the user defined exclusion list if they are determined to support cloning. If the applications are not cloneable, they should be removed from the source domain controller before the clone media is created. Any application that appears in cmdlet output and is not included in the user defined inclusion list will force cloning to fail.

Once you have granted a source virtualized DC permissions to be cloned, the Get-ADDCCloningExcludedApplicationList cmdlet should be run a first time with no additional parameters on the source virtualized domain controller to identify all programs or services that are to be evaluated for cloning. Next, vet the returned list with your software vendors and remove any applications from the list that cannot be safely cloned. Finally, you can run the Get-ADDCCloningExcludedApplicationList cmdlet again using the -GenerateXml parameter set to create the CustomDCCloneAllowList.xml file.

The Get-ADDCCloningExcludedApplicationList cmdlet needs to be run before the New-ADDCCloneConfigFile cmdlet is used because if the New-ADDCCloneConfigFile cmdlet detects an excluded application, it will not create a DCCloneConfig.xml file. For more information on virtual domain controller cloning, see the guidance on AD DS virtualization at <http://go.microsoft.com/fwlink/?LinkId=208030>.

Parameters

Parameter :**Force**

Description :Forces an overwrite of an existing CustomDCCloneAllowList.xml file if one is found to exist at the folder path specified in the -Path parameter.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**GenerateXml**

Description :Creates the CustomDCCloneAllowList.xml file and writes it in the location specified using the -Path parameter.

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Path**

Description :The folder path to use when creating the CustomDCCloneAllowList.xml file using the -GenerateXml switch parameter.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Examples

----- EXAMPLE 1 -----

Description

Displays the excluded application list to the console. If there is already a CustomDCCloneAllowList.xml, this cmdlet displays the delta of that list compared to the operating system (which may be nothing if the lists match).

```
C:\PS>Get -ADDCCloningExcludedApplicationList
```

----- EXAMPLE 2 -----

Description

Generates the excluded application list as a file named CustomDCCloneAllowList.xml at the specified folder path (C:\Windows\NTDS) and forces overwrite if a file by that name is found to already exist at that path location.

```
C:\PS>Get-ADDCCloningExcludedApplicationList -GenerateXml -  
Path C:\Windows\NTDS -Force
```

Cmdlet: Get-ADDefaultDomainPasswordPolicy

Synops

Gets the default password policy for an Active Directory domain.

Syntax

```
Get-ADDefaultDomainPasswordPolicy [[-Current] {LocalComputer |
    LoggedOnUser}] [-AuthType {Negotiate | Basic}] [-Credential
    <PSCredential>] [-Server <String>] [<CommonParameters>]
```

```
Get-ADDefaultDomainPasswordPolicy [-Identity]
    <ADDefaultDomainPasswordPolicy> [-AuthType {Negotiate |
    Basic}]
    [-Credential <PSCredential>] [-Server <String>]
    [<CommonParameters>]
```

Description

The Get-ADDefaultDomainPasswordPolicy cmdlet gets the default password policy for a domain.

The Identity parameter specifies the Active Directory domain. You can identify a domain by its Distinguished Name (DN), GUID, Security Identifier (SID), DNS domain name, or NETBIOS name. You can also set the parameter to a domain object variable, such as \$<localDomainObject> or pass a domain object through the pipeline to the Identity parameter.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Manage ment.AuthType.Negotiate
Accept pipeline input?	false

Accept wildcard characters?	false
-----------------------------	-------

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Current

Description :Specifies whether to return the domain of the local computer or the current logged on user (CLU). Possible values for this parameter are:

Required	false
Position	2
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory domain object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute. All values are for the domainDNS object that represents the domain.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by

providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A domain object is received by the Identity parameter.

Type : Microsoft.ActiveDirectory.Management.ADDomain

Outputs

Returns the default domain password policy object for the specified domain.

Type : Microsoft.ActiveDirectory.Management.ADDefaultDomainPasswordPolicy

Notes

Examples

----- EXAMPLE 1 -----

Description

Get the default domain password policy from current logged on user domain.

```
C:\PS>Get-ADDefaultDomainPasswordPolicy -Current LoggedOnUser
```

----- EXAMPLE 2 -----

Description

Get the default domain password policy from current local computer.

```
C:\PS>Get-ADDefaultDomainPasswordPolicy -Current LocalComputer
```

----- EXAMPLE 3 -----

Description

Get the default domain password policy from a given domain.

```
C:\PS>Get-ADDefaultDomainPasswordPolicy -Identity fabrikam.com
```

----- EXAMPLE 4 -----

Description

Get the default domain password policy objects from all the domains in the forest.

```
C:\PS>(Get-ADForest -Current LoggedOnUser).Domains | %{ Get-ADDefaultDomainPasswordPolicy -Identity $_ }
```

----- EXAMPLE 5 -----

Description

Get the default domain password policy from current logged on user domain.

```
C:\PS>Get-ADDefaultDomainPasswordPolicy
```

Cmdlet: Get-ADDomain

Synops

Gets an Active Directory domain.

Syntax

```
Get-ADDomain [-AuthType {Negotiate | Basic}] [-Credential  
<PSCredential>]  
    [-Current {LocalComputer | LoggedOnUser}] [-Server <String>]  
    [<CommonParameters>]
```

```
Get-ADDomain [-Identity] <ADDomain> [-AuthType {Negotiate |  
Basic}]  
    [-Credential <PSCredential>] [-Server <String>]  
    [<CommonParameters>]
```

Description

The Get-ADDomain cmdlet gets the Active Directory domain specified by the parameters. You can specify the domain by setting the Identity or Current parameters.

The Identity parameter specifies the Active Directory domain to get. You can identify the domain object to get by its Distinguished Name (DN), GUID, Security Identifier (SID), DNS domain name, or NetBIOS name. You can also set the parameter to a domain object variable, such as \$<localDomainObject> or pass a domain object through the pipeline to the Identity parameter.

To get the domain of the local computer or current logged on user (CLU) set the Current parameter to LocalComputer or LoggedOnUser. When you set the Current parameter, you do not need to set the Identity parameter.

When the Current parameter is set to LocalComputer or LoggedOnUser, the cmdlet uses the Server and Credential parameters according to the following rules.

-If both the Server and Credential parameters are not specified:

--The domain is set to the domain of the LocalComputer or LoggedOnUser and a server is located in this domain. The credentials of the current logged on user are used to get the domain.

-If the Server parameter is specified and the Credential parameter is not specified:

--The domain is set to the domain of the specified server and the cmdlet checks to make

sure that the server is in the domain of the LocalComputer or LoggedOnUser. Then the credentials of the current logged on user are used to get the domain. An error is returned when the server is not in the domain of the LocalComputer or LoggedOnUser.

-If the Server parameter is not specified and the Credential parameter is specified:

--The domain is set to the domain of the LocalComputer or LoggedOnUser and a server is located in this domain. Then the credentials specified by the Credential parameter are used to get the domain.

If the Server and Credential parameters are specified:

The domain is set to the domain of the specified server and the cmdlet checks to make sure that the server is in the domain of the LocalComputer or LoggedOnUser. Then the credentials specified by the Credential parameter are used to get the domain. An error is returned when the server is not in the domain of the LocalComputer or LoggedOnUser.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Current**

Description :Specifies whether to return the domain of the local computer or the current logged on user (CLU). Possible values for this parameter are:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Identity**

Description :Specifies an Active Directory domain object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute. All values are for the domainDNS object that represents the domain.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A domain object is received by the Identity parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADDomain

Outputs

Returns one or more domain objects.

The cmdlet returns all of the properties of the domain. To view all of the properties for an ADDomain object, use the following command and replace <domain> with a domain controller identifier such as a DNS host name.

Get-ADDomain <domain>| Get-Member

Type : Microsoft.ActiveDirectory.Management.ADDomain

Notes

Examples

----- EXAMPLE 1 -----

Description

Gets the domain information for the domain 'fabrikam.com'.

```
C:\PS>Get-ADDomain fabrikam.com
```

----- EXAMPLE 2 -----

Description

Get the domain information of the current local computer domain.

```
C:\PS>Get-ADDomain -Current LocalComputer
```

----- EXAMPLE 3 -----

Description

Gets the domain information for the domain of the currently logged on user.

```
C:\PS>Get-ADDomain -Current LoggedOnUser
```

----- EXAMPLE 4 -----

Description

Gets the domain information for the domain of the currently logged on user.

C:\PS>Get-ADDomain

```
AllowedDNSSuffixes           : {}
ChildDomains                 : {}
ComputersContainer           :
CN=Computers,DC=Fabrikam,DC=com
DeletedObjectsContainer      : CN=Deleted
Objects,DC=Fabrikam,DC=com
DistinguishedName            : DC=Fabrikam,DC=com
DNSRoot                      : Fabrikam.com
DomainControllersContainer   : OU=Domain
Controllers,DC=Fabrikam,DC=com
DomainMode                   : Windows2003Domain
DomainSID                    : S-1-5-21-41432690-
3719764436-1984117282
ForeignSecurityPrincipalsContainer :
CN=ForeignSecurityPrincipals,DC=Fabrikam,DC=com
Forest                       : Fabrikam.com
InfrastructureMaster         : Fabrikam-DC1.Fabrikam.com
LastLogonReplicationInterval :
LinkedGroupPolicyObjects     : {CN={31B2F340-016D-11D2-
945F-00C04FB984F9},CN=Policies,CN=System,DC=Fabrikam,DC=com}
LostAndFoundContainer        :
CN=LostAndFound,DC=Fabrikam,DC=com
ManagedBy                   :
Name                         : Fabrikam
NetBIOSName                  : FABRIKAM
ObjectClass                   : domainDNS
ObjectGUID                   : b63b4f44-58b9-49cf-8911-
b36e8575d5eb
ParentDomain                 :
PDCEmulator                  : Fabrikam-DC1.Fabrikam.com
QuotasContainer              : CN=NTDS
Quotas,DC=Fabrikam,DC=com
ReadOnlyReplicaDirectoryServers : {CSD2722780.Fabrikam.com}
ReplicaDirectoryServers      : {Fabrikam-
DC1.Fabrikam.com}
RIDMaster                    : Fabrikam-DC1.Fabrikam.com
SubordinateReferences         :
{DC=ForestDnsZones,DC=Fabrikam,DC=com,
DC=DomainDnsZones,DC=Fabrikam,DC=com, CN=Co
nfiguration,DC=Fabrikam,DC=com}
SystemsContainer             :
CN=System,DC=Fabrikam,DC=com
UsersContainer                :
CN=Users,DC=Fabrikam,DC=com
```

Cmdlet: Get-ADDomainController

Synops

Gets one or more Active Directory domain controllers based on discoverable services criteria, search parameters or by providing a domain controller identifier, such as the NetBIOS name.

Syntax

```
Get-ADDomainController [[-Identity] <ADDomainController>] [-AuthType {Negotiate | Basic}] [-Credential <PSCredential>] [-Server <String>] [<CommonParameters>]
```

```
Get-ADDomainController [-AuthType {Negotiate | Basic}] [-AvoidSelf] [-DomainName <String>] [-ForceDiscover] [-MinimumDirectoryServiceVersion {Windows2000 | Windows2008 | Windows2012 | Windows2012R2}] [-NextClosestSite] [-Service {ADWS | GlobalCatalog | KDC | PrimaryDC | ReliableTimeService | TimeService}] [-SiteName <String>] [-Writable] [-Discover [<CommonParameters>]]
```

```
Get-ADDomainController [-AuthType {Negotiate | Basic}] [-Credential <PSCredential>] [-Server <String>] [-Filter <String>] [<CommonParameters>]
```

Description

The Get-ADDomainController cmdlet gets the domain controllers specified by the parameters. You can get domain controllers by setting the Identity, Filter or Discover parameters.

The Identity parameter specifies the domain controller to get. You can identify a domain

controller by its GUID, IPV4Address, global IPV6Address, or DNS host name. You can also identify a domain controller by the name of the server object that represents the domain controller, the Distinguished Name (DN) of the NTDS settings object or the server object, the GUID of the NTDS settings object or the server object under the configuration partition, or the DN of the computer object that represents the domain controller. You can also set the Identity parameter to a domain controller object variable, such as \$<localDomainControllerObject>, or pass a domain controller object through the pipeline to the Identity parameter.

To search for and retrieve more than one domain controller, use the Filter parameter. The Filter parameter uses the PowerShell Expression Language to write query strings for Active Directory. PowerShell Expression Language syntax provides rich type conversion support for value types received by the Filter parameter. For more information about the Filter parameter syntax, see [about_ActiveDirectory_Filter](#). You cannot use an LDAP query string with this cmdlet.

To get a domain controller by using the discovery mechanism of DCLocator, use the Discover parameter. You can provide search criteria by setting parameters such as Service, SiteName, DomainName, NextClosestSite, AvoidSelf, and ForceDiscover.

Parameters

Parameter :AuthType

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :AvoidSelf

Description :Specifies to not return the current computer as a domain controller. If the current computer is not a domain controller, this parameter is ignored. You can specify this parameter when you want to get the name of another domain controller in the domain.

Required	false
Position	named
Default value	

Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Discover

Description :Specifies to return a discoverable domain controller that meets the conditions specified by the cmdlet parameters.

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :DomainName

Description :Specifies the domain to search. The cmdlet locates a discoverable domain controller in this domain. Specify the domain by using the NetBIOS name or Fully Qualified Domain Name (FQDN) of the domain.

Required	false
Position	named
Default value	Name of the domain to which this machine is joined
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Filter

Description :Specifies a query string that retrieves Active Directory objects. This string uses the PowerShell Expression Language syntax. The PowerShell Expression Language syntax provides rich type-conversion support for value types received by the Filter parameter. The syntax uses an in-order representation, which means that the operator is placed between the operand and the value. For more information about the Filter parameter, see about_ActiveDirectory_Filter.

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**ForceDiscover**

Description :Forces the cmdlet to clear any cached domain controller information and perform a new discovery. If this parameter is not specified the cmdlet may return cached domain controller information.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Identity**

Description :Specifies an Active Directory domain controller object by providing one of the following values. The identifier in parentheses is the LDAP display name for the attribute. Unless specified otherwise, these values are for the server object that represents the domain controller.

Required	false
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :**MinimumDirectoryServiceVersion**

Description :Species the earliest operating system that the domain controller can have so

that it is returned by the cmdlet when getting a DC using -Discover switch. Possible values are:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**NextClosestSite**

Description :Specifies to return a domain controller in the next closest site when a domain controller is not found in the site that contains the client. The next closest site is the site with the lowest site link cost with respect to the current site. Costs between sites are based on factors such as bandwidth, as well as physical proximity.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Service**

Description :Species the types of domain controllers to get. You can specify more than one type by using a comma-separated list. Possible values for this parameter are:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**SiteName**

Description :Specifies the name of a site to search in to find the domain controller. If this parameter is not set, the cmdlet searches for domain controllers in the same site as the client. The name of the site is defined by the Name property of the site object.

Required	false
Position	named
Default value	Name of the site that the client is in
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Writable**

Description :Specifies whether or not this is a writable domain controller.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A domain controller object is received by the Identity parameter.

Type : Microsoft.ActiveDirectory.Management.ADDomainController

Outputs

Returns one or more domain controller objects.

When you use the Discover parameter to get a domain controller, the cmdlet returns a default set of property values for each domain controller.

When you use the Identity or Filter parameters to get a domain controller, this cmdlet returns all of the properties of the domain controller.

To view all of the properties for an ADDomainController object, use the following command and replace <domaincontroller> with a domain controller identifier such as a DNS host name.

Get-ADDomainController <domaincontroller>| Get-Member

Type : Microsoft.ActiveDirectory.Management.ADDomainController

Notes

Examples

----- EXAMPLE 1 -----

Description

Get one available DC in a given site using Discovery.

```
C:\PS>Get-ADDomainController -Discover -Site "Default-First-Site-Name"
```

----- EXAMPLE 2 -----

Description

Force discover/find one available DC in a given site.

```
C:\PS>Get-ADDomainController -Discover -Site "Default-First-Site-Name" -ForceDiscover
```

----- EXAMPLE 3 -----

Description

Get a global catalog in the current forest using Discovery.

```
C:\PS>Get-ADDomainController -Discover -Service "GlobalCatalog"
```

----- EXAMPLE 4 -----

Description

Get a global catalog in the current forest using Discovery.

```
C:\PS>Get-ADDomainController -Discover -Service 2
```

----- EXAMPLE 5 -----

Description

Get one available DC in the current domain using Discovery.

```
C:\PS>Get-ADDomainController -Discover
```

----- EXAMPLE 6 -----

Description

Get one available DC in a given domain using Discovery.

```
C:\PS>Get-ADDomainController -Discover -Domain "fabrikam.com"
```

----- EXAMPLE 7 -----

Description

Get the PDC using Discovery and make sure that is advertising as a time server.

```
C:\PS>Get-ADDomainController -Discover -Domain  
"corp.contoso.com" -Service "PrimaryDC","TimeService"
```

----- EXAMPLE 8 -----

Description

Get a domain controller using its NetBIOS name.

```
C:\PS>Get-ADDomainController -Identity "PDC-01"
```

----- EXAMPLE 9 -----

Description

Get a domain controller using its NetBIOS name.

```
C:\PS>Get-ADDomainController "PDC-01"
```

----- EXAMPLE 10 -----

Description

Get a domain controller using its DNS host name, in a given domain (specified in Server parameter) and specifying administrator credentials.

```
C:\PS>Get-ADDomainController -Identity "TK5-CORP-DC-10.fabrikam.com" -Server "fabrikam.com" -Credential "corp\administrator"
```

----- EXAMPLE 11 -----

Description

Get a domain controller using its IP address.

```
C:\PS>Get-ADDomainController -Identity "168.54.62.57"
```

----- EXAMPLE 12 -----

Description

Get all global catalogs in a given site.

```
C:\PS>Get-ADDomainController -Filter { isGlobalCatalog -eq $true -and Site -eq "Default-First-Site-Name" }
```

----- EXAMPLE 13 -----

Description

Get all ROGCs in the child domain to which the client is connected.

```
C:\PS>Get-ADDomainController -Server "research.fabrikam.com" -Filter { isGlobalCatalog -eq $true -and isReadOnly -eq $true }
```

----- EXAMPLE 14 -----

Description

Gets the domain controller in the user's current session. This is the domain controller used as a default Server in the context of an AD Provider. Using this cmdlet in this way will let you know which Server is being used by default.

```
C:\PS>Get-ADDomainController
```

----- EXAMPLE 15 -----

Description

Gets a list of all of the domain controllers for all the domains within a forest.

```
C:\PS>$allDCs = (Get-ADForest).Domains | %{ Get-ADDomainController -Filter * -Server $_ }
```

Cmdlet: Get-ADDomainControllerPasswordReplicationPolicy

Synops

Gets the members of the allowed list or denied list of a read-only domain controller's password replication policy.

Syntax

```
Get-ADDomainControllerPasswordReplicationPolicy  
[<CommonParameters>]
```

Description

The Get-ADDomainControllerPasswordReplicationPolicy gets the users, computers, service accounts and groups that are members of the applied list or denied list for a read-only domain controller's (RODC) password replication policy. To get the members of the applied list, specify the AppliedList parameter. To get the members of the denied list, specify the DeniedList parameter.

The Identity parameter specifies the RODC that uses the allowed and denied lists to apply the password replication policy. You can identify a domain controller by its GUID, IPV4Address, IPV6Address, or DNS host name. You can also identify a domain controller by the name of the server object that represents the domain controller, the Distinguished Name (DN) of the NTDS settings object or the server object, the GUID of the NTDS settings object or the server object under the configuration partition, or the DN of the computer object that represents the domain controller.

You can also set the Identity parameter to a domain controller object variable, such as \$<localDomainControllerobject>, or pass a domain controller object through the pipeline to the Identity parameter. For example, you can use the Get-ADDomainController cmdlet to retrieve a domain controller object and then pass the object through the pipeline to the Get-ADDomainControllerPasswordReplicationPolicy cmdlet.

If you specify a writeable domain controller for this cmdlet, the cmdlet returns a non-terminating error.

Parameters

Inputs

A domain controller object is received by the Identity parameter.

Type : Microsoft.ActiveDirectory.Management.ADDomainController

Outputs

Returns one or more objects that represent the users, computers, service accounts and groups that are members of the applied list or denied list of the domain controller password replication policy. The list returned depends on the parameters specified.

Type : Microsoft.ActiveDirectory.Management.ADPrincipal

Notes

Examples

----- EXAMPLE 1 -----

Description

Get from an RODC domain controller password replication policy the allowed accounts showing the name and object class of each

```
C:\PS>Get-ADDomainControllerPasswordReplicationPolicy -  
Identity "FABRIKAM-RODC1" -Allowed | ft Name,ObjectClass
```

----- EXAMPLE 2 -----

Description

Get the password replication policy allowed lists from all RODCs in the domain.

```
C:\PS>Get-ADDomainController -Filter {IsReadOnly -eq $true} |  
Get-ADDomainControllerPasswordReplicationPolicy -Allowed  
  
DistinguishedName : CN=Allowed RODC Password Replication  
Group,CN=Users,DC=Fabrikam,DC=com  
Name              : Allowed RODC Password Replication Group  
ObjectClass       : group  
ObjectGUID        : 239b0470-7f49-472d-8fcb-4911e90b2c5e  
SamAccountName    : Allowed RODC Password Replication Group  
SID               : S-1-5-21-41432690-3719764436-1984117282-  
571
```

Cmdlet: Get-ADDomainControllerPasswordReplicationPolicyUsage

Synops

Gets the Active Directory accounts that are authenticated by a read-only domain controller or that are in the revealed list of the domain controller.

Syntax

```
Get-ADDomainControllerPasswordReplicationPolicyUsage  
[<CommonParameters>]
```

Description

The Get-ADDomainControllerPasswordReplicationPolicyUsage cmdlet gets the user or computer accounts that are authenticated by a read-only domain controller (RODC) or that have passwords that are stored on that RODC. The list of accounts that are stored on a RODC is known as the revealed list.

To get accounts that are authenticated by the RODC, use the `AuthenticatedAccounts` parameter. To get the accounts that have passwords stored on the RODC, use the `RevealedAccounts` parameter.

The `Identity` parameter specifies the RODC. You can identify a domain controller by its GUID, `IPV4Address`, global `IPV6Address`, or DNS host name. You can also identify a domain controller by the name of the server object that represents the domain controller, the Distinguished Name (DN) of the NTDS settings object of the server object, the GUID of the NTDS settings object of the server object under the configuration partition, or the DN of the computer object that represents the domain controller. You can also set the `Identity` parameter to a domain controller object variable, such as `$<localDomainControllerObject>`, or pass a domain controller object through the pipeline to the `Identity` parameter. For example, you can use the `Get-ADDomainController` cmdlet to retrieve a domain controller object and then pass the object through the pipeline to the `Get-ADDomainControllerPasswordReplicationPolicyUsage` cmdlet. If you specify a writeable domain controller for this cmdlet, the cmdlet returns a non-terminating error.

Parameters

Inputs

A domain controller object is received by the `Identity` parameter.

Type : `Microsoft.ActiveDirectory.Management.ADDomainController`

Outputs

Returns one or more account objects that represent the users, computers, and service accounts that are authenticated by the specified read-only domain controller (RODC) or that have passwords that are stored on the RODC.

Type : Microsoft.ActiveDirectory.Management.ADAccount

Notes

Examples

----- EXAMPLE 1 -----

Description

Get the authenticated accounts for a given RODC showing the name and object class of each

```
C:\PS>Get-ADDomainControllerPasswordReplicationPolicyUsage -  
Identity "FABRIKAM-RODC1" -AuthenticatedAccounts | ft  
Name, ObjectClass -A
```

----- EXAMPLE 2 -----

Description

Gets the revealed accounts for a given RODC showing the name and object class of each account returned.

```
C:\PS>Get-ADDomainControllerPasswordReplicationPolicyUsage -  
Identity "FABRIKAM-RODC1" -RevealedAccounts | ft  
Name, ObjectClass -A
```

----- EXAMPLE 3 -----

Description

Gets the list of accounts cached across all RODCs in the domain.

```
C:\PS>Get-ADDomainController -Filter {IsReadOnly -eq $true} |  
Get-ADDomainControllerPasswordReplicationPolicyUsage
```

```
DistinguishedName :  
CN=krbtgt_35512,CN=Users,DC=Fabrikam,DC=com  
Enabled           : False  
Name              : krbtgt_35512  
ObjectClass       : user  
ObjectGUID        : 8c7268f9-add3-409c-968b-de029e517211  
SamAccountName    : krbtgt_35512  
SID               : S-1-5-21-41432690-3719764436-1984117282-  
1106  
UserPrincipalName :
```

```
DistinguishedName : CN=CSD2722780,OU=Domain  
Controllers,DC=Fabrikam,DC=com  
Enabled           : True  
Name              : CSD2722780  
ObjectClass       : computer  
ObjectGUID        : 63a5e005-e01f-4fc9-ae71-9d9367f808bc  
SamAccountName    : CSD2722780$  
SID               : S-1-5-21-41432690-3719764436-1984117282-  
1105  
UserPrincipalName :
```

Cmdlet: Get-ADFineGrainedPasswordPolicy

Synops

Gets one or more Active Directory fine grained password policies.

Syntax

```
Get-ADFineGrainedPasswordPolicy [-AuthType {Negotiate | Basic}]  
    [-Credential <PSCredential>] [-Properties <String[]>] [-  
ResultPageSize  
    <Int32>] [-ResultSetSize <Int32>] [-SearchBase <String>] [-  
SearchScope  
    {Base | OneLevel | Subtree}] [-Server <String>] -Filter  
<String>  
    [<CommonParameters>]
```

```
Get-ADFineGrainedPasswordPolicy [-Identity  
<ADFineGrainedPasswordPolicy>  
    [-AuthType {Negotiate | Basic}] [-Credential <PSCredential>]  
[-Properties  
    <String[]>] [-Server <String>] [<CommonParameters>]
```

```
Get-ADFineGrainedPasswordPolicy [-AuthType {Negotiate | Basic}]  
    [-Credential <PSCredential>] [-Properties <String[]>] [-  
ResultPageSize  
    <Int32>] [-ResultSetSize <Int32>] [-SearchBase <String>] [-  
SearchScope  
    {Base | OneLevel | Subtree}] [-Server <String>] -LDAPFilter  
<String>  
    [<CommonParameters>]
```

Description

The Get-ADFineGrainedPasswordPolicy cmdlet gets a fine grained password policy or performs a search to retrieve multiple fine grained password policies.

The Identity parameter specifies the Active Directory fine grained password policy to get. You can identify a fine grained password policy by its distinguished name (DN), GUID or

name. You can also set the parameter to a fine grained password policy object variable, such as `$<localFineGrainedPasswordPolicyObject>` or pass a fine grained password policy object through the pipeline to the Identity parameter.

To search for and retrieve more than one fine grained password policies, use the Filter or LDAPFilter parameters. The Filter parameter uses the PowerShell Expression Language to write query strings for Active Directory. PowerShell Expression Language syntax provides rich type conversion support for value types received by the Filter parameter. For more information about the Filter parameter syntax, see `about_ActiveDirectory_Filter`. If you have existing LDAP query strings, you can use the LDAPFilter parameter.

This cmdlet retrieves a default set of fine grained password policy object properties. To retrieve additional properties use the Properties parameter. For more information about the how to determine the properties for FineGrainedPasswordPolicy objects, see the Properties parameter description.

Parameters

Parameter :AuthType

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Filter

Description : Specifies a query string that retrieves Active Directory objects. This string uses the PowerShell Expression Language syntax. The PowerShell Expression Language syntax provides rich type-conversion support for value types received by the Filter parameter. The syntax uses an in-order representation, which means that the operator is placed between the operand and the value. For more information about the Filter parameter, see [about_ActiveDirectory_Filter](#).

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Identity**

Description : Specifies an Active Directory fine-grained password policy object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :**LDAPFilter**

Description : Specifies an LDAP query string that is used to filter Active Directory objects. You can use this parameter to run your existing LDAP queries. The Filter parameter syntax supports the same functionality as the LDAP syntax. For more information, see the Filter parameter description and the [about_ActiveDirectory_Filter](#).

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Properties**

Description : Specifies the properties of the output object to retrieve from the server. Use

this parameter to retrieve properties that are not included in the default set.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**ResultPageSize**

Description :Specifies the number of objects to include in one page for an Active Directory Domain Services query.

Required	false
Position	named
Default value	256
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**ResultSetSize**

Description :Specifies the maximum number of objects to return for an Active Directory Domain Services query. If you want to receive all of the objects, set this parameter to \$null (null value). You can use Ctrl+c to stop the query and return of objects.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**SearchBase**

Description :Specifies an Active Directory path to search under.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**SearchScope**

Description :Specifies the scope of an Active Directory search. Possible values for this parameter are:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A fine grained password policy is received by the Identity parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADFineGrainedPasswordPolicy

Outputs

Returns one or more fine grained password policy objects.

This cmdlet returns a default set of ADFineGrainedPasswordPolicy property values. To retrieve additional ADFineGrainedPasswordPolicy properties, use the Properties parameter.

To view the properties for an ADFineGrainedPasswordPolicy object, see the following examples. To run these examples, replace <fine grained password policy> with a fine grained password policy identifier such as the name of your local fine grained password policy.

To get a list of the default set of properties of an ADFineGrainedPasswordPolicy object,

use the following command:

```
Get-ADFineGrainedPasswordPolicy <fine grained password policy>| Get-Member
```

To get a list of all the properties of an ADFineGrainedPasswordPolicy object, use the following command:

```
Get-ADFineGrainedPasswordPolicy <fine grained password policy> -Properties * | Get-Member
```

Type : Microsoft.ActiveDirectory.Management.ADFineGrainedPasswordPolicy

Notes

Examples

----- EXAMPLE 1 -----

Description

```
C:\PS>Get-ADFineGrainedPasswordPolicy -Filter {Name -like "*"}  
| ft Name, Precedence,MaxPasswordAge,MinPasswordLength -A
```

Name	Precedence	MaxPasswordAge	MinPasswordLength
----	-----	-----	-----
DomainUsersPSO	500	60.00:00:00	8
SvcAccPSO	100	30.00:00:00	20
AdminsPSO	200	15.00:00:00	10
DlgtAdminsPSO	300	20.00:00:00	10

----- EXAMPLE 2 -----

Description

Get the Fine Grained Password Policy named 'AdminsPSO'.

```
C:\PS>Get-ADFineGrainedPasswordPolicy AdminsPSO
```

```
Name : AdminsPSO
ComplexityEnabled : True
LockoutThreshold : 0
ReversibleEncryptionEnabled : True
LockoutDuration : 00:30:00
LockoutObservationWindow : 00:30:00
MinPasswordLength : 10
Precedence : 200
ObjectGUID : ba1061f0-c947-4018-a399-6ad8897d26e3
ObjectClass : msDS-PasswordSettings
PasswordHistoryCount : 24
MinPasswordAge : 1.00:00:00
MaxPasswordAge : 15.00:00:00
AppliesTo : {}
DistinguishedName : CN=AdminsPSO,CN=Password
Settings Container,CN=System,DC=FABRIKAM,DC=COM
```

----- EXAMPLE 3 -----

Description

Get all the properties for the Fine Grained Password Policy with DistinguishedName
'CN=DlgtAdminsPSO,CN=Password Settings
Container,CN=System,DC=FABRIKAM,DC=COM'.

```

C:\PS>Get-ADFineGrainedPasswordPolicy
'CN=DlgtAdminsPSO,CN=Password Settings
Container,CN=System,DC=FABRIKAM,DC=COM' -Properties *

msDS-LockoutDuration                : -180000000000
msDS-PasswordSettingsPrecedence     : 300
ObjectCategory                     : CN=ms-DS-Password-
Settings,CN=Schema,CN=Configuration,DC=FABRIKAM,DC=COM
DistinguishedName                   :
CN=DlgtAdminsPSO,CN=Password Settings
Container,CN=System,DC=FABRIKAM,DC=COM
ExpireOn                            :
msDS-MinimumPasswordAge             : -864000000000
dSCorePropagationData               : {12/31/1600 4:00:00
PM}
msDS-LockoutThreshold               : 0
Description                         : The Delegated
Administrators Password Policy
LockoutThreshold                    : 0
instanceType                        : 4
msDS-PasswordComplexityEnabled      : True
MaxPasswordAge                     : 20.00:00:00
whenCreated                         : 8/15/2008 12:47:43
AM
Name                                : DlgtAdminsPSO
ObjectClass                         : msDS-
PasswordSettings
ReversibleEncryptionEnabled         : True
msDS-PasswordReversibleEncryptionEnabled : True
Dynamic                             : False
LockoutDuration                     : 00:30:00
msDS-PSOAppliesTo                   : {CN=Kim
Abercrombie,OU=Finance,OU=UserAccounts,DC=FABRIKAM,DC=COM,
CN=Bob
Kelly,OU=AsiaPacific,OU=Sales,OU=UserAccounts,DC=FABRIKAM,DC=C
OM}
DisplayName                         : Delegated
Administrators PSO
uSNCreated                          : 16395
Modified                            : 8/20/2008 12:21:15
AM
MinPasswordAge                      : 1.00:00:00
ProtectedFromAccidentalDeletion     : False
Created                             : 8/15/2008 12:47:43
AM
sDRightsEffective                   : 15
ComplexityEnabled                   : True
PasswordHistoryCount                : 24
msDS-MaximumPasswordAge             : -17280000000000
MinPasswordLength                   : 10
Precedence                          : 300
ObjectGUID                          : 75cf8c7a-9c93-4e81-
b611-851803372cb2
msDS-MinimumPasswordLength          : 10
Deleted                             :
Orphaned                           : False
CN                                  : DlgtAdminsPSO
LastKnownParent                     :
CanonicalName                       :
FABRIKAM.COM/System/Password Settings Container/DlgtAdminsPSO

```

```

modifyTimeStamp          : 8/20/2008 12:21:15
AM
msDS-LockoutObservationWindow : -180000000000
LockoutObservationWindow : 00:30:00
whenChanged             : 8/20/2008 12:21:15
AM
createTimeStamp          : 8/15/2008 12:47:43
AM
msDS-PasswordHistoryLength : 24
nTSecurityDescriptor      :
System.DirectoryServices.ActiveDirectorySecurity
AppliesTo                :
{CN=JeffPrice,OU=Finance,OU=UserAccounts,DC=FABRIKAM,DC=COM,
CN=GlenJohn,OU=AsiaPacific,OU=Sales,OU=UserAccounts,DC=FABRIKA
M,DC=COM}
uSNChanged               : 72719

```

----- EXAMPLE 4 -----

Description

Get all the Fine Grained Password Policy object that have a name that begins with admin.

```

C:\PS>Get-ADFineGrainedPasswordPolicy -Filter {name -like
"*admin*"}

AppliesTo          :
{CN=GlenJohn,CN=Users,DC=Fabrikam,DC=com,
CN=JeffPrice,CN=Users,DC=Fabrikam,DC=com,
CN=Administrator,CN=Users,DC=Fabrikam,DC=com}
ComplexityEnabled   : True
DistinguishedName   : CN=DlgtAdminsPSO,CN=Password
Settings Container, CN=System, DC=Fabrikam, DC=com
LockoutDuration     : 00:30:00
LockoutObservationWindow : 00:30:00
LockoutThreshold    : 0
MaxPasswordAge      : 42.00:00:00
MinPasswordAge      : 1.00:00:00
MinPasswordLength   : 7
Name                : DlgtAdminsPSO
ObjectClass          : msDS-PasswordSettings
ObjectGUID          : b7de4e6e-c291-4ce6-bb47-
6bf8f807df53
PasswordHistoryCount : 24
Precedence           : 100
ReversibleEncryptionEnabled : True

```

Cmdlet: Get-ADFineGrainedPasswordPolicySubject

Synops

Gets the users and groups to which a fine grained password policy is applied.

Syntax

```
Get-ADFineGrainedPasswordPolicySubject [-Identity]
    <ADFineGrainedPasswordPolicy> [-AuthType {Negotiate | Basic}]
[-Credential
    <PSCredential>] [-Server <String>] [<CommonParameters>]
```

Description

The Get-ADFineGrainedPasswordPolicySubject cmdlet gets users and groups that are subject to a fine grained password policy.

The Identity parameter specifies the fine grained password policy. You can identify a fine grained password policy by its distinguished name, GUID or name. You can also set the Identity parameter to a fine grained password policy object variable, such as \$<localPasswordPolicyObject>, or pass a fine grained password policy object through the pipeline to the Identity parameter. For example, you can use the Get-ADFineGrainedPasswordPolicy cmdlet to retrieve a fine grained password policy object and then pass the object through the pipeline to the Get-ADFineGrainedPasswordPolicySubject cmdlet.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Manage ment.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory fine-grained password policy object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A fine grained password policy object is received by the Identity parameter.

Type : Microsoft.ActiveDirectory.Management.ADFineGrainedPasswordPolicy

Outputs

Returns principal objects that represent the users and groups to which the fine grained password policy is applied.

Type : `Microsoft.ActiveDirectory.Management.ADPrincipal`

Notes

Cmdlet: Get-ADForest

Synops

Gets an Active Directory forest.

Syntax

```
Get-ADForest [-AuthType {Negotiate | Basic}] [-Credential  
<PSCredential>]  
    [-Current {LocalComputer | LoggedOnUser}] [-Server <String>]  
    [<CommonParameters>]
```

```
Get-ADForest [-Identity] <ADForest> [-AuthType {Negotiate |  
Basic}]  
    [-Credential <PSCredential>] [-Server <String>]  
    [<CommonParameters>]
```

Description

The Get-ADForest cmdlet gets the Active Directory forest specified by the parameters. You can specify the forest by setting the Identity or Current parameters.

The Identity parameter specifies the Active Directory forest to get. You can identify a forest by its fully qualified domain name (FQDN), DNS host name, or NetBIOS name. You can also set the parameter to a forest object variable, such as \$<localForestObject> or you can pass a forest object through the pipeline to the Identity parameter.

To retrieve the forest of the local computer or current logged on user (CLU) set the Current parameter to LocalComputer or LoggedOnUser. When you set the Current parameter, you do not need to set the Identity parameter.

When the Current parameter is set to LocalComputer or LoggedOnUser, the cmdlet uses the Server and Credential parameter values to determine the domain and the credentials to use to identify the domain of the forest according to the following rules.

-If both the Server and Credential parameters are not specified:

--The domain is set to the domain of the LocalComputer or LoggedOnUser and a server is located in this domain. The credentials of the current logged on user are used to get the domain.

-If the Server parameter is specified and the Credential parameter is not specified:

--The domain is set to the domain of the specified server and the cmdlet checks to make

sure that the server is in the domain of the LocalComputer or LoggedOnUser. Then the credentials of the current logged on user are used to get the domain. An error is returned when the server is not in the domain of the LocalComputer or LoggedOnUser.

-If the Server parameter is not specified and the Credential parameter is specified:

--The domain is set to the domain of the LocalComputer or LoggedOnUser and a server is located in this domain. Then the credentials specified by the Credential parameter are used to get the domain.

If the Server and Credential parameters are specified:

The domain is set to the domain of the specified server and the cmdlet checks to make sure that the server is in the domain of the LocalComputer or LoggedOnUser. Then the credentials specified by the Credential parameter are used to get the domain. An error is returned when the server is not in the domain of the LocalComputer or LoggedOnUser.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Current**

Description :Specifies whether to return the domain of the local computer or the current logged on user (CLU). Possible values for this parameter are:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Identity**

Description :Specifies an Active Directory forest object by providing one of the following attribute values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A forest object is received by the Identity parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADForest

Outputs

Returns one or more forest objects.

This cmdlet returns all of the properties of the forest. To view all of the properties for an ADForest object, use the following command and replace <forest> with a forest identifier such as a DNS host name.

Get-ADForest <forest> | Get-Member

Type : Microsoft.ActiveDirectory.Management.ADForest

Notes

Examples

----- EXAMPLE 1 -----

Description

Get the forest information of the Fabrikam.com forest.

```
C:\PS>Get-ADForest Fabrikam.com
```

----- EXAMPLE 2 -----

Description

Get the forest information of the current local computer's forest.

```
C:\PS>Get-ADForest -Current LocalComputer
```

----- EXAMPLE 3 -----

Description

Get the forest information of the current logged on users's forest.

```
C:\PS>Get-ADForest -Current LoggedOnUser
```

----- EXAMPLE 4 -----

Description

Gets the forest information for the forest of the currently logged on user.

```

C:\PS>Get-ADForest
ApplicationPartitions      :
{DC=ForestDnsZones,DC=Fabrikam,DC=com,
DC=DomainDnsZones,DC=Fabrikam,DC=com}
CrossForestReferences      :
{CN=northwind,CN=Partitions,CN=Configuration,DC=Fabrikam,DC=com}
DomainNamingMaster         : Fabrikam-DC1.Fabrikam.com
Domains                    : {Fabrikam.com}
ForestMode                  : Windows2003Forest
GlobalCatalogs             : {Fabrikam-DC1.Fabrikam.com,
CSD2722780.Fabrikam.com}
Name                        : Fabrikam.com
PartitionsContainer        :
CN=Partitions,CN=Configuration,DC=Fabrikam,DC=com
RootDomain                  : Fabrikam.com
SchemaMaster                : Fabrikam-DC1.Fabrikam.com
Sites                      : {Default-First-Site-Name,
UnitedKingdomHQ, B03, RODC-Site-Name}
SPNSuffixes                : {}
UPNSuffixes                : {}

```

----- EXAMPLE 5 -----

Description

Gets a list of all the domain controllers for all domain within a forest.

```

C:\PS>$allDCs = (Get-ADForest).Domains | %{ Get-
ADDomainController -Filter * -Server $_ }

```

Cmdlet: Get-ADGroup

Synops

Gets one or more Active Directory groups.

Syntax

```
Get-ADGroup [-AuthType {Negotiate | Basic}] [-Credential
<PSCredential>]
    [-Properties <String[]>] [-ResultPageSize <Int32>] [-
ResultSetSize
    <Int32>] [-SearchBase <String>] [-SearchScope {Base |
OneLevel | Subtree}]
    [-Server <String>] -Filter <String> [<CommonParameters>]

Get-ADGroup [-Identity] <ADGroup> [-AuthType {Negotiate | Basic}]

    [-Credential <PSCredential>] [-Partition <String>] [-
Properties
    <String[]>] [-Server <String>] [<CommonParameters>]

Get-ADGroup [-AuthType {Negotiate | Basic}] [-Credential
<PSCredential>]
    [-Properties <String[]>] [-ResultPageSize <Int32>] [-
ResultSetSize
    <Int32>] [-SearchBase <String>] [-SearchScope {Base |
OneLevel | Subtree}]
    [-Server <String>] -LDAPFilter <String> [<CommonParameters>]
```

Description

The Get-ADGroup cmdlet gets a group or performs a search to retrieve multiple groups from an Active Directory.

The Identity parameter specifies the Active Directory group to get. You can identify a group by its distinguished name (DN), GUID, security identifier (SID), Security Accounts Manager (SAM) account name, or canonical name. You can also specify group object variable, such as \$<localGroupObject>.

To search for and retrieve more than one group, use the **Filter** or **LDAPFilter** parameters. The **Filter** parameter uses the PowerShell Expression Language to write query strings for Active Directory. PowerShell Expression Language syntax provides rich type conversion support for value types received by the **Filter** parameter. For more information about the **Filter** parameter syntax, see [about_ActiveDirectory_Filter](#). If you have existing LDAP query strings, you can use the **LDAPFilter** parameter.

This cmdlet gets a default set of group object properties. To get additional properties use the **Properties** parameter. For more information about the how to determine the properties for group objects, see the **Properties** parameter description.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Filter**

Description :Specifies a query string that retrieves Active Directory objects. This string uses the PowerShell Expression Language syntax. The PowerShell Expression Language syntax provides rich type-conversion support for value types received by the **Filter** parameter. The syntax uses an in-order representation, which means that the

operator is placed between the operand and the value. For more information about the Filter parameter, see [about_ActiveDirectory_Filter](#).

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Identity**

Description :Specifies an Active Directory group object by providing one of the following values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :**LDAPFilter**

Description :Specifies an LDAP query string that is used to filter Active Directory objects. You can use this parameter to run your existing LDAP queries. The Filter parameter syntax supports the same functionality as the LDAP syntax. For more information, see the Filter parameter description and the [about_ActiveDirectory_Filter](#).

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Partition**

Description :Specifies the distinguished name of an Active Directory partition. The distinguished name must be one of the naming contexts on the current directory server. The cmdlet searches this partition to find the object defined by the Identity parameter.

Required	false
----------	-------

Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Properties

Description :Specifies the properties of the output object to retrieve from the server. Use this parameter to retrieve properties that are not included in the default set.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ResultPageSize

Description :Specifies the number of objects to include in one page for an Active Directory Domain Services query.

Required	false
Position	named
Default value	256
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ResultSetSize

Description :Specifies the maximum number of objects to return for an Active Directory Domain Services query. If you want to receive all of the objects, set this parameter to \$null (null value). You can use Ctrl+c to stop the query and return of objects.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :SearchBase

Description :Specifies an Active Directory path to search under.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**SearchScope**

Description :Specifies the scope of an Active Directory search. Possible values for this parameter are:

Required	false
Position	named
Default value	Subtree
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A group object is received by the Identity parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADGroup

Outputs

Returns one or more group objects.

The Get-ADGroup cmdlet returns a default set of ADGroup property values. To retrieve

additional ADGroup properties, use the Properties parameter.

To view the properties for an ADGroup object, see the following examples. To run these examples, replace <group> with a group identifier such as Administrators.

To get a list of the default set of properties of an ADGroup object, use the following command:

```
Get-ADGroup <group> | Get-Member
```

To get a list of all the properties of an ADGroup object, use the following command:

```
Get-ADGroup <group> -Properties * | Get-Member
```

Type : Microsoft.ActiveDirectory.Management.ADGroup

Examples

----- EXAMPLE 1 -----

Description

Get the group with samAccountName administrators.

```
C:\PS>Get-ADGroup administrators
```

```
DistinguishedName :  
CN=Administrators,CN=Builtin,DC=Fabrikam,DC=com  
GroupCategory      : Security  
GroupScope         : DomainLocal  
Name               : Administrators  
ObjectClass        : group  
ObjectGUID         : 02ce3874-dd86-41ba-bddc-013f34019978  
SamAccountName     : Administrators  
SID                : S-1-5-32-544
```

----- EXAMPLE 2 -----

Description

Get the group with SID S-1-5-32-544 including the additional property member.

```
C:\PS>get-adgroup -Identity S-1-5-32-544 -Properties member
```

```
DistinguishedName :  
CN=Administrators,CN=Builtin,DC=Fabrikam,DC=com  
GroupCategory      : Security  
GroupScope         : DomainLocal  
member             : {CN=Domain  
Admins,CN=Users,DC=Fabrikam,DC=com, CN=Enterprise  
Admins,CN=Users,DC=Fabrikam,DC=com,  
CN=LabAdmin,CN=Users,DC=Fabrikam,DC=com, C  
N=Administrator,CN=Users,DC=Fabrikam,DC=com}  
Name               : Administrators  
ObjectClass        : group  
ObjectGUID         : 02ce3874-dd86-41ba-bddc-013f34019978  
SamAccountName     : Administrators  
SID                : S-1-5-32-544
```

----- EXAMPLE 3 -----

Description

Get all groups that have a GroupCategory of Security but do not have a GroupScope of DomainLocal.

```
C:\PS>get-adgroup -Filter 'GroupCategory -eq "Security" -and  
GroupScope -ne "DomainLocal"'
```

----- EXAMPLE 4 -----

Description

Get all the DomainLocal groups from the AppNC partition of the AD LDS instance.

```
C:\PS>get-adgroup -server localhost:60000 -filter {GroupScope
-eq "DomainLocal"} -SearchBase "DC=AppNC"
```

```
DistinguishedName : CN=AlphaGroup,OU=AccountDeptOU,DC=AppNC
GroupCategory      : Security
GroupScope         : DomainLocal
Name               : AlphaGroup
ObjectClass        : group
ObjectGUID         : 6498c9fb-7c62-48fe-9972-1461f7f3dec2
SID                : S-1-510474493-936115905-2475435479-
1276657127-1006239422-938965137
```

```
DistinguishedName : CN=BranchOffice1,OU=AccountDeptOU,DC=AppNC
GroupCategory      : Security
GroupScope         : DomainLocal
Name               : BranchOffice1
ObjectClass        : group
ObjectGUID         : 0b7504c5-482b-4a73-88f5-8a76960e4568
SID                : S-1-510474493-936115905-2534227223-
1194883713-3669005192-3746664089
```

```
DistinguishedName : CN=AccountLeads,OU=AccountDeptOU,DC=AppNC
GroupCategory      : Distribution
GroupScope         : DomainLocal
Name               : AccountLeads
ObjectClass        : group
ObjectGUID         : b20c032b-2de9-401a-b48c-341854a37254
SID                : S-1-510474493-936115905-2813670187-
1179675302-2001457839-270172950
```

Cmdlet: Get-ADGroupMember

Synops

Gets the members of an Active Directory group.

Syntax

```
Get-ADGroupMember [-Identity] <ADGroup> [-AuthType {Negotiate |  
Basic}]  
    [-Credential <PSCredential>] [-Partition <String>] [-  
Recursive] [-Server  
    <String>] [<CommonParameters>]
```

Description

The Get-ADGroupMember cmdlet gets the members of an Active Directory group. Members can be users, groups, and computers.

The Identity parameter specifies the Active Directory group to access. You can identify a group by its distinguished name (DN), GUID, security identifier (SID), or Security Accounts Manager (SAM) account name. You can also specify the group by passing a group object through the pipeline. For example, you can use the Get-ADGroup cmdlet to retrieve a group object and then pass the object through the pipeline to the Get-ADGroupMember cmdlet.

If the Recursive parameter is specified, the cmdlet gets all members in the hierarchy of the group that do not contain child objects. For example, if the group SaraDavisReports contains the user KarenToh and the group JohnSmithReports, and JohnSmithReports contains the user JoshPollock, then the cmdlet returns KarenToh and JoshPollock.

For AD LDS environments, the Partition parameter must be specified except in the following two conditions:

- The cmdlet is run from an Active Directory provider drive.
- A default naming context or partition is defined for the AD LDS environment. To specify a default naming context for an AD LDS environment, set the msDS-defaultNamingContext property of the Active Directory directory service agent (DSA) object (nTDSDSA) for the AD LDS instance.

Parameters

Parameter :AuthType

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Identity**

Description :Specifies an Active Directory group object by providing one of the following values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :**Partition**

Description :Specifies the distinguished name of an Active Directory partition. The distinguished name must be one of the naming contexts on the current directory server. The cmdlet searches this partition to find the object defined by the Identity parameter.

Required	false
----------	-------

Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Recursive**

Description :Specifies that the cmdlet get all members in the hierarchy of a group that do not contain child objects. The following example shows a hierarchy for the group SaraDavisReports.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A group object is received by the Identity parameter

Type : None or Microsoft.ActiveDirectory.Management.ADGroup

Outputs

Returns one or more principal objects that represent users, computers or groups that are members of the specified group.

Type : Microsoft.ActiveDirectory.Management.ADPrincipal

Notes

Examples

----- EXAMPLE 1 -----

Description

Get all the members of the administrators groups using the default behavior.

```
C:\PS>get-adgroupmember
cmdlet Get-ADGroupMember at command pipeline position 1
Supply values for the following parameters:
(Type !? for Help.)
Identity: Administrators

distinguishedName : CN=Domain
Admins,CN=Users,DC=Fabrikam,DC=com
name              : Domain Admins
objectClass       : group
objectGUID        : 5ccc6037-c2c9-42be-8e92-c8f98afd0011
SamAccountName    : Domain Admins
SID               : S-1-5-21-41432690-3719764436-1984117282-
512

distinguishedName : CN=Enterprise
Admins,CN=Users,DC=Fabrikam,DC=com
name              : Enterprise Admins
objectClass       : group
objectGUID        : 0215b0a5-aea1-40da-b598-720efe930ddf
SamAccountName    : Enterprise Admins
SID               : S-1-5-21-41432690-3719764436-1984117282-
519

distinguishedName : CN=LabAdmin,CN=Users,DC=Fabrikam,DC=com
name              : LabAdmin
objectClass       : user
objectGUID        : ab7c269d-aec5-4fcc-aebe-6cd1a2e6cd53
SamAccountName    : LabAdmin
SID               : S-1-5-21-41432690-3719764436-1984117282-
1000

distinguishedName :
CN=Administrator,CN=Users,DC=Fabrikam,DC=com
name              : Administrator
objectClass       : user
objectGUID        : 994f46e6-c62c-483f-a6cf-124197b6a959
SamAccountName    : Administrator
SID               : S-1-5-21-41432690-3719764436-1984117282-
500
```

----- EXAMPLE 2 -----

Description

Get the groups members of all domain local groups in the AD LDS instance.

```
C:\PS>get-adgroup -server localhost:60000 -filter {GroupScope
-eq "DomainLocal"} -SearchBase "DC=AppNC" | get-adgroupmember
-partition "DC=AppNC"
```

```
distinguishedName : CN=SanjayPatel,OU=AccountDeptOU,DC=AppNC
name              : SanjayPatel
objectClass       : user
objectGUID        : d671de28-6e40-42a7-b32c-63d336de296d
SamAccountName    :
SID               : S-1-510474493-936115905-2231798853-
1260534229-4171027843-767619944
```

----- EXAMPLE 3 -----

Description

Get all the group members of the administrators group.

```
C:\PS>get-adgroupmember -Identity administrators
```

```
distinguishedName : CN=Domain
Admins,CN=Users,DC=Fabrikam,DC=com
name              : Domain Admins
objectClass       : group
objectGUID        : 5ccc6037-c2c9-42be-8e92-c8f98afd0011
SamAccountName    : Domain Admins
SID               : S-1-5-21-41432690-3719764436-1984117282-
512
```

```
distinguishedName : CN=Enterprise
Admins,CN=Users,DC=Fabrikam,DC=com
name              : Enterprise Admins
objectClass       : group
objectGUID        : 0215b0a5-aea1-40da-b598-720efe930ddf
SamAccountName    : Enterprise Admins
SID               : S-1-5-21-41432690-3719764436-1984117282-
519
```

```
distinguishedName : CN=LabAdmin,CN=Users,DC=Fabrikam,DC=com
name              : LabAdmin
objectClass       : user
objectGUID        : ab7c269d-aec5-4fcc-aebe-6cd1a2e6cd53
SamAccountName    : LabAdmin
SID               : S-1-5-21-41432690-3719764436-1984117282-
1000
```

```
distinguishedName :
CN=Administrator,CN=Users,DC=Fabrikam,DC=com
name              : Administrator
objectClass       : user
objectGUID        : 994f46e6-c62c-483f-a6cf-124197b6a959
SamAccountName    : Administrator
SID               : S-1-5-21-41432690-3719764436-1984117282-
500
```

----- EXAMPLE 4 -----

Description

Get all the members of the 'Enterprise Admins' group including the members of any child groups.

```
C:\PS>get-adgroupmember "Enterprise Admins" -recursive

distinguishedName :
CN=Administrator,CN=Users,DC=Fabrikam,DC=com
name              : Administrator
objectClass       : user
objectGUID        : 994f46e6-c62c-483f-a6cf-124197b6a959
SamAccountName    : Administrator
SID               : S-1-5-21-41432690-3719764436-1984117282-500

distinguishedName : CN=Sagiv
Hadaya,CN=Users,DC=Fabrikam,DC=com
name              : Sagiv Hadaya
objectClass       : user
objectGUID        : 64706230-f179-4fe4-b8c9-f0d334e66ab1
SamAccountName    : SHadaya
SID               : S-1-5-21-41432690-3719764436-1984117282-1158
```

Cmdlet: Get-ADObject

Synops

Gets one or more Active Directory objects.

Syntax

```
Get-ADObject [-AuthType {Negotiate | Basic}] [-Credential
<PSCredential>]
    [-IncludeDeletedObjects] [-Properties <String[]>] [-
ResultPageSize
    <Int32>] [-ResultSetSize <Int32>] [-SearchBase <String>] [-
SearchScope
    {Base | OneLevel | Subtree}] [-Server <String>] -Filter
<String>
    [<CommonParameters>]
```

```
Get-ADObject [-Identity] <ADObject> [-AuthType {Negotiate |
Basic}]
    [-Credential <PSCredential>] [-IncludeDeletedObjects] [-
Partition
    <String>] [-Properties <String[]>] [-Server <String>]
[<CommonParameters>]
```

```
Get-ADObject [-AuthType {Negotiate | Basic}] [-Credential
<PSCredential>]
    [-IncludeDeletedObjects] [-Properties <String[]>] [-
ResultPageSize
    <Int32>] [-ResultSetSize <Int32>] [-SearchBase <String>] [-
SearchScope
    {Base | OneLevel | Subtree}] [-Server <String>] -LDAPFilter
<String>
    [<CommonParameters>]
```

Description

The Get-ADObject cmdlet gets an Active Directory object or performs a search to retrieve

multiple objects.

The Identity parameter specifies the Active Directory object to get. You can identify the object to get by its distinguished name (DN) or GUID. You can also set the parameter to an Active Directory object variable, such as `$<localADObject>` or pass an object through the pipeline to the Identity parameter.

To search for and retrieve more than one object, use the Filter or LDAPFilter parameters. The Filter parameter uses the PowerShell Expression Language to write query strings for Active Directory. PowerShell Expression Language syntax provides rich type conversion support for value types received by the Filter parameter. For more information about the Filter parameter syntax, see [about_ActiveDirectory_Filter](#). If you have existing LDAP query strings, you can use the LDAPFilter parameter.

This cmdlet gets a default set of Active Directory object properties. To get additional properties use the Properties parameter. For more information about the how to determine the properties for computer objects, see the Properties parameter description.

Parameters

Parameter :AuthType

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Filter

Description :Specifies a query string that retrieves Active Directory objects. This string uses the PowerShell Expression Language syntax. The PowerShell Expression Language syntax provides rich type-conversion support for value types received by the Filter parameter. The syntax uses an in-order representation, which means that the operator is placed between the operand and the value. For more information about the Filter parameter, see [about_ActiveDirectory_Filter](#).

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :IncludeDeletedObjects

Description :Specifies to retrieve deleted objects and the deactivated forward and backward links. When this parameter is specified, the cmdlet uses the following LDAP controls:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :LDAPFilter

Description :Specifies an LDAP query string that is used to filter Active Directory objects.

You can use this parameter to run your existing LDAP queries. The Filter parameter syntax supports the same functionality as the LDAP syntax. For more information, see the Filter parameter description and the about_ActiveDirectory_Filter.

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Partition

Description :Specifies the distinguished name of an Active Directory partition. The distinguished name must be one of the naming contexts on the current directory server. The cmdlet searches this partition to find the object defined by the Identity parameter.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Properties

Description :Specifies the properties of the output object to retrieve from the server. Use this parameter to retrieve properties that are not included in the default set.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ResultPageSize

Description :Specifies the number of objects to include in one page for an Active Directory Domain Services query.

Required	false
Position	named

Default value	256
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**ResultSetSize**

Description :Specifies the maximum number of objects to return for an Active Directory Domain Services query. If you want to receive all of the objects, set this parameter to \$null (null value). You can use Ctrl+c to stop the query and return of objects.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**SearchBase**

Description :Specifies an Active Directory path to search under.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**SearchScope**

Description :Specifies the scope of an Active Directory search. Possible values for this parameter are:

Required	false
Position	named
Default value	Subtree
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory

server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

An Active Directory object is received by the Identity parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADObj

Outputs

Returns one or more Active Directory objects.

The Get-ADObject cmdlet returns a default set of ADObj property values. To retrieve additional ADObj properties, use the Properties parameter of the cmdlet.

To view the properties for an ADObj object, see the following examples. To run these examples, replace <object> with an Active Directory object identifier.

To get a list of the default set of properties of an ADObj object, use the following command:

```
Get-ADObject <object> | Get-Member
```

To get a list of all the properties of an ADObj object, use the following command:

```
Get-ADObject <object> -Properties ALL | Get-Member
```

Type : Microsoft.ActiveDirectory.Management.ADObj Derived types, such as the following are also accepted: Microsoft.ActiveDirectory.Management.ADGroup

Microsoft.ActiveDirectory.Management.ADUser

Microsoft.ActiveDirectory.Management.ADComputer

Microsoft.ActiveDirectory.Management.ADSERVICEACCOUNT

Microsoft.ActiveDirectory.Management.ADOrganizationalUnit

Microsoft.ActiveDirectory.Management.ADFineGrainedPasswordPolicy

Microsoft.ActiveDirectory.Management.ADDomain

Examples

----- EXAMPLE 1 -----

Description

Displays a list of sites for Fabrikam using the LDAP filter syntax.

```
C:\PS>Get-ADObject -LDAPFilter "(objectClass=site)" -
SearchBase 'CN=Configuration,DC=Fabrikam,DC=Com' -Properties
CanonicalName | FT Name,CanonicalName -A
```

Name	CanonicalName
HQ	FABRIKAM.COM/Configuration/Sites/HQ
B01	FABRIKAM.COM/Configuration/Sites/B01
B02	FABRIKAM.COM/Configuration/Sites/B02
B03	FABRIKAM.COM/Configuration/Sites/B03

----- EXAMPLE 2 -----

Description

Gets the Site objects from the Configuration Naming Context and then enumerates through the list outputting 'siteObjectBL'.

```
C:\PS>Get-ADObject -Filter 'ObjectClass -eq "site"' -
SearchBase 'CN=Configuration,DC=Fabrikam,DC=Com' -Properties
siteObjectBL | foreach {$_siteObjectBL}
```

```
CN=192.167.1.0/26,CN=Subnets,CN=Sites,CN=Configuration,DC=FABR
IKAM,DC=COM
CN=192.166.1.0/26,CN=Subnets,CN=Sites,CN=Configuration,DC=FABR
IKAM,DC=COM
CN=192.168.1.0/26,CN=Subnets,CN=Sites,CN=Configuration,DC=FABR
IKAM,DC=COM
CN=192.165.1.0/26,CN=Subnets,CN=Sites,CN=Configuration,DC=FABR
IKAM,DC=COM
CN=192.164.1.0/26,CN=Subnets,CN=Sites,CN=Configuration,DC=FABR
IKAM,DC=COM
CN=192.163.1.0/26,CN=Subnets,CN=Sites,CN=Configuration,DC=FABR
IKAM,DC=COM
CN=192.162.1.0/26,CN=Subnets,CN=Sites,CN=Configuration,DC=FABR
IKAM,DC=COM
CN=192.161.1.0/26,CN=Subnets,CN=Sites,CN=Configuration,DC=FABR
IKAM,DC=COM
CN=192.160.1.0/26,CN=Subnets,CN=Sites,CN=Configuration,DC=FABR
IKAM,DC=COM
CN=192.159.1.0/26,CN=Subnets,CN=Sites,CN=Configuration,DC=FABR
IKAM,DC=COM
CN=192.158.1.0/26,CN=Subnets,CN=Sites,CN=Configuration,DC=FABR
IKAM,DC=COM
CN=192.157.1.0/26,CN=Subnets,CN=Sites,CN=Configuration,DC=FABR
IKAM,DC=COM
```

----- EXAMPLE 3 -----

Description

Gets all the objects, including the deleted ones, whose 'whenChanged' attribute is greater than the specified date. Note that both deleted and non-deleted (and non-recycled) objects matching the filter will be returned.

```
C:\PS>$changeDate = New-Object DateTime(2008, 11, 18, 1, 40, 02); Get-ADObject -Filter 'whenChanged -gt $changeDate' -IncludeDeletedObjects
```

----- EXAMPLE 4 -----

Description

Gets all the deleted objects, whose 'whenChanged' attribute is greater than the specified date. The clause 'name -ne "Deleted Objects"' makes sure that the Deleted Objects Container is not returned. This will only return objects which can be restored

```
C:\PS>$changeDate = New-Object DateTime(2008, 11, 18, 1, 40, 02)
Get-ADObject -Filter 'whenChanged -gt $changeDate -and isDeleted -eq $true -and -not (isRecycled -eq $true) -and name -ne "Deleted Objects"' -IncludeDeletedObjects
```

```
ObjectGUID      : 98118958-91c7-437d-8ada-ba0b66db823b
Deleted         : True
DistinguishedName : CN=Andrew Ma\0ADEL:98118958-91c7-437d-8ada-ba0b66db823b,CN=Deleted Objects,DC=FABRIKAM,DC=COM
Name            : Andrew Ma
DEL:98118958-91c7-437d-8ada-ba0b66db823b
ObjectClass      : user
```

----- EXAMPLE 5 -----

Description

Gets all the deleted objects whose 'whenChanged' attribute is greater than the specified date AND at the time of deletion were the children of the specified Organizational Unit.

```

C:\PS>$changeDate = New-Object DateTime(2008, 11, 18, 1, 40,
02)
Get-ADObject -Filter 'whenChanged -gt $changeDate -and
isDeleted -eq $true -and -not (isRecycled -eq $true) -and
lastKnownParent -eq "OU=Accounting,DC=Fabrikam,DC=com"' -
IncludeDeletedObjects

ObjectGUID           : 12d53e7f-aaf7-4790-b41a-da19044504db
Deleted              : True
DistinguishedName    : CN=Craig Dewar\0ADEL:12d53e7f-aaf7-4790-
b41a-da19044504db,CN=Deleted Objects,DC=Fabrikam,DC=com
Name                 : Craig Dewar
DEL:12d53e7f-aaf7-4790-b41a-da19044504db
ObjectClass          : user

```

----- EXAMPLE 6 -----

Description

Gets the information of the domainDNS object of an LDS instance

```

C:\PS>Get-ADObject -Identity "DC=AppNC" -server "FABRIKAM-
SRV1:60000"

ObjectGUID           DistinguishedName
Name                 ObjectClass
-----
--
62b2e185-9322-4980-9c93-cf... DC=AppNC
AppNC                    domainDNS

```

Cmdlet: Get-ADOptionalFeature

Synops

Gets one or more Active Directory optional features.

Syntax

```
Get-ADOptionalFeature [-AuthType {Negotiate | Basic}] [-Credential  
    <PSCredential>] [-Properties <String[]>] [-ResultPageSize  
<Int32>]  
    [-ResultSetSize <Int32>] [-SearchBase <String>] [-SearchScope  
{Base |  
    OneLevel | Subtree}] [-Server <String>] -Filter <String>  
    [<CommonParameters>]
```

```
Get-ADOptionalFeature [-Identity] <ADOptionalFeature> [-AuthType  
    {Negotiate | Basic}] [-Credential <PSCredential>] [-  
Properties <String[]>]  
    [-Server <String>] [<CommonParameters>]
```

```
Get-ADOptionalFeature [-AuthType {Negotiate | Basic}] [-Credential  
    <PSCredential>] [-Properties <String[]>] [-ResultPageSize  
<Int32>]  
    [-ResultSetSize <Int32>] [-SearchBase <String>] [-SearchScope  
{Base |  
    OneLevel | Subtree}] [-Server <String>] -LDAPFilter <String>  
    [<CommonParameters>]
```

Description

The Get-ADOptionalFeature cmdlet gets an optional feature or performs a search to retrieve multiple optional features from an Active Directory.

The Identity parameter specifies the Active Directory optional feature that you want to get. You can identify an optional feature by its distinguished name (DN), feature GUID, or object GUID. You can also set the parameter to an optional feature object variable, such

as \$<localOptionalFeatureObject> or you can pass an optional feature object through the pipeline to the Identity parameter.

To search for and retrieve more than one optional feature, use the Filter or LDAPFilter parameters. The Filter parameter uses the PowerShell Expression Language to write query strings for Active Directory. PowerShell Expression Language syntax provides rich type conversion support for value types received by the Filter parameter. For more information about the Filter parameter syntax, see about_ActiveDirectory_Filter. If you have existing LDAP query strings, you can use the LDAPFilter parameter.

This cmdlet retrieves a default set of optional feature object properties. To retrieve additional properties use the Properties parameter. For more information about the how to determine the properties for computer objects, see the Properties parameter description.

Parameters

Parameter :AuthType

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Manage ment.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Filter

Description :Specifies a query string that retrieves Active Directory objects. This string uses the PowerShell Expression Language syntax. The PowerShell Expression Language syntax provides rich type-conversion support for value types received by the Filter parameter. The syntax uses an in-order representation, which means that the operator is placed between the operand and the value. For more information about the Filter parameter, see [about_ActiveDirectory_Filter](#).

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Identity**

Description :Specifies an Active Directory optional feature object by providing one of the following values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :**LDAPFilter**

Description :Specifies an LDAP query string that is used to filter Active Directory objects. You can use this parameter to run your existing LDAP queries. The Filter parameter syntax supports the same functionality as the LDAP syntax. For more information, see the Filter parameter description and the [about_ActiveDirectory_Filter](#).

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Properties**

Description :Specifies the properties of the output object to retrieve from the server. Use this parameter to retrieve properties that are not included in the default set.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**ResultPageSize**

Description :Specifies the number of objects to include in one page for an Active Directory Domain Services query.

Required	false
Position	named
Default value	256
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**ResultSetSize**

Description :Specifies the maximum number of objects to return for an Active Directory Domain Services query. If you want to receive all of the objects, set this parameter to \$null (null value). You can use Ctrl+c to stop the query and return of objects.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**SearchBase**

Description :Specifies an Active Directory path to search under.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**SearchScope**

Description :Specifies the scope of an Active Directory search. Possible values for this parameter are:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

An optional feature object is received by the Identity parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADOptionalFeature

Outputs

Returns one or more optional feature objects.

This cmdlet returns a default set of ADOptionalFeature property values. To retrieve additional ADOptionalFeature properties, use the Properties parameter.

To view the properties for an ADOptionalFeature object, see the following examples. To run these examples, replace <optional feature> with an optional feature identifier, such as distinguished name of the optional feature.

To get a list of the default set of properties of an ADOptionalFeature object, use the following command:

Get-ADOptionalFeature <optional feature>| Get-Member

To get a list of all the properties of an ADOptionalFeature object, use the following

command:

Get-ADOptionalFeature <optional feature> -Properties ALL | Get-Member

Type : Microsoft.ActiveDirectory.Management.ADOptionalFeature

Examples

----- EXAMPLE 1 -----

Description

Get a list of all the available optional features in the current forest.

```
C:\PS>Get-ADOptionalFeature -Filter *
```

----- EXAMPLE 2 -----

Description

Get the optional feature with the name 'Recycle Bin Feature'.

```
C:\PS>Get-ADOptionalFeature 'Recycle Bin Feature'
```

----- EXAMPLE 3 -----

Description

Get the optional feature with the feature guid '766ddcd8-acd0-445e-f3b9-a7f9b6744f2a'.

```
C:\PS>Get-ADOptionalFeature 766ddcd8-acd0-445e-f3b9-a7f9b6744f2a
```

----- EXAMPLE 4 -----

Description

Get the 'Recycle Bin Feature' optional feature in an AD LDS instance.

```
C:\PS>Get-ADOptionalFeature 'Recycle Bin Feature' -server  
server1:50000
```


Cmdlet: Get-ADOrganizationalUnit

Synops

Gets one or more Active Directory organizational units.

Syntax

```
Get-ADOrganizationalUnit [-AuthType {Negotiate | Basic}] [-  
Credential  
    <PSCredential>] [-Properties <String[]>] [-ResultPageSize  
<Int32>]  
    [-ResultSetSize <Int32>] [-SearchBase <String>] [-SearchScope  
{Base |  
    OneLevel | Subtree}] [-Server <String>] -Filter <String>  
    [<CommonParameters>]
```

```
Get-ADOrganizationalUnit [-Identity] <ADOrganizationalUnit> [-  
AuthType  
    {Negotiate | Basic}] [-Credential <PSCredential>] [-Partition  
<String>]  
    [-Properties <String[]>] [-Server <String>]  
    [<CommonParameters>]
```

```
Get-ADOrganizationalUnit [-AuthType {Negotiate | Basic}] [-  
Credential  
    <PSCredential>] [-Properties <String[]>] [-ResultPageSize  
<Int32>]  
    [-ResultSetSize <Int32>] [-SearchBase <String>] [-SearchScope  
{Base |  
    OneLevel | Subtree}] [-Server <String>] -LDAPFilter <String>  
    [<CommonParameters>]
```

Description

The Get-ADOrganizational unit cmdlet gets an organizational unit object or performs a search to retrieve multiple organizational units.

The Identity parameter specifies the Active Directory organizational unit to retrieve. You

can identify an organizational unit by its distinguished name (DN) or GUID. You can also set the parameter to an organizational unit object variable, such as `$<localOrganizationalunitObject>` or pass an organizational unit object through the pipeline to the Identity parameter.

To search for and retrieve more than one organizational unit, use the Filter or LDAPFilter parameters. The Filter parameter uses the PowerShell Expression Language to write query strings for Active Directory. PowerShell Expression Language syntax provides rich type conversion support for value types received by the Filter parameter. For more information about the Filter parameter syntax, see [about_ActiveDirectory_Filter](#). If you have existing LDAP query strings, you can use the LDAPFilter parameter.

This cmdlet retrieves a default set of organizational unit object properties. To retrieve additional properties use the Properties parameter. For more information about the how to determine the properties for computer objects, see the Properties parameter description.

Parameters

Parameter :AuthType

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Filter

Description :Specifies a query string that retrieves Active Directory objects. This string uses the PowerShell Expression Language syntax. The PowerShell Expression Language syntax provides rich type-conversion support for value types received by the Filter parameter. The syntax uses an in-order representation, which means that the operator is placed between the operand and the value. For more information about the Filter parameter, see [about_ActiveDirectory_Filter](#).

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies the identity of an Active Directory organizational unit object. The parameter accepts the following identity formats. The identifier in parentheses is the LDAP display name for the attribute that contains the identity.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :LDAPFilter

Description :Specifies an LDAP query string that is used to filter Active Directory objects. You can use this parameter to run your existing LDAP queries. The Filter parameter syntax supports the same functionality as the LDAP syntax. For more information, see the Filter parameter description and the [about_ActiveDirectory_Filter](#).

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Partition

Description :Specifies the distinguished name of an Active Directory partition. The distinguished name must be one of the naming contexts on the current directory server. The cmdlet searches this partition to find the object defined by the Identity parameter.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Properties**

Description :Specifies the properties of the output object to retrieve from the server. Use this parameter to retrieve properties that are not included in the default set.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**ResultPageSize**

Description :Specifies the number of objects to include in one page for an Active Directory Domain Services query.

Required	false
Position	named
Default value	256
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**ResultSetSize**

Description :Specifies the maximum number of objects to return for an Active Directory Domain Services query. If you want to receive all of the objects, set this parameter to \$null (null value). You can use Ctrl+c to stop the query and return of objects.

Required	false
Position	named

Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**SearchBase**

Description :Specifies an Active Directory path to search under.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**SearchScope**

Description :Specifies the scope of an Active Directory search. Possible values for this parameter are:

Required	false
Position	named
Default value	Subtree
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

An organizational unit object is received by the Identity parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADOrganizationalUnit

Outputs

Returns one or more organizational unit objects.

This cmdlet returns a default set of ADOrganizational unit property values. To retrieve additional ADOrganizational unit properties, use the Properties parameter.

To view the properties for an ADOrganizational unit object, see the following examples. To run these examples, replace <organizational unit> with an organizational unit identifier such as the distinguished name (DN) of an organizational unit.

To get a list of the default set of properties of an ADOrganizational unit object, use the following command:

```
Get-ADOrganizational unit <organizational unit> | Get-Member
```

To get a list of all the properties of an ADOrganizational unit object, use the following command:

```
Get-ADOrganizational unit <organizational unit> -Properties * | Get-Member
```

Type : Microsoft.ActiveDirectory.Management.ADOrganizationalUnit

Examples

----- EXAMPLE 1 -----

Description

Gets all the Organizational Units in the domain

```
C:\PS>Get-ADOrganizationalUnit -Filter 'Name -like "*" | FT
Name, DistinguishedName -A
```

Name	DistinguishedName
Domain Controllers	OU=Domain Controllers,DC=FABRIKAM,DC=COM
UserAccounts	OU=UserAccounts,DC=FABRIKAM,DC=COM
Sales	OU=Sales,OU=UserAccounts,DC=FABRIKAM,DC=COM
Marketing	OU=Marketing,OU=UserAccounts,DC=FABRIKAM,DC=COM
Production	OU=Production,OU=UserAccounts,DC=FABRIKAM,DC=COM
HumanResources	OU=HumanResources,OU=UserAccounts,DC=FABRIKAM,DC=COM
NorthAmerica	OU=NorthAmerica,OU=Sales,OU=UserAccounts,DC=FABRIKAM,DC=COM
SouthAmerica	OU=SouthAmerica,OU=Sales,OU=UserAccounts,DC=FABRIKAM,DC=COM
Europe	OU=Europe,OU=Sales,OU=UserAccounts,DC=FABRIKAM,DC=COM
AsiaPacific	OU=AsiaPacific,OU=Sales,OU=UserAccounts,DC=FABRIKAM,DC=COM
Finance	OU=Finance,OU=UserAccounts,DC=FABRIKAM,DC=COM
Corporate	OU=Corporate,OU=UserAccounts,DC=FABRIKAM,DC=COM
ApplicationServers	OU=ApplicationServers,DC=FABRIKAM,DC=COM
Groups	OU=Groups,OU=Managed,DC=FABRIKAM,DC=COM
PasswordPolicyGroups	OU=PasswordPolicyGroups,OU=Groups,OU=Managed,DC=FABRIKAM,DC=COM
Managed	OU=Managed,DC=FABRIKAM,DC=COM
ServiceAccounts	OU=ServiceAccounts,OU=Managed,DC=FABRIKAM,DC=COM

----- EXAMPLE 2 -----

Description

Gets the Organizational Unit with DistinguishedName

'OU=AsiaPacific,OU=Sales,OU=UserAccounts,DC=FABRIKAM,DC=COM'.

```
C:\PS>Get-ADOrganizationalUnit -Identity
'OU=AsiaPacific,OU=Sales,OU=UserAccounts,DC=FABRIKAM,DC=COM' |
ft Name, Country, PostalCode, City, StreetAddress, State -A
```

Name	Country	PostalCode	City	StreetAddress	State
AsiaPacific	AU	4171	Balmoral	45 Martens Place	QLD

----- EXAMPLE 3 -----

Description

Gets Organizational Units underneath the sales Organizational Unit using an LDAP filter.

```
C:\PS>Get-ADOrganizationalUnit -LDAPFilter '(name=*)' -  
SearchBase 'OU=Sales,OU=UserAccounts,DC=FABRIKAM,DC=COM' -  
SearchScope OneLevel | ft  
Name, Country, PostalCode, City, StreetAddress, State
```

Name	Country	PostalCode
City	StreetAddress	State
----	-----	-----
----	-----	-----
AsiaPacific	AU	4171
Balmoral	45 Martens Place	QLD
Europe	UK	NG34 0NI
QUARRINGTON	22 Station Rd	
NorthAmerica	US	02142
Cambridge	1634 Randolph Street	MA

Cmdlet: Get-ADPrincipalGroupMembership

Synops

Gets the Active Directory groups that have a specified user, computer, group, or service account.

Syntax

```
Get-ADPrincipalGroupMembership [-Identity] <ADPrincipal> [-AuthType  
    {Negotiate | Basic}] [-Credential <PSCredential>] [-Partition  
    <String>]  
    [-ResourceContextPartition <String>] [-ResourceContextServer  
    <String>]  
    [-Server <String>] [<CommonParameters>]
```

Description

The Get-ADPrincipalGroupMembership cmdlet gets the Active Directory groups that have a specified user, computer, group, or service account as a member. This cmdlet requires a global catalog to perform the group search. If the forest that contains the user, computer or group does not have a global catalog, the cmdlet returns a non-terminating error. If you want to search for local groups in another domain, use the ResourceContextServer parameter to specify the alternate server in the other domain.

The Identity parameter specifies the user, computer, or group object that you want to determine group membership for. You can identify a user, computer, or group object by its distinguished name (DN), GUID, security identifier (SID) or SAM account name. You can also specify a user, group, or computer object variable, such as \$<localGroupObject>, or pass an object through the pipeline to the Identity parameter. For example, you can use the Get-ADGroup cmdlet to retrieve a group object and then pass the object through the pipeline to the Get-ADPrincipalGroupMembership cmdlet. Similarly, you can use Get-ADUser or Get-ADComputer to get user and computer objects to pass through the pipeline.

For AD LDS environments, the Partition parameter must be specified except in the following two conditions:

- The cmdlet is run from an Active Directory provider drive.
- A default naming context or partition is defined for the AD LDS environment. To specify a default naming context for an AD LDS environment, set the msDS-

defaultNamingContext property of the Active Directory directory service agent (DSA) object (nTDSDSA) for the AD LDS instance.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Identity**

Description :Specifies an Active Directory principal object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Partition

Description :Specifies the distinguished name of an Active Directory partition. The distinguished name must be one of the naming contexts on the current directory server. The cmdlet searches this partition to find the object defined by the Identity parameter.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ResourceContextPartition

Description :Specifies the distinguished name of the partition of an AD or AD LDS instance to search. Use this parameter with the ResourceContextServer parameter to specify a partition hosted by the specified server. If the ResourceContextPartition parameter is not specified, the default partition of the ResourceContextServer is searched.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ResourceContextServer

Description :Specifies that the cmdlet return a list of groups that the user is a member of and that reside in the specified domain. Use this parameter to search for groups in a domain that is not the domain where the user's account resides. To search a partition other than the default partition in this domain, also specify the ResourceContextPartition parameter.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A principal object that represents a user, computer or group is received by the Identity parameter. Derived types, such as the following are also received by this parameter.

Microsoft.ActiveDirectory.Management.ADUser

Microsoft.ActiveDirectory.Management.ADComputer

Microsoft.ActiveDirectory.Management.ADSERVICEACCOUNT

Microsoft.ActiveDirectory.Management.ADGroup

Type : Microsoft.ActiveDirectory.Management.ADPrincipal

Outputs

Returns group objects that have the specified user, computer, group or service account as a member.

The Get-ADPrincipalGroupMembership cmdlet returns a default set of ADGroup property values. To retrieve additional ADGroup properties pass the ADGroups objects produced by this cmdlet through the pipeline to Get-ADGroup. Specify the additional properties required from the group objects by passing the -Properties parameter to Get-ADGroup.

Type : Microsoft.ActiveDirectory.Management.ADGroup

Notes

Examples

----- EXAMPLE 1 -----

Description

Retrieve all the groups the user 'CN=GlenJohns,DC=AppNC' is a member of on an AD LDS instance.

```
C:\PS>get-adprincipalgroupmembership -server localhost:60000 -  
identity "CN=GlenJohns,DC=AppNC" -partition "DC=AppNC"
```

----- EXAMPLE 2 -----

Description

Retrieve all the groups the administrator is a member of.

```
C:\PS>get-adprincipalgroupmembership -Identity Administrator
```

```
distinguishedName : CN=Domain
Users,CN=Users,DC=Fabrikam,DC=com
GroupCategory      : Security
GroupScope         : Global
name               : Domain Users
objectClass        : group
objectGUID         : 86c0f0d5-8b4d-4f35-a867-85a006b92902
SamAccountName     : Domain Users
SID                : S-1-5-21-41432690-3719764436-1984117282-
513
```

```
distinguishedName :
CN=Administrators,CN=Builtin,DC=Fabrikam,DC=com
GroupCategory      : Security
GroupScope         : DomainLocal
name               : Administrators
objectClass        : group
objectGUID         : 02ce3874-dd86-41ba-bddc-013f34019978
SamAccountName     : Administrators
SID                : S-1-5-32-544
```

```
distinguishedName : CN=Schema
Admins,CN=Users,DC=Fabrikam,DC=com
GroupCategory      : Security
GroupScope         : Universal
name               : Schema Admins
objectClass        : group
objectGUID         : 8d62890f-385e-4cfa-9b2a-c72576097583
SamAccountName     : Schema Admins
SID                : S-1-5-21-41432690-3719764436-1984117282-
518
```

```
distinguishedName : CN=Enterprise
Admins,CN=Users,DC=Fabrikam,DC=com
GroupCategory      : Security
GroupScope         : Universal
name               : Enterprise Admins
objectClass        : group
objectGUID         : 0215b0a5-aea1-40da-b598-720efe930ddf
SamAccountName     : Enterprise Admins
SID                : S-1-5-21-41432690-3719764436-1984117282-
519
```

```
distinguishedName : CN=Domain
Admins,CN=Users,DC=Fabrikam,DC=com
GroupCategory      : Security
GroupScope         : Global
name               : Domain Admins
objectClass        : group
objectGUID         : 5ccc6037-c2c9-42be-8e92-c8f98afd0011
SamAccountName     : Domain Admins
SID                : S-1-5-21-41432690-3719764436-1984117282-
512
```

```
distinguishedName : CN=Group Policy Creator
Owners,CN=Users,DC=Fabrikam,DC=com
GroupCategory      : Security
GroupScope         : Global
name               : Group Policy Creator Owners
```

```
objectClass      : group
objectGUID       : a58f7bf2-fd20-4bbd-96f0-ee10fa1613c7
SamAccountName   : Group Policy Creator Owners
SID              : S-1-5-21-41432690-3719764436-1984117282-520
```

----- EXAMPLE 3 -----

Description

Retrieve all the groups the administrator account in the local domain is a member of in the resource domain ChildDomain.Fabrikam.Com

```
C:\PS>get-adprincipalgroupmembership -Identity Administrator -
ResourceContextServer ChildDomain.Fabrikam.Com -
ResourceContextPartition "DC=Fabrikam,DC=com"
```

```
distinguishedName : CN=Domain
Users,CN=Users,DC=Fabrikam,DC=com
GroupCategory      : Security
GroupScope         : Global
name               : Domain Users
objectClass        : group
objectGUID         : 86c0f0d5-8b4d-4f35-a867-85a006b92902
SamAccountName     : Domain Users
SID                : S-1-5-21-41432690-3719764436-1984117282-
513
```

```
distinguishedName : CN=Group Policy Creator
Owners,CN=Users,DC=Fabrikam,DC=com
GroupCategory      : Security
GroupScope         : Global
name               : Group Policy Creator Owners
objectClass        : group
objectGUID         : a58f7bf2-fd20-4bbd-96f0-ee10fa1613c7
SamAccountName     : Group Policy Creator Owners
SID                : S-1-5-21-41432690-3719764436-1984117282-
520
```

```
distinguishedName : CN=Enterprise
Admins,CN=Users,DC=Fabrikam,DC=com
GroupCategory      : Security
GroupScope         : Universal
name               : Enterprise Admins
objectClass        : group
objectGUID         : 0215b0a5-aea1-40da-b598-720efe930ddf
SamAccountName     : Enterprise Admins
SID                : S-1-5-21-41432690-3719764436-1984117282-
519
```

```
distinguishedName : CN=Schema
Admins,CN=Users,DC=Fabrikam,DC=com
GroupCategory      : Security
GroupScope         : Universal
name               : Schema Admins
objectClass        : group
objectGUID         : 8d62890f-385e-4cfa-9b2a-c72576097583
SamAccountName     : Schema Admins
SID                : S-1-5-21-41432690-3719764436-1984117282-
518
```

```
distinguishedName : CN=Domain
Admins,CN=Users,DC=Fabrikam,DC=com
GroupCategory      : Security
GroupScope         : Global
name               : Domain Admins
objectClass        : group
objectGUID         : 5ccc6037-c2c9-42be-8e92-c8f98afd0011
SamAccountName     : Domain Admins
SID                : S-1-5-21-41432690-3719764436-1984117282-
512
```

```
distinguishedName :
CN=Administrators,CN=Builtin,DC=Fabrikam,DC=com
```

GroupCategory	:	Security
GroupScope	:	DomainLocal
name	:	Administrators
objectClass	:	group
objectGUID	:	02ce3874-dd86-41ba-bddc-013f34019978
SamAccountName	:	Administrators
SID	:	S-1-5-32-544

Cmdlet: Get-ADReplicationAttributeMetadata

Synops

Returns the replication metadata for one or more Active Directory replication partners.

Syntax

```
Get-ADReplicationAttributeMetadata [-Object] <ADObject> [-Server]
<String>
    [[-Properties] <String[]>] [-AuthType {Negotiate | Basic}] [-
Credential
    <PSCredential>] [-Filter <String>] [-IncludeDeletedObjects]
    [-ShowAllLinkedValues] [<CommonParameters>]
```

Description

The Get-ADReplicationAttributeMetadata cmdlet returns the replication metadata for one or more attributes on a given object. The metadata is contained in the following two directory objects:

single-value attribute: msDS-ReplAttributeMetaData

multi-value attribute: msDS-ReplValueMetaData

The cmdlet parses the byte array(s) and returns the data in a readable format.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Manage ment.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies a user account that has permission to perform this action. The

default is the current user.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Filter

Description :Specifies a filter in the provider's format or language. The value of this parameter qualifies the Path parameter. The syntax of the filter, including the use of wildcards, depends on the provider. Filters are more efficient than other parameters, because the provider applies them when retrieving the objects, rather than having Windows PowerShell filter the objects after they are retrieved.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :IncludeDeletedObjects

Description :Specifies to retrieve deleted objects and the deactivated forward and backward links. When this parameter is specified, the cmdlet uses the following LDAP controls:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Object

Description :Specifies an Active Directory object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
----------	------

Position	1
Default value	None
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Properties

Description :Specifies a list of one or more attribute names as a comma separated list to return the metadata for replication partners. This parameter also accepts * to indicate that all attributes set on the object should be returned.

Required	false
Position	3
Default value	* (all properties)
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	true
Position	2
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ShowAllLinkedValues

Description :Specifying this switch returns all linked values if the attribute returned is multi-valued.

Required	false
Position	named
Default value	False; by default, only the linked value with the highest USN is returned
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A class structure that represents the Active Directory objects.

Type : Microsoft.ActiveDirectory.Management.ADOject

Outputs

A class structure that represents Active Directory replication attribute metadata objects.

Type : Microsoft.ActiveDirectory.Management.ADReplicationAttributeMetadata

Notes

Examples

----- EXAMPLE 1 -----

Description

Get the replication metadata for the attributes of a group with Distinguished Name "CN=Domain Admins,CN=Users,DC=corp,DC=contoso,DC=com" from the CORP-DC01 domain controller. By including the -ShowAllLinkedValues switch parameter if a multi-valued attribute is present, all its linked values are also retrieved.

```
C:\PS>Get-ADReplicationAttributeMetadata "CN=Domain  
Admins,CN=Users,DC=corp,DC=contoso,DC=com" corp-DC01 -  
ShowAllLinkedValues
```

----- EXAMPLE 2 -----

Description

Get the replication metadata for the attributes of an object with GUID "1A7BFEC6-C92C-4804-94B0-D407E51F1B64", including the deleted objects and the deactivated forward and backward links.

```
C:\PS>Get-ADReplicationAttributeMetadata "1A7BFEC6-C92C-4804-  
94B0-D407E51F1B64" corp-DC01 -IncludeDeletedObjects
```

----- EXAMPLE 3 -----

Description

Get all groups that have any of their attributes modified on 11/10/2011.

```
C:\PS>Get-ADObject -Filter 'objectclass -eq "group"' | Get-ADReplicationAttributeMetadata -Server corp-DC01 | Where-Object {$_.lastoriginatingchangetime -like "*11/10/2011*"} | Format-Table object
```

Cmdlet: Get-ADReplicationConnection

Synops

Returns a specific Active Directory replication connection or a set of AD replication connection objects based on a specified filter.

Syntax

```
Get-ADReplicationConnection [-AuthType {Negotiate | Basic}] [-Credential
    <PSCredential>] [-Filter <String>] [-Properties <String[]>]
[-Server
    <String>] [<CommonParameters>]
```

```
Get-ADReplicationConnection [-Identity] <ADReplicationConnection>

    [-AuthType {Negotiate | Basic}] [-Credential <PSCredential>]
[-Properties
    <String[]>] [-Server <String>] [<CommonParameters>]
```

Description

The Get-ADReplicationConnection cmdlet returns a specific Active Directory replication connection or a set of AD replication connection objects based on a specified filter. Connections are used to enable domain controllers to replicate with each other. A connection defines a one-way, inbound route from one domain controller, the source, to another domain controller, the destination. The Kerberos consistency checker (KCC) reuses existing connections where it can, deletes unused connections, and creates new connections if none exist that meet the current need.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named

Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Filter**

Description :Specifies a query string that retrieves Active Directory objects. This string uses the PowerShell Expression Language syntax. The PowerShell Expression Language syntax provides rich type-conversion support for value types received by the Filter parameter. The syntax uses an in-order representation, which means that the operator is placed between the operand and the value. For more information about the Filter parameter, see [about_ActiveDirectory_Filter](#).

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Identity**

Description :Specifies an Active Directory object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	

Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :**Properties**

Description :Specifies the properties of the output object to retrieve from the server. Use this parameter to retrieve properties that are not included in the default set.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A connection object is received by the Identity parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADReplicationConnection

Examples

----- EXAMPLE 1 -----

Description

Get all the replication connections.

```
C:\PS>Get-ADReplicationConnection -Filter *
```

----- EXAMPLE 2 -----

Description

Get all replication connections that replicate from corp-DC01.

```
C:\PS>Get-ADReplicationConnection -Filter  
{ReplicateFromDirectoryServer -eq "corp-DC01"}
```

----- EXAMPLE 3 -----

Description

Get the replication connection with name '5f98e288-19e0-47a0-9677-57f05ed54f6b'.

```
C:\PS>Get-ADReplicationConnection "5f98e288-19e0-47a0-9677-  
57f05ed54f6b"
```

----- EXAMPLE 4 -----

Description

Get all the properties of the replication connection with name '5f98e288-19e0-47a0-9677-57f05ed54f6b'.

```
C:\PS>Get-ADReplicationConnection "5f98e288-19e0-47a0-9677-  
57f05ed54f6b" -Properties *
```

Cmdlet: Get-ADReplicationFailure

Synops

Returns a collection of data describing an Active Directory replication failure.

Syntax

```
Get-ADReplicationFailure [-Target] <Object[]> [-AuthType  
{Negotiate |  
    Basic}] [-Credential <PSCredential>] [-EnumeratingServer  
<String>]  
    [-Filter <String>] [<CommonParameters>]
```

```
Get-ADReplicationFailure [[-Target] <Object[]>] [-Scope] {Domain  
| Forest  
    | Server | Site} [-AuthType {Negotiate | Basic}] [-Credential  
    <PSCredential>] [-EnumeratingServer <String>] [-Filter  
<String>]  
    [<CommonParameters>]
```

Description

The Get-ADReplicationFailure cmdlet returns all failures currently associated with a given domain controller or Active Directory Lightweight Directory Services (AD LDS) instance. The return object is of type ADReplicationFailure. This cmdlet returns the list of failures in the ADReplicationSummary object for a specific server.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Manage ment.AuthType.Negotiate

Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies a user account that has permission to perform this action. The default is the current user.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :EnumeratingServer

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Filter

Description :Specifies a filter in the provider's format or language. The value of this parameter qualifies the Path parameter. The syntax of the filter, including the use of wildcards, depends on the provider. Filters are more efficient than other parameters, because the provider applies them when retrieving the objects, rather than having Windows PowerShell filter the objects after they are retrieved.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Scope**

Description :Specifies the type of object used as input by the Target parameter. The following are allowable values to use:

Required	true
Position	2
Default value	None
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Target**

Description :Specifies either one or more (using a comma separated list) of Active Directory domain controllers, sites, domains, or forests. It will return results for all the domain controllers that are specified or that are part of the specified container.

Required	true
Position	1
Default value	DCLocator; Provider: -Server of the connected drive
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Inputs

A class structure that contains one or more Active Directory server objects.

Type : Microsoft.ActiveDirectory.Management.ADDirectoryServer

Outputs

A class structure that represents Active Directory replication failure objects.

Type : Microsoft.ActiveDirectory.Management.ADReplicationFailure

Examples

----- EXAMPLE 1 -----

Description

Get a collection of data describing an Active Directory replication failure for corp-DC01.

```
C:\PS>Get-ADReplicationFailure -Target corp-DC01
```

----- EXAMPLE 2 -----

Description

Get a collection of data describing an Active Directory replication failure from corp-DC01 (same as above).

```
C:\PS>Get-ADReplicationFailure -Target corp-DC01 -Scope Server
```

----- EXAMPLE 3 -----

Description

Get a collection of data describing an Active Directory replication failure from corp-DC01 and corp-DC02.

```
C:\PS>Get-ADReplicationFailure -Target corp-DC01,corp-DC02
```

----- EXAMPLE 4 -----

Description

Get a collection of data describing Active Directory replication failures from all the domain controllers in the site 'NorthAmerica'.

```
C:\PS>Get-ADReplicationFailure -Target NorthAmerica -Scope Site
```

----- EXAMPLE 5 -----

Description

Get a collection of data describing Active Directory replication failures from all the domain controllers in the domain 'corp.contoso.com'.

```
C:\PS>Get-ADReplicationFailure -Target "corp.contoso.com" -Scope Domain
```

----- EXAMPLE 6 -----

Description

Get a collection of data describing Active Directory replication failures from all the domain controllers in the forest 'corp.contoso.com'

```
C:\PS>Get-ADReplicationFailure -Target "corp.contoso.com" -  
Scope Forest
```

Cmdlet: Get-ADReplicationPartnerMetadata

Synops

Returns the replication metadata for a set of one or more replication partners.

Syntax

```
Get-ADReplicationPartnerMetadata [-Target] <Object[]> [[-Partition]
    <String[]>] [[-PartnerType] {Both | Inbound | Outbound}] [-AuthType
    {Negotiate | Basic}] [-Credential <PSCredential>] [-EnumerationServer
    <String>] [-Filter <String>] [<CommonParameters>]
```

```
Get-ADReplicationPartnerMetadata [[-Target] <Object[]>] [-Scope]
{Domain | Forest | Server | Site} [[-Partition] <String[]>] [[-PartnerType] {Both |
    Inbound | Outbound}] [-AuthType {Negotiate | Basic}] [-Credential
    <PSCredential>] [-EnumerationServer <String>] [-Filter
    <String>]
    [<CommonParameters>]
```

Description

The Get-ADReplicationPartnerMetadata cmdlet returns an Active Directory replication partner metadata object for each of its replication partners which contains all of the relevant replication data for the partners involved. This includes attributes such as LastReplicationSuccess or LastReplicationAttempt and other data specific to each pairing of replication partners. If the results are too verbose for your needs, you can use the Partition parameter to specify a partition to narrow down the results. Optionally, you can use the Filter parameter to narrow down results as well. If no partition or filter are specified for the results, the default naming context is used and metadata for all replication partners is returned.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies a user account that has permission to perform this action. The default is the current user.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**EnumerationServer**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Filter**

Description :Specifies a filter in the provider's format or language. The value of this parameter qualifies the Path parameter. The syntax of the filter, including the use of wildcards, depends on the provider. Filters are more efficient than other parameters, because the provider applies them when retrieving the objects, rather than having

Windows PowerShell filter the objects after they are retrieved.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Partition

Description :Specifies the distinguished name of an Active Directory partition. The distinguished name must be one of the naming contexts on the current directory server. The cmdlet searches this partition to find the object defined by the Identity parameter.

Required	false
Position	3
Default value	DefaultNC; Provider: Default is to use the Partition that you are currently in. Else, use DefaultNC (IE: If you are in the RootDSE)
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PartnerType

Description :An enumeration of the replication types returned by this cmdlet. The following are the allowable values for this parameter: Inbound, Outbound, Both.

Required	false
Position	4
Default value	Inbound
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Scope

Description :Specifies the scope type for the Target parameter when used as input. The allowable values for this parameter are:

Required	true
----------	------

Position	2
Default value	None
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Target**

Description :Specifies the target for returning replication partner metadata as either one or more domain controllers, sites, domains, or forests. If multiple values for the target are to be specified, they need to be separated by commas. This parameter will return results for all the domain controllers specified or for part of the specified container.

Required	true
Position	1
Default value	DCLocator; Provider: -Server of the connected drive
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Inputs

A class structure that represents Active Directory server objects.

Type : Microsoft.ActiveDirectory.Management.ADDirectoryServer

Outputs

A class structure that represents Active Directory replication partner metadata objects.

Type : Microsoft.ActiveDirectory.Management.ADReplicationPartnerMetadata

Notes

Examples

----- EXAMPLE 1 -----

Description

Get the replication metadata between corp-DC01 and its inbound partners for the default partition only.

```
C:\PS>Get-ADReplicationPartnerMetadata -Target corp-DC01
```

----- EXAMPLE 2 -----

Description

Get the replication metadata between corp-DC01 and its inbound partners for the default partition only (same as above).

```
C:\PS>Get-ADReplicationPartnerMetadata -Target corp-DC01 -
PartnerType Inbound
```

----- EXAMPLE 3 -----

Description

Get the replication metadata between corp-DC01, corp-DC02 and their respective partners only (both inbound and outbound) for the schema partition.

```
C:\PS>Get-ADReplicationPartnerMetadata -Target corp-DC01,corp-
DC02 -PartnerType Both -Partition Schema
```

----- EXAMPLE 4 -----

Description

Get the replication metadata for all the inbound partners of all the domain controllers within the 'NorthAmerica' site for all hosted partitions.

```
C:\PS>Get-ADReplicationPartnerMetadata -Target NorthAmerica -
Scope Site -Partition *
```

----- EXAMPLE 5 -----

Description

Get the replication metadata for all the domain controllers that are inbound partners for the default partition in the domain 'corp.contoso.com'.

```
C:\PS>Get-ADReplicationPartnerMetadata -Target
"corp.contoso.com" -Scope Domain
```

----- EXAMPLE 6 -----

Description

Get the replication metadata for all the domain controllers that are inbound partners for the configuration partition in the forest 'corp.contoso.com'.

```
C:\PS>Get-ADReplicationPartnerMetadata -Target  
"corp.contoso.com" -Scope Forest -Partition Configuration
```

Cmdlet: Get-ADReplicationQueueOperation

Synops

Returns the contents of the replication queue for a specified server.

Syntax

```
Get-ADReplicationQueueOperation [-Server] <String> [[-Partition]
    <String[]>] [-AuthType {Negotiate | Basic}] [-Credential
    <PSCredential>]
    [-Filter <String>] [<CommonParameters>]
```

Description

The Get-ADReplicationQueueOperation cmdlet returns all of the pending operations in the replication queue. While replication operations are pending, this cmdlet can be useful for determining the status of queued operations.

The Get-ADReplicationQueueOperation cmdlet can be called from script to watch and observe when operations get moved out of the queue as they are replicated. It also allows for filtering on any of the properties on the ADReplicationOperation object.

The replication queue operates in the following manner: suppose a domain controller has five inbound replication connections. As the domain controller formulates change requests, either by a schedule being reached or from a notification, it adds a work item for each request to the end of the queue of pending synchronization requests. Each pending synchronization request represents one <source domain controller, directory partition> pair, such as "synchronize the schema directory partition from DC1," or "delete the ApplicationX directory partition."

When a work item has been received into the queue, notification and polling intervals do not apply. Instead, the domain controller processes the item (begins synchronizing from its source) as soon as the work item reaches the front of the replication queue. This process continues until either the destination is fully synchronized with the source domain controller, an error occurs, or the synchronization is pre-empted by a higher-priority operation.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies a user account that has permission to perform this action. The default is the current user.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Filter

Description :Specifies a filter in the provider's format or language. The value of this parameter qualifies the Path parameter. The syntax of the filter, including the use of wildcards, depends on the provider. Filters are more efficient than other parameters, because the provider applies them when retrieving the objects, rather than having Windows PowerShell filter the objects after they are retrieved.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Partition

Description :Specifies the distinguished name of an Active Directory partition. The distinguished name must be one of the naming contexts on the current directory server. The cmdlet searches this partition to find the object defined by the Identity parameter.

Required	false
Position	3

Default value	DefaultNC; Provider: Default is to use the Partition that you are currently in. Else, use DefaultNC (IE: If you are in the RootDSE)
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	true
Position	2
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A class structure that represents one or more Active Directory servers.

Type : Microsoft.ActiveDirectory.Management.ADDirectoryServer

Outputs

A class structure that represents one or more Active Directory replication operations.

Type : Microsoft.ActiveDirectory.Management.ADReplicationOperation

Cmdlet: Get-ADReplicationSite

Synops

Returns a specific Active Directory replication site or a set of replication site objects based on a specified filter.

Syntax

```
Get-ADReplicationSite [[-Identity] <ADReplicationSite>] [-AuthType {Negotiate | Basic}] [-Credential <PSCredential>] [-Properties <String[]>] [-Server <String>] [<CommonParameters>]
```

```
Get-ADReplicationSite [-AuthType {Negotiate | Basic}] [-Credential <PSCredential>] [-Properties <String[]>] [-Server <String>] -Filter <String> [<CommonParameters>]
```

Description

The Get-ADReplicationSite cmdlet returns a specific Active Directory replication site or a set of replication site objects based on a specified filter. Sites are used in Active Directory to either enable clients to discover network resources (published shares, domain controllers) close to the physical location of a client computer or to reduce network traffic over wide area network (WAN) links. Sites can also be used to optimize replication between domain controllers.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named

Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Filter**

Description :Specifies a query string that retrieves Active Directory objects. This string uses the PowerShell Expression Language syntax. The PowerShell Expression Language syntax provides rich type-conversion support for value types received by the Filter parameter. The syntax uses an in-order representation, which means that the operator is placed between the operand and the value. For more information about the Filter parameter, see [about_ActiveDirectory_Filter](#).

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Identity**

Description :Specifies an Active Directory object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	false
Position	1
Default value	All Sites (Filter *)

Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :**Properties**

Description :Specifies the properties of the output object to retrieve from the server. Use this parameter to retrieve properties that are not included in the default set.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A site object is received by the Identity parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADReplicationSite

Examples

----- EXAMPLE 1 -----

Description

Get all the sites.

```
C:\PS>Get-ADReplicationSite -Filter *
```

----- EXAMPLE 2 -----

Description

Get all sites that have the WindowsServer2003KCCBehaviorEnabled flag turned on. (The -Properties parameter must be set because the WindowsServer2003KCCSiteLinkBridgingEnabled property is not retrieved by default.)

```
C:\PS>Get-ADReplicationSite -Properties * -Filter  
{WindowsServer2003KCCSiteLinkBridgingEnabled -eq $TRUE}
```

----- EXAMPLE 3 -----

Description

Get the site with name 'NorthAmerica'.

```
C:\PS>Get-ADReplicationSite NorthAmerica
```

----- EXAMPLE 4 -----

Description

Get the AutomaticInterSiteTopologyGenerationEnabled property of the site with name 'NorthAmerica'.

```
C:\PS>Get-ADReplicationSite NorthAmerica -Properties  
AutomaticInterSiteTopologyGenerationEnabled
```

Cmdlet: Get-ADReplicationSiteLink

Synops

Returns a specific Active Directory site link or a set of site links based on a specified filter.

Syntax

```
Get-ADReplicationSiteLink [-AuthType {Negotiate | Basic}] [-  
Credential  
    <PSCredential>] [-Properties <String[]>] [-Server <String>] -  
Filter  
    <String> [<CommonParameters>]
```

```
Get-ADReplicationSiteLink [-Identity] <ADReplicationSiteLink> [-  
AuthType  
    {Negotiate | Basic}] [-Credential <PSCredential>] [-  
Properties <String[]>]  
    [-Server <String>] [<CommonParameters>]
```

Description

The Get-ADReplicationSiteLink cmdlet can be used to return a specific Active Directory site link or a set of site links based on a specified filter. A site link connects two or more sites. Site links reflect the administrative policy for how sites are to be interconnected and the methods used to transfer replication traffic. You must connect sites with site links so that domain controllers at each site can replicate Active Directory changes.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Manage ment.AuthType.Negotiate

Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Filter

Description :Specifies a query string that retrieves Active Directory objects. This string uses the PowerShell Expression Language syntax. The PowerShell Expression Language syntax provides rich type-conversion support for value types received by the Filter parameter. The syntax uses an in-order representation, which means that the operator is placed between the operand and the value. For more information about the Filter parameter, see [about_ActiveDirectory_Filter](#).

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :**Properties**

Description :Specifies the properties of the output object to retrieve from the server. Use this parameter to retrieve properties that are not included in the default set.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A site link object is received by the Identity parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADReplicationSiteLink

Examples

----- EXAMPLE 1 -----

Description

Get all the site links.

```
C:\PS>Get-ADReplicationSiteLink -Filter *
```

----- EXAMPLE 2 -----

Description

Get all site links that include 'NorthAmerica'.

```
C:\PS>Get-ADReplicationSiteLink -Filter {SitesIncluded -eq "NorthAmerica"} | FT Name,SitesIncluded -A
```

----- EXAMPLE 3 -----

Description

Get all site links that have a cost greater than 100 and a replication frequency less than 15 minutes.

```
C:\PS>Get-ADReplicationSiteLink -Filter {Cost -gt 100 -and ReplicationFrequencyInMinutes -lt 15}
```

----- EXAMPLE 4 -----

Description

Get the site link with name 'Europe-Asia'.

```
C:\PS>Get-ADReplicationSiteLink "Europe-Asia"
```

----- EXAMPLE 5 -----

Description

Get the ReplicationSchedule property of the site link with name 'Europe-Asia'.

```
C:\PS>Get-ADReplicationSiteLink "Europe-Asia" -Properties ReplicationSchedule
```

Cmdlet: Get-ADReplicationSiteLinkBridge

Synops

Returns a specific Active Directory site link bridge or a set of site link bridge objects based on a specified filter.

Syntax

```
Get-ADReplicationSiteLinkBridge [-AuthType {Negotiate | Basic}]  
    [-Credential <PSCredential>] [-Properties <String[]>] [-  
Server <String>]  
    -Filter <String> [<CommonParameters>]
```

```
Get-ADReplicationSiteLinkBridge [-Identity]  
<ADReplicationSiteLinkBridge>  
    [-AuthType {Negotiate | Basic}] [-Credential <PSCredential>]  
[-Properties  
    <String[]>] [-Server <String>] [<CommonParameters>]
```

Description

The Get-ADReplicationSiteLinkBridge cmdlet returns a specific Active Directory site link bridge or a set of site link bridge objects based on a specified filter. A site link bridge connects two or more site links and enables transitivity between site links. Each site link in a bridge must have a site in common with another site link in the bridge.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Manage ment.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Filter

Description :Specifies a query string that retrieves Active Directory objects. This string uses the PowerShell Expression Language syntax. The PowerShell Expression Language syntax provides rich type-conversion support for value types received by the Filter parameter. The syntax uses an in-order representation, which means that the operator is placed between the operand and the value. For more information about the Filter parameter, see [about_ActiveDirectory_Filter](#).

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Properties

Description :Specifies the properties of the output object to retrieve from the server. Use this parameter to retrieve properties that are not included in the default set.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A site link bridge object is received by the Identity parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADReplicationSiteLinkBridge

Notes

Examples

----- EXAMPLE 1 -----

Description

Get all the site link bridges.

```
C:\PS>Get-ADReplicationSiteLinkBridge -Filter *
```

----- EXAMPLE 2 -----

Description

Get all site link bridges that include site link 'NorthAmerica-Europe'.

```
C:\PS>Get-ADReplicationSiteLinkBridge -Filter  
{SiteLinksIncluded -eq "NorthAmerica-Europe"} | FT  
Name,SiteLinksIncluded -A
```

----- EXAMPLE 3 -----

Description

Get the site link bridge with name 'NorthAmerica-Europe'

```
C:\PS>Get-ADReplicationSiteLinkBridge "NorthAmerica-Asia"
```

----- EXAMPLE 4 -----

Description

Get all the properties of the site link bridge with name 'NorthAmerica-Europe'.

```
C:\PS>Get-ADReplicationSiteLinkBridge "NorthAmerica-Asia" -  
Properties *
```

Cmdlet: Get-ADReplicationSubnet

Synops

Returns a specific Active Directory subnet or a set of AD subnets based on a specified filter.

Syntax

```
Get-ADReplicationSubnet [-AuthType {Negotiate | Basic}] [-  
Credential  
    <PSCredential>] [-Properties <String[]>] [-Server <String>] -  
Filter  
    <String> [<CommonParameters>]
```

```
Get-ADReplicationSubnet [-Identity] <ADReplicationSubnet> [-  
AuthType  
    {Negotiate | Basic}] [-Credential <PSCredential>] [-  
Properties <String[]>]  
    [-Server <String>] [<CommonParameters>]
```

Description

The Get-ADReplicationSubnet cmdlet returns a specific Active Directory subnet or a set of AD subnets based on a specified filter. Subnet objects (class subnet) define network subnets in Active Directory. A network subnet is a segment of a TCP/IP network to which a set of logical IP addresses is assigned. Subnets group computers in a way that identifies their physical proximity on the network. Subnet objects in Active Directory are used to map computers to sites.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named

Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Filter**

Description :Specifies a query string that retrieves Active Directory objects. This string uses the PowerShell Expression Language syntax. The PowerShell Expression Language syntax provides rich type-conversion support for value types received by the Filter parameter. The syntax uses an in-order representation, which means that the operator is placed between the operand and the value. For more information about the Filter parameter, see [about_ActiveDirectory_Filter](#).

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Identity**

Description :Specifies an Active Directory object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	All Subnets (Filter *)

Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :**Properties**

Description :Specifies the properties of the output object to retrieve from the server. Use this parameter to retrieve properties that are not included in the default set.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A subnet object is received by the Identity parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADReplicationSubnet

Examples

----- EXAMPLE 1 -----

Description

Get all the subnets.

```
C:\PS>Get-ADReplicationSubnet -Filter *
```

----- EXAMPLE 2 -----

Description

Get all the subnets in Japan.

```
C:\PS>Get-ADReplicationSubnet -Filter {Location -like
"*Japan"}
```

----- EXAMPLE 3 -----

Description

Get the subnet with name '10.0.0.0/25'.

```
C:\PS>Get-ADReplicationSubnet "10.0.0.0/25"
```

----- EXAMPLE 4 -----

Description

Get all the properties of the subnet with name '10.0.0.0/25'.

```
C:\PS>Get-ADReplicationSubnet "10.0.0.0/25" -Properties *
```

Cmdlet: Get-ADReplicationUpToDatenessVectorTable

Synops

Displays the highest Update Sequence Number (USN) for the specified domain controller.

Syntax

```
Get-ADReplicationUpToDatenessVectorTable [-Target] <Object[]>  
    [[-Partition] <String[]>] [-AuthType {Negotiate | Basic}] [-  
Credential  
    <PSCredential>] [-EnumerationServer <String>] [-Filter  
<String>]  
    [<CommonParameters>]
```

```
Get-ADReplicationUpToDatenessVectorTable [[-Target] <Object[]>]  
[-Scope  
    {Domain | Forest | Server | Site}] [[-Partition] <String[]>]  
[-AuthType  
    {Negotiate | Basic}] [-Credential <PSCredential>] [-  
EnumerationServer  
    <String>] [-Filter <String>] [<CommonParameters>]
```

Description

Displays the highest Update Sequence Number (USN) for the specified domain controller(s). This information shows how up-to-date a replica is with its replication partners. During replication, each object that is replicated has USN and if the object is modified, the USN is incremented. The value of the USN for a given object is local to each domain controller where it has replicated are number is different on each domain controller.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies a user account that has permission to perform this action. The default is the current user.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :EnumerationServer

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Filter

Description :Specifies a filter in the provider's format or language. The value of this parameter qualifies the Path parameter. The syntax of the filter, including the use of wildcards, depends on the provider. Filters are more efficient than other parameters, because the provider applies them when retrieving the objects, rather than having Windows PowerShell filter the objects after they are retrieved.

Required	false
Position	named

Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Partition

Description :Specifies the distinguished name of an Active Directory partition. The distinguished name must be one of the naming contexts on the current directory server. The cmdlet searches this partition to find the object defined by the Identity parameter.

Required	false
Position	3
Default value	DefaultNC; Provider: Default is to use the Partition that you are currently in. Else, use DefaultNC (IE: If you are in the RootDSE)
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Scope

Description :Specifies the type of object used as input by the Target parameter. The following are allowable values to use:

Required	true
Position	2
Default value	None
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Target

Description :Specifies either one or more (using a comma separated list) of Active Directory domain controllers, sites, domains, or forests. It will return results for all the domain controllers that are specified or that are part of the specified container.

Required	true
Position	1
Default value	DCLocator; Provider: -Server of the connected drive
Accept pipeline input?	True (ByValue)

Accept wildcard characters?	false
-----------------------------	-------

Inputs

A class structure that contains one or more Active Directory server objects.

Type : Microsoft.ActiveDirectory.Management.ADDirectoryServer

Outputs

A class structure that contains one or more Active Directory replication up-to-dateness (UTD) vector tables.

Type : Microsoft.ActiveDirectory.Management.ADReplicationUpToDatenessVector

Examples

----- EXAMPLE 1 -----

Description

Get the highest Update Sequence Number (USN) information for the default partition from corp-DC01.

```
C:\PS>Get-ADReplicationUpToDatenessVectorTable -Target corp-DC01
```

----- EXAMPLE 2 -----

Description

Get the highest Update Sequence Number (USN) information for the default partition from corp-DC01 (same as above).

```
C:\PS>Get-ADReplicationUpToDatenessVectorTable -Target corp-DC01 -Scope Server
```

----- EXAMPLE 3 -----

Description

Get the highest Update Sequence Number (USN) information for the schema partition from corp-DC01 and corp-DC02.

```
C:\PS>Get-ADReplicationUpToDatenessVectorTable -Target corp-DC01,corp-DC02 -Partition Schema
```

----- EXAMPLE 4 -----

Description

Get the highest Update Sequence Number (USN) for all partitions from all the Domain Controllers in site 'NorthAmerica'.

```
C:\PS>Get-ADReplicationUpToDatenessVectorTable -Target NorthAmerica -Scope Site -Partition *
```

----- EXAMPLE 5 -----

Description

Get the highest Update Sequence Number (USN) for the default partition from all the Domain Controllers in domain 'corp.contoso.com'.

```
C:\PS>Get-ADReplicationUpToDatenessVectorTable -Target "corp.contoso.com" -Scope Domain -Partition Default
```

----- EXAMPLE 6 -----

Description

Get the highest Update Sequence Number (USN) for the configuration partition from all the Domain Controllers in forest 'corp.contoso.com'.

```
C:\PS>Get-ADReplicationUpToDatenessVectorTable -Target "corp.contoso.com" -Scope Forest -Partition Configuration
```

Cmdlet: Get-ADResourceProperty

Synops

Gets one or more resource properties.

Syntax

```
Get-ADResourceProperty [-AuthType {Negotiate | Basic}] [-Credential
    <PSCredential>] [-Properties <String[]>] [-ResultPageSize
<Int32>]
    [-ResultSetSize <Int32>] [-Server <String>] -Filter <String>
    [<CommonParameters>]
```

```
Get-ADResourceProperty [-Identity] <ADResourceProperty> [-AuthType
    {Negotiate | Basic}] [-Credential <PSCredential>] [-Properties <String[]>]
    [-Server <String>] [<CommonParameters>]
```

```
Get-ADResourceProperty [-AuthType {Negotiate | Basic}] [-Credential
    <PSCredential>] [-Properties <String[]>] [-ResultPageSize
<Int32>]
    [-ResultSetSize <Int32>] [-Server <String>] -LDAPFilter
<String>
    [<CommonParameters>]
```

Description

The Get-ADResourceProperty cmdlet gets one or more resource properties.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Filter

Description :Specifies a query string that retrieves Active Directory objects. This string uses the PowerShell Expression Language syntax. The PowerShell Expression Language syntax provides rich type-conversion support for value types received by the Filter parameter. The syntax uses an in-order representation, which means that the operator is placed between the operand and the value. For more information about the Filter parameter, see [about_ActiveDirectory_Filter](#).

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :**LDAPFilter**

Description :Specifies an LDAP query string that is used to filter Active Directory objects. You can use this parameter to run your existing LDAP queries. The Filter parameter syntax supports the same functionality as the LDAP syntax. For more information, see the Filter parameter description and the [about_ActiveDirectory_Filter](#).

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Properties**

Description :Specifies the properties of the output object to retrieve from the server. Use this parameter to retrieve properties that are not included in the default set.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**ResultPageSize**

Description :Specifies the number of objects to include in one page for an Active Directory Domain Services query.

Required	false
Position	named
Default value	256
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**ResultSetSize**

Description :Specifies the maximum number of objects to return for an Active Directory Domain Services query. If you want to receive all of the objects, set this parameter to \$null (null value). You can use Ctrl+c to stop the query and return of objects.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Examples

----- EXAMPLE 1 -----

Description

Get all the resource properties that refer to the claim type named 'Country' for their suggested values.

```
C:\PS>Get-ADResourceProperty -Filter {SharesValuesWith -eq 'Country'}
```

----- EXAMPLE 2 -----

Description

Get the resource property with display name 'Authors'.

```
C:\PS>Get-ADResourceProperty Authors
```

Cmdlet: Get-ADResourcePropertyList

Synops

Retrieves resource property lists from Active Directory.

Syntax

```
Get-ADResourcePropertyList [-AuthType {Negotiate | Basic}] [-Credential
    <PSCredential>] [-Properties <String[]>] [-ResultPageSize
<Int32>]
    [-ResultSetSize <Int32>] [-Server <String>] -Filter <String>
    [<CommonParameters>]
```

```
Get-ADResourcePropertyList [-Identity] <ADResourcePropertyList>
    [-AuthType
        {Negotiate | Basic}] [-Credential <PSCredential>] [-
Properties <String[]>]
    [-Server <String>] [<CommonParameters>]
```

```
Get-ADResourcePropertyList [-AuthType {Negotiate | Basic}] [-Credential
    <PSCredential>] [-Properties <String[]>] [-ResultPageSize
<Int32>]
    [-ResultSetSize <Int32>] [-Server <String>] -LDAPFilter
<String>
    [<CommonParameters>]
```

Description

The Get-ADResourcePropertyList cmdlet retrieves resource property lists from Active Directory.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this

parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Filter**

Description :Specifies a query string that retrieves Active Directory objects. This string uses the PowerShell Expression Language syntax. The PowerShell Expression Language syntax provides rich type-conversion support for value types received by the Filter parameter. The syntax uses an in-order representation, which means that the operator is placed between the operand and the value. For more information about the Filter parameter, see [about_ActiveDirectory_Filter](#).

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Identity**

Description :Specifies an Active Directory object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :LDAPFilter

Description :Specifies an LDAP query string that is used to filter Active Directory objects. You can use this parameter to run your existing LDAP queries. The Filter parameter syntax supports the same functionality as the LDAP syntax. For more information, see the Filter parameter description and the about_ActiveDirectory_Filter.

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Properties

Description :Specifies the properties of the output object to retrieve from the server. Use this parameter to retrieve properties that are not included in the default set.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ResultPageSize

Description :Specifies the number of objects to include in one page for an Active Directory Domain Services query.

Required	false
Position	named
Default value	256
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**ResultSetSize**

Description :Specifies the maximum number of objects to return for an Active Directory Domain Services query. If you want to receive all of the objects, set this parameter to \$null (null value). You can use Ctrl+c to stop the query and return of objects.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Notes

Examples

----- EXAMPLE 1 -----

Description

Retrieves a list of all resource property lists.

```
C:\PS>Get-ADResourcePropertyList -Filter *
```

----- EXAMPLE 2 -----

Description

Retrieves all resource property lists that has the resource property "Country" in the list.

```
C:\PS>Get-ADResourcePropertyList -Filter {Members -eq  
'Country'}
```

----- EXAMPLE 3 -----

Description

Retrieves the global resource property list.

```
C:\PS>Get-ADResourcePropertyList "Global Resource Property  
List"
```

Cmdlet: Get-ADResourcePropertyValue

Synops

Retrieves a resource property value type from Active Directory.

Syntax

```
Get-ADResourcePropertyValue [-AuthType {Negotiate | Basic}]  
    [-Credential <PSCredential>] [-Properties <String[]>] [-  
Server <String>]  
    -Filter <String> [<CommonParameters>]
```

```
Get-ADResourcePropertyValue [-Identity]  
<ADResourcePropertyValue>  
    [-AuthType {Negotiate | Basic}] [-Credential <PSCredential>]  
[-Properties  
    <String[]>] [-Server <String>] [<CommonParameters>]
```

```
Get-ADResourcePropertyValue [-AuthType {Negotiate | Basic}]  
    [-Credential <PSCredential>] [-Properties <String[]>] [-  
Server <String>]  
    -LDAPFilter <String> [<CommonParameters>]
```

Description

The Get-ADResourcePropertyValue cmdlet retrieves a resource property value type from Active Directory. The resource property value type supports the following Active Directory primitives (ValueType, IsSingleValued, RestrictValues) and a Boolean indicating whether SuggestedValues are allowed.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
----------	-------

Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Filter

Description :Specifies a query string that retrieves Active Directory objects. This string uses the PowerShell Expression Language syntax. The PowerShell Expression Language syntax provides rich type-conversion support for value types received by the Filter parameter. The syntax uses an in-order representation, which means that the operator is placed between the operand and the value. For more information about the Filter parameter, see [about_ActiveDirectory_Filter](#).

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory user object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1

Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :LDAPFilter

Description :Specifies an LDAP query string that is used to filter Active Directory objects. You can use this parameter to run your existing LDAP queries. The Filter parameter syntax supports the same functionality as the LDAP syntax. For more information, see the Filter parameter description and the about_ActiveDirectory_Filter.

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Properties

Description :Specifies the properties of the output object to retrieve from the server. Use this parameter to retrieve properties that are not included in the default set.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Outputs

Default

1 ValueType

2 IsSingleValued

3 RestrictValues

4 AreSuggestedValuesPresent

Type : Microsoft.ActiveDirectory.Management.ADResourcePropertyValueTypes

Examples

----- EXAMPLE 1 -----

Description

Retrieves the names of all resource property value types.

```
C:\PS>Get-ADResourcePropertyValueTypes -Filter * | ft Name
```

----- EXAMPLE 2 -----

Description

Retrieves all resource property value types that the resource properties "Country" and "Authors" use.

```
C:\PS>Get-ADResourcePropertyValueTypes -Filter  
{ResourceProperties -eq 'Country' -or ResourceProperties -eq  
'Authors'}
```

----- EXAMPLE 3 -----

Description

Retrieves a resource property value type named "MS-DS-Text".

```
C:\PS>Get-ADResourcePropertyValueTypes "MS-DS-Text"
```

Cmdlet: Get-ADRootDSE

Synops

Gets the root of a Directory Server information tree.

Syntax

```
Get-ADRootDSE [-AuthType {Negotiate | Basic}] [-Credential  
<PSCredential>]  
    [-Properties <String[]>] [-Server <String>]  
[<CommonParameters>]
```

Description

The Get-ADRootDSE cmdlet gets the conceptual object representing the root of the directory information tree of a directory server. This tree provides information about the configuration and capabilities of the directory server, such as the distinguished name for the configuration container, the current time on the directory server, and the functional levels of the directory server and the domain.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Manage ment.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Properties**

Description :Specifies the properties of the output object to retrieve from the server. Use this parameter to retrieve properties that are not included in the default set.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Outputs

An ADRootDSE object that represents the data tree for the specified directory server is output by this cmdlet.

Type : Microsoft.ActiveDirectory.Management.ADRootDSE

Examples

----- EXAMPLE 1 -----

Description

Get the rootDSE from the default domain controller.

```
C:\PS>Get-ADRootDSE
```

```
configurationNamingContext      :  
CN=Configuration,DC=Fabrikam,DC=com  
currentTime                     : 3/18/2009 11:12:55 AM  
defaultNamingContext            : DC=Fabrikam,DC=com  
dnsHostName                     : FABRIKAM-DC1.Fabrikam.com  
domainControllerFunctionality   : Windows2008R2  
domainFunctionality             : Windows2003Domain  
dsServiceName                   : CN=NTDS Settings,CN=FABRIKAM-  
DC1,CN=Servers,CN=Default-First-Site-  
Name,CN=Sites,CN=Configuration,DC=Fabrikam,DC=com  
forestFunctionality             : Windows2003Forest  
highestCommittedUSN             : 23015  
isGlobalCatalogReady           : {TRUE}  
isSynchronized                  : {TRUE}  
ldapServiceName                 : Fabrikam.com:FABRIKAM-  
DC1$@FABRIKAM.COM  
namingContexts                  : {DC=Fabrikam,DC=com,  
CN=Configuration,DC=Fabrikam,DC=com,  
CN=Schema,CN=Configuration,DC=Fabrikam,DC=com,  
DC=DomainDnsZones,DC=Fabrikam,DC=com...}  
rootDomainNamingContext         : DC=Fabrikam,DC=com  
schemaNamingContext             :  
CN=Schema,CN=Configuration,DC=Fabrikam,DC=com  
serverName                      : CN=FABRIKAM-  
DC1,CN=Servers,CN=Default-First-Site-  
Name,CN=Sites,CN=Configuration,DC=Fabrikam,DC=com  
subschemaSubentry               :  
CN=Aggregate,CN=Schema,CN=Configuration,DC=Fabrikam,DC=com  
supportedCapabilities            : {1.2.840.113556.1.4.800  
(LDAP_CAP_ACTIVE_DIRECTORY_OID), 1.2.840.113556.1.4.1670  
(LDAP_CAP_ACTIVE_DIRECTORY_V51_OID), 1.2.840.113556.1.4.1791  
(LDAP_CAP_ACTIVE_DIRECTORY_LDAP_INTEG_OID),  
1.2.840.113556.1.4.1935  
(LDAP_CAP_ACTIVE_DIRECTORY_V61_OID)...}  
supportedControl                 : {1.2.840.113556.1.4.319  
(LDAP_PAGED_RESULT_OID_STRING), 1.2.840.113556.1.4.801  
(LDAP_SERVER_SD_FLAGS_OID), 1.2.840.113556.1.4.473  
(LDAP_SERVER_SORT_OID), 1.2.840.113556.1.4.528  
(LDAP_SERVER_NOTIFICATION_OID)...}  
supportedLDAPPolicies            : {MaxPoolThreads,  
MaxDatagramRecv, MaxReceiveBuffer, InitRecvTimeout...}  
supportedLDAPVersion             : {3, 2}  
supportedSASLMechanisms          : {GSSAPI, GSS-SPNEGO, EXTERNAL,  
DIGEST-MD5}
```

----- EXAMPLE 2 -----

Description

Get the rootDSE information including the supportedExtension property for Fabrikam-RODC1 server.

```
C:\PS>Get-ADRootDSE -Server Fabrikam-RODC1 -Properties
supportedExtension

configurationNamingContext      :
CN=Configuration,DC=Fabrikam,DC=com
currentTime                     : 3/18/2009 11:12:55 AM
defaultNamingContext            : DC=Fabrikam,DC=com
dnsHostName                     : FABRIKAM-RODC1.Fabrikam.com
domainControllerFunctionality  : Windows2008R2
domainFunctionality            : Windows2003Domain
dsServiceName                   : CN=NTDS Settings,CN=FABRIKAM-
RODC1,CN=Servers,CN=Default-First-Site-
Name,CN=Sites,CN=Configuration,DC=Fabrikam,DC=com
forestFunctionality            : Windows2003Forest
highestCommittedUSN            : 23015
isGlobalCatalogReady          : {TRUE}
isSynchronized                 : {TRUE}
ldapServiceName                 : Fabrikam.com:FABRIKAM-
RODC1$@FABRIKAM.COM
namingContexts                 : {DC=Fabrikam,DC=com,
CN=Configuration,DC=Fabrikam,DC=com,
CN=Schema,CN=Configuration,DC=Fabrikam,DC=com,
DC=DomainDnsZones,DC=Fabrikam,DC=com...}
rootDomainNamingContext        : DC=Fabrikam,DC=com
schemaNamingContext            :
CN=Schema,CN=Configuration,DC=Fabrikam,DC=com
serverName                     : CN=FABRIKAM-
RODC1,CN=Servers,CN=Default-First-Site-
Name,CN=Sites,CN=Configuration,DC=Fabrikam,DC=com
subschemaSubentry              :
CN=Aggregate,CN=Schema,CN=Configuration,DC=Fabrikam,DC=com
supportedCapabilities           : {1.2.840.113556.1.4.800
(LDAP_CAP_ACTIVE_DIRECTORY_OID), 1.2.840.113556.1.4.1670
(LDAP_CAP_ACTIVE_DIRECTORY_V51_OID), 1.2.840.113556.1.4.1791
(LDAP_CAP_ACTIVE_DIRECTORY_LDAP_INTEG_OID),
1.2.840.113556.1.4.1935
(LDAP_CAP_ACTIVE_DIRECTORY_V61_OID)...}
supportedControl                : {1.2.840.113556.1.4.319
(LDAP_PAGED_RESULT_OID_STRING), 1.2.840.113556.1.4.801
(LDAP_SERVER_SD_FLAGS_OID), 1.2.840.113556.1.4.473
(LDAP_SERVER_SORT_OID), 1.2.840.113556.1.4.528
(LDAP_SERVER_NOTIFICATION_OID)...}
supportedExtension              : {1.3.6.1.4.1.1466.20037,
1.3.6.1.4.1.1466.101.119.1, 1.2.840.113556.1.4.1781,
1.3.6.1.4.1.4203.1.11.3}
supportedLDAPPolicies           : {MaxPoolThreads,
MaxDatagramRecv, MaxReceiveBuffer, InitRecvTimeout...}
supportedLDAPVersion            : {3, 2}
supportedSASLMechanisms        : {GSSAPI, GSS-SPNEGO, EXTERNAL,
DIGEST-MD5}
```

----- EXAMPLE 3 -----

Description

Get the rootDSE information of FABRIKAM-AD LDS1 using the FABRIKAM\user1 credentials.

```
C:\PS>Get-ADRootDSE -Server "FABRIKAM-AD LDS1.Fabrikam.com:60000" -Credential "FABRIKAM\User1"

configurationNamingContext      : CN=Configuration,CN={9131D98B-E210-480F-A95D-24F9396898CA}
currentTime                     : 3/18/2009 11:40:19 AM
dnsHostName                     : FABRIKAM-AD LDS1.Fabrikam.com
domainControllerFunctionality   : Windows2008R2
dsServiceName                   : CN=NTDS Settings,CN=FABRIKAM-AD LDS1$instance1,CN=Servers,CN=Default-First-Site-Name,CN= Sites,CN=Configuration,CN={9131D98B-E210-480F-A95D-24F9396898CA}
forestFunctionality              : Windows2003Forest
highestCommittedUSN              : 13967
isSynchronized                  : {TRUE}
namingContexts                  :
{CN=Configuration,CN={9131D98B-E210-480F-A95D-24F9396898CA},CN=Schema,CN=Configuration,CN={9131D98B-E210-480F-A95D-24F9396898CA},DC=AppNC}
schemaNamingContext              :
CN=Schema,CN=Configuration,CN={9131D98B-E210-480F-A95D-24F9396898CA}
serverName                      : CN=FABRIKAM-AD LDS1$instance1,CN=Servers,CN=Default-First-Site-Name,CN= Sites,CN=Configuration,CN={9131D98B-E210-480F-A95D-24F9396898CA}
subschemaSubentry                :
CN=Aggregate,CN=Schema,CN=Configuration,CN={9131D98B-E210-480F-A95D-24F9396898CA}
supportedCapabilities             : {1.2.840.113556.1.4.1851(LDAP_CAP_ACTIVE_DIRECTORY_ADAM_OID), 1.2.840.113556.1.4.1670(LDAP_CAP_ACTIVE_DIRECTORY_V51_OID), 1.2.840.113556.1.4.1791(LDAP_CAP_ACTIVE_DIRECTORY_LDAP_INTEG_OID), 1.2.840.113556.1.4.1935(LDAP_CAP_ACTIVE_DIRECTORY_V61_OID)...}
supportedControl                 : {1.2.840.113556.1.4.319(LDAP_PAGED_RESULT_OID_STRING), 1.2.840.113556.1.4.801(LDAP_SERVER_SD_FLAGS_OID), 1.2.840.113556.1.4.473(LDAP_SERVER_SORT_OID), 1.2.840.113556.1.4.528(LDAP_SERVER_NOTIFICATION_OID)...}
supportedLDAPPolicies            : {MaxPoolThreads, MaxDatagramRecv, MaxReceiveBuffer, InitRecvTimeout...}
supportedLDAPVersion             : {3, 2}
supportedSASLMechanisms          : {GSSAPI, GSS-SPNEGO, EXTERNAL, DIGEST-MD5}
```

Cmdlet: Get-ADServiceAccount

Synops

Gets one or more Active Directory managed service accounts or group managed service accounts.

Syntax

```
Get-ADServiceAccount [-AuthType {Negotiate | Basic}] [-Credential  
    <PSCredential>] [-Properties <String[]>] [-ResultPageSize  
<Int32>]  
    [-ResultSetSize <Int32>] [-SearchBase <String>] [-SearchScope  
{Base |  
    OneLevel | Subtree}] [-Server <String>] -Filter <String>  
    [<CommonParameters>]
```

```
Get-ADServiceAccount [-Identity] <ADServiceAccount> [-AuthType  
{Negotiate  
    | Basic}] [-Credential <PSCredential>] [-Partition <String>]  
[-Properties  
    <String[]>] [-Server <String>] [<CommonParameters>]
```

```
Get-ADServiceAccount [-AuthType {Negotiate | Basic}] [-Credential  
    <PSCredential>] [-Properties <String[]>] [-ResultPageSize  
<Int32>]  
    [-ResultSetSize <Int32>] [-SearchBase <String>] [-SearchScope  
{Base |  
    OneLevel | Subtree}] [-Server <String>] -LDAPFilter <String>  
    [<CommonParameters>]
```

Description

The Get-ADServiceAccount cmdlet gets a managed service account (MSA) or performs a search to retrieve MSAs.

The Identity parameter specifies the Active Directory MSA to get. You can identify a MSA

by its distinguished name Members (DN), GUID, security identifier (SID), or Security Accounts Manager (SAM) account name. You can also set the parameter to a MSA object variable, such as `$<localServiceaccountObject>` or pass a MSA object through the pipeline to the Identity parameter.

To search for and retrieve more than one MSA, use the Filter or LDAPFilter parameters. The Filter parameter uses the PowerShell Expression Language to write query strings for Active Directory. PowerShell Expression Language syntax provides rich type conversion support for value types received by the Filter parameter. For more information about the Filter parameter syntax, see `about_ActiveDirectory_Filter`. If you have existing LDAP query strings, you can use the LDAPFilter parameter.

This cmdlet gets a default set of MSA object properties. To retrieve additional properties use the Properties parameter. For more information about the how to determine the properties for service account objects, see the Properties parameter description.

Parameters

Parameter :AuthType

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Filter

Description :Specifies a query string that retrieves Active Directory objects. This string uses the PowerShell Expression Language syntax. The PowerShell Expression Language syntax provides rich type-conversion support for value types received by the Filter parameter. The syntax uses an in-order representation, which means that the operator is placed between the operand and the value. For more information about the Filter parameter, see [about_ActiveDirectory_Filter](#).

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Identity**

Description :Distinguished Name Specifies an Active Directory account object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :**LDAPFilter**

Description :Specifies an LDAP query string that is used to filter Active Directory objects. You can use this parameter to run your existing LDAP queries. The Filter parameter syntax supports the same functionality as the LDAP syntax. For more information, see the Filter parameter description and the [about_ActiveDirectory_Filter](#).

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Partition**

Description :Specifies the distinguished name of an Active Directory partition. The

distinguished name must be one of the naming contexts on the current directory server. The cmdlet searches this partition to find the object defined by the Identity parameter.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Properties**

Description :Specifies the properties of the output object to retrieve from the server. Use this parameter to retrieve properties that are not included in the default set.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**ResultPageSize**

Description :Specifies the number of objects to include in one page for an Active Directory Domain Services query.

Required	false
Position	named
Default value	256
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**ResultSetSize**

Description :Specifies the maximum number of objects to return for an Active Directory Domain Services query. If you want to receive all of the objects, set this parameter to \$null (null value). You can use Ctrl+c to stop the query and return of objects.

Required	false
Position	named
Default value	

Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**SearchBase**

Description :Specifies an Active Directory path to search under.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**SearchScope**

Description :Specifies the scope of an Active Directory search. Possible values for this parameter are:

Required	false
Position	named
Default value	Subtree
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A managed service account object is received by the Identity parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADServiceAccount

Outputs

Returns one or more managed service account (MSA) objects.

This cmdlet returns a default set of ADService account property values. To retrieve additional ADService account properties, use the Properties parameter.

To view the properties for an ADService account object, see the following examples. To run these examples, replace <service account> with a MSA identifier such as the name of a MSA.

To get a list of the default set of properties of an ADService account object, use the following command:

```
Get-ADService account <service account> | Get-Member
```

To get a list of all the properties of an ADService account object, use the following command:

```
Get-ADService account <service account> -Properties ALL | Get-Member
```

Type : Microsoft.ActiveDirectory.Management.ADSERVICEACCOUNT

Notes

Examples

----- EXAMPLE 1 -----

Description

Retrieve Service-Account with samAccountName 'service1'.

```
C:\PS>Get-ADServiceAccount -Identity service1

Enabled           : True
Name              : service1
UserPrincipalName : 
SamAccountName    : service1$
ObjectClass       : msDS-ManagedServiceAccount
SID               : S-1-5-21-159507390-2980359153-3438059098-29770
ObjectGUID        : eaa435ee-6ebc-44dd-b4b6-dc1bb5bcd23a
HostComputers     : 
DistinguishedName : CN=service1,CN=Managed Service Accounts,DC=contoso,DC=com
```

----- EXAMPLE 2 -----

Description

Retrieve the managed service account with SID S-1-5-21-159507390-2980359153-3438059098-29770'.

```
C:\PS>Get-ADServiceAccount -Identity S-1-5-21-159507390-2980359153-3438059098-29770

Enabled           : True
Name              : service1
UserPrincipalName :
SamAccountName    : service1$
ObjectClass       : msDS-ManagedServiceAccount
SID               : S-1-5-21-159507390-2980359153-3438059098-29770
ObjectGUID        : eaa435ee-6ebc-44dd-b4b6-dc1bb5bcd23a
HostComputers     :
DistinguishedName : CN=service1,CN=Managed Service Accounts,DC=contoso,DC=com
```

----- EXAMPLE 3 -----

Description

Find the Managed Service Accounts installed on the computer "CN=SQL-Server-1,DC=contoso,DC=com".

```
C:\PS>Get-ADServiceAccount -Filter {HostComputers -eq "CN=SQL-Server-1, DC=contoso,DC=com" }

Enabled           : True
Name              : service1
UserPrincipalName :
SamAccountName    : service1$
ObjectClass       : msDS-ManagedServiceAccount
SID               : S-1-5-21-159507390-2980359153-3438059098-29770
ObjectGUID        : eaa435ee-6ebc-44dd-b4b6-dc1bb5bcd23a
HostComputers     : {CN=SQL-Server-1, DC=contoso,DC=com}
DistinguishedName : CN=service1,CN=Managed Service Accounts,DC=contoso,DC=com
```

Cmdlet: Get-ADTrust

Synops

Returns all trusted domain objects in the directory.

Syntax

```
Get-ADTrust [-AuthType {Negotiate | Basic}] [-Credential  
<PSCredential>]  
    [-Properties <String[]>] [-Server <String>] -Filter <String>  
    [<CommonParameters>]
```

```
Get-ADTrust [-Identity] <ADTrust> [-AuthType {Negotiate | Basic}]  
  
    [-Credential <PSCredential>] [-Properties <String[]>] [-  
Server <String>]  
    [<CommonParameters>]
```

```
Get-ADTrust [-AuthType {Negotiate | Basic}] [-Credential  
<PSCredential>]  
    [-Properties <String[]>] [-Server <String>] -InputObject  
<Object>  
    [<CommonParameters>]
```

```
Get-ADTrust [-AuthType {Negotiate | Basic}] [-Credential  
<PSCredential>]  
    [-Properties <String[]>] [-Server <String>] -LDAPFilter  
<String>  
    [<CommonParameters>]
```

Description

The Get-ADTrust cmdlet returns all trusted domain objects in the directory.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Filter

Description :Specifies a query string that retrieves Active Directory objects. This string uses the PowerShell Expression Language syntax. The PowerShell Expression Language syntax provides rich type-conversion support for value types received by the Filter parameter. The syntax uses an in-order representation, which means that the operator is placed between the operand and the value. For more information about the Filter parameter, see [about_ActiveDirectory_Filter](#).

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory object by providing one of the following

property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :InputObject

Description :Specifies an Active Directory input object. This parameter can accept one of the the following object types:

Required	true
Position	named
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :LDAPFilter

Description :Specifies an LDAP query string that is used to filter Active Directory objects. You can use this parameter to run your existing LDAP queries. The Filter parameter syntax supports the same functionality as the LDAP syntax. For more information, see the Filter parameter description and the about_ActiveDirectory_Filter.

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Properties

Description :Specifies the properties of the output object to retrieve from the server. Use this parameter to retrieve properties that are not included in the default set.

Required	false
Position	named
Default value	

Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A trusted domain object is received by the Identity parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADTrust

Notes

Examples

----- EXAMPLE 1 -----

Description

Get all the trusted domain objects in the forest.

```
C:\PS>Get-ADTrust -Filter *
```

----- EXAMPLE 2 -----

Description

Get all the trusted domain objects with 'corp.contoso.com' as the trust partner.

```
C:\PS>Get-ADTrust -Filter {Target -eq "corp.contoso.com"}
```

----- EXAMPLE 3 -----

Description

Get the trusted domain object with name 'corp.contoso.com'

```
C:\PS>Get-ADTrust "corp.contoso.com"
```

Cmdlet: Get-ADUser

Synops

Gets one or more Active Directory users.

Syntax

```
Get-ADUser [-AuthType {Negotiate | Basic}] [-Credential  
<PSCredential>]  
    [-Properties <String[]>] [-ResultPageSize <Int32>] [-  
ResultSetSize  
    <Int32>] [-SearchBase <String>] [-SearchScope {Base |  
OneLevel | Subtree}]  
    [-Server <String>] -Filter <String> [<CommonParameters>]
```

```
Get-ADUser [-Identity] <ADUser> [-AuthType {Negotiate | Basic}]  
    [-Credential <PSCredential>] [-Partition <String>] [-  
Properties  
    <String[]>] [-Server <String>] [<CommonParameters>]
```

```
Get-ADUser [-AuthType {Negotiate | Basic}] [-Credential  
<PSCredential>]  
    [-Properties <String[]>] [-ResultPageSize <Int32>] [-  
ResultSetSize  
    <Int32>] [-SearchBase <String>] [-SearchScope {Base |  
OneLevel | Subtree}]  
    [-Server <String>] -LDAPFilter <String> [<CommonParameters>]
```

Description

The Get-ADUser cmdlet gets a user object or performs a search to retrieve multiple user objects.

The Identity parameter specifies the Active Directory user to get. You can identify a user by its distinguished name (DN), GUID, security identifier (SID), Security Accounts Manager (SAM) account name or name. You can also set the parameter to a user object variable, such as `$<localUserObject>` or pass a user object through the pipeline to the Identity parameter.

To search for and retrieve more than one user, use the **Filter** or **LDAPFilter** parameters. The **Filter** parameter uses the PowerShell Expression Language to write query strings for Active Directory. PowerShell Expression Language syntax provides rich type conversion support for value types received by the **Filter** parameter. For more information about the **Filter** parameter syntax, see [about_ActiveDirectory_Filter](#). If you have existing LDAP query strings, you can use the **LDAPFilter** parameter.

This cmdlet retrieves a default set of user object properties. To retrieve additional properties use the **Properties** parameter. For more information about the how to determine the properties for user objects, see the **Properties** parameter description.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Filter**

Description :Specifies a query string that retrieves Active Directory objects. This string uses the PowerShell Expression Language syntax. The PowerShell Expression Language syntax provides rich type-conversion support for value types received by the **Filter** parameter. The syntax uses an in-order representation, which means that the

operator is placed between the operand and the value. For more information about the Filter parameter, see about_ActiveDirectory_Filter.

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Identity**

Description :Specifies an Active Directory user object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :**LDAPFilter**

Description :Specifies an LDAP query string that is used to filter Active Directory objects. You can use this parameter to run your existing LDAP queries. The Filter parameter syntax supports the same functionality as the LDAP syntax. For more information, see the Filter parameter description and the about_ActiveDirectory_Filter.

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Partition**

Description :Specifies the distinguished name of an Active Directory partition. The distinguished name must be one of the naming contexts on the current directory server. The cmdlet searches this partition to find the object defined by the Identity parameter.

Required	false
----------	-------

Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Properties

Description :Specifies the properties of the output object to retrieve from the server. Use this parameter to retrieve properties that are not included in the default set.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ResultPageSize

Description :Specifies the number of objects to include in one page for an Active Directory Domain Services query.

Required	false
Position	named
Default value	256
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ResultSetSize

Description :Specifies the maximum number of objects to return for an Active Directory Domain Services query. If you want to receive all of the objects, set this parameter to \$null (null value). You can use Ctrl+c to stop the query and return of objects.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :SearchBase

Description :Specifies an Active Directory path to search under.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**SearchScope**

Description :Specifies the scope of an Active Directory search. Possible values for this parameter are:

Required	false
Position	named
Default value	Subtree
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A user object is received by the Identity parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADUser

Outputs

Returns one or more user objects.

This cmdlet returns a default set of ADUser property values. To retrieve additional

ADUser properties, use the Properties parameter.

To get a list of the default set of properties of an ADUser object, use the following command:

```
Get-ADUser <user> | Get-Member
```

To get a list of the most commonly used properties of an ADUser object, use the following command:

```
Get-ADUser <user> -Properties Extended | Get-Member
```

To get a list of all the properties of an ADUser object, use the following command:

```
Get-ADUser <user> -Properties * | Get-Member
```

Type : Microsoft.ActiveDirectory.Management.ADUser

Notes

Examples

----- EXAMPLE 1 -----

Description

Get all users under the container

'OU=Finance,OU=UserAccounts,DC=FABRIKAM,DC=COM'.

```
C:\PS>Get-ADUser -Filter * -SearchBase
"OU=Finance,OU=UserAccounts,DC=FABRIKAM,DC=COM"
```

----- EXAMPLE 2 -----

Description

Get all users that have a name that ends with 'SvcAccount'.

```
C:\PS>Get-ADUser -Filter 'Name -like "*SvcAccount"' | FT
Name, SamAccountName -A
```

Name		SamAccountName
SQL01	SvcAccount	SQL01
SQL02	SvcAccount	SQL02
IIS01	SvcAccount	IIS01

----- EXAMPLE 3 -----

Description

Get all properties of the user with samAccountName 'GlenJohn'.

```
C:\PS>Get-ADUser GlenJohn -Properties *
```

Surname	: John
Name	: Glen John
UserPrincipalName	:
GivenName	: Glen
Enabled	: False
SamAccountName	: GlenJohn
ObjectClass	: user
SID	: S-1-5-21-2889043008-4136710315-2444824263-3544
ObjectGUID	: e1418d64-096c-4cb0-b903-ebb66562d99d
DistinguishedName	: CN=Glen John, OU=NorthAmerica, OU=Sales, OU=UserAccounts, DC=FABRIKAM, DC=COM

----- EXAMPLE 4 -----

Description

Get the user with name 'GlenJohn' on the AD LDS instance.

```
C:\PS>Get-ADUser -Filter {Name -eq "GlenJohn"} -SearchBase "DC=AppNC" -Properties mail -Server lds.Fabrikam.com:50000
```

Cmdlet: Get-ADUserResultantPasswordPolicy

Synops

Gets the resultant password policy for a user.

Syntax

```
Get-ADUserResultantPasswordPolicy [-Identity] <ADUser> [-AuthType  
    {Negotiate | Basic}] [-Credential <PSCredential>] [-Partition  
<String>]  
    [-Server <String>] [<CommonParameters>]
```

Description

The Get-ADUserResultantPasswordPolicy gets the resultant password policy object (RSoP) for a user. The RSoP is defined by the Active Directory attribute named msDS-ResultantPSO.

A user can have multiple password policy objects (PSOs) associated with it, but only one PSO is the RSoP. A PSO is associated with a user when the PSO applies directly to the user or when the PSO applies to an Active Directory group that contains the user. When more than one PSO policy is associated with a user or group, the RSoP value defines the PSO to apply.

The resultant password policy or RSoP for a user is determined by using the following procedure.

- If only one PSO is associated with a user, this PSO is the RSoP.
- If more than one PSO is associated with a user, the PSO that applies directly to the user is the RSoP.
- If more than one PSO applies directly to the user, the PSO with the lowest msDS-PasswordSettingsPrecedence attribute value is the RSoP and this event is logged as a warning in the Active Directory event log. The lowest attribute value represents the highest PSO precedence. For example, if the msDS-PasswordSettingsPrecedence values of two PSOs are 100 and 200, the PSO with the attribute value of 100 is the RSoP.
- If there are no PSOs that apply directly to the user, the PSOs of the global security groups that have the user as a member are compared. The PSO with the lowest msDS-PasswordSettingsPrecedence value is the RSoP.

The Identity parameter specifies the Active Directory user. You can identify a user by its

distinguished name (DN), GUID, security identifier (SID) or Security Accounts Manager (SAM) account name. You can also set the parameter to a user object variable, such as \$<localUserObject> or pass a user object through the pipeline to the Identity parameter. For example, you can use the Get-ADUser cmdlet to retrieve a user object and then pass the object through the pipeline to the Get-ADUserResultantPasswordPolicy cmdlet.

Parameters

Parameter :AuthType

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory user object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)

Accept wildcard characters?	false
-----------------------------	-------

Parameter :**Partition**

Description :Specifies the distinguished name of an Active Directory partition. The distinguished name must be one of the naming contexts on the current directory server. The cmdlet searches this partition to find the object defined by the Identity parameter.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A user object is received by the Identity parameter.

Type : Microsoft.ActiveDirectory.Management.ADUser

Outputs

Returns a fine grained password policy object that represents the resultant password policy for the user.

Type : Microsoft.ActiveDirectory.Management.ADFineGrainedPasswordPolicy

Notes

Cmdlet: Grant-ADAuthenticationPolicySiloAccess

Synops

Grants permission to join an authentication policy silo.

Syntax

```
Grant-ADAuthenticationPolicySiloAccess [-Identity]
    <ADAuthenticationPolicySilo> [-Account] <ADAccount> [-
AuthType {Negotiate
    | Basic}] [-Credential <PSCredential>] [-PassThru] [-Server
<String>]
    [-Confirm] [-WhatIf] [<CommonParameters>]
```

Description

The Grant-ADAuthenticationPolicySiloAccess cmdlet grants permission to an account to join an authentication policy silo in Active Directory® Domain Services.

Parameters

Parameter :**Account**

Description :Specifies the account to which to grant access to the authentication policy silo. Specify the account in one of the following formats:

-- Distinguished Name

-- GUID

-- Security Identifier

-- SAM Account Name

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :**AuthType**

Description :Specifies the authentication method to use. The acceptable values for this parameter are:

--Negotiate or 0

--Basic or 1

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies a user account that has permission to perform the task. The default is the current user. Type a user name, such as "User01" or "Domain01\User01", or enter a PScredential object, such as one generated by the Get-Credential cmdlet.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Identity**

Description :Specifies an ADAuthenticationPolicySilo object. Specify the authentication policy silo object in one of the following formats:

--Distinguished Name

--GUID

--Name

Required	true
Position	0

Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :**PassThru**

Description :Returns an object representing the item with which you are working. By default, this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to which to connect, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Examples

Example 1: Grant access to an authentication policy silo to a user account

This command grants access to the authentication policy silo named AuthenticationPolicySilo01 to the user account named User01.

```
PS C:\>Grant-ADAuthenticationPolicySiloAccess -Identity  
AuthenticationPolicySilo01 -Account User01
```

Example 2: grant access to an authentication policy silo for filter matches

This example first uses the Get-ADComputer cmdlet to get a list of computers that match the filter specified by the Filter parameter. The output is then passed to the Grant-ADAuthenticationPolicySiloAccess to grant access to the authentication policy silo named AuthenticationPolicySilo02.

```
PS C:\>Get-ADComputer -Filter 'Name -like "newComputer*"' |  
Grant-ADAuthenticationPolicySiloAccess -Identity  
AuthenticationPolicySilo01
```

Cmdlet: Install-ADServiceAccount

Synops

Installs an Active Directory managed service account on a computer or caches a group managed service account on a computer.

Syntax

```
Install-ADServiceAccount [-Identity] <ADServiceAccount> [-  
AccountPassword  
    <SecureString>] [-AuthType {Negotiate | Basic}] [-Force]  
    [-PromptForPassword] [-Confirm] [-WhatIf]  
[<CommonParameters>]
```

Description

The Install-ADServiceAccount cmdlet installs an existing Active Directory managed service account (MSA) on the computer on which the cmdlet is run. This cmdlet verifies that the computer is eligible to host the MSA. The cmdlet also makes the required changes locally so that the MSA password can be managed without requiring any user action.

The Identity parameter specifies the Active Directory MSA to install. You can identify a MSA by its distinguished name Members (DN), GUID, security identifier (SID) or Security Accounts Manager (SAM) account name. You can also set the parameter to a MSA object variable, such as \$<localServiceaccountObject> or pass a MSA object through the pipeline to the Identity parameter. For example, you can use Get-ADServiceAccount to get a MSA object and then pass the object through the pipeline to the Install-ADServiceAccount.

The AccountPassword parameter allows you to pass a SecureString that contains the password of a standalone MSA and is ignored for group MSAs. Alternatively you can use PromptForPassword switch parameter to be prompted for the standalone MSA password. You need to enter the password of a standalone MSA if you want to install an account that you have pre-provisioned early on. This is required when you are installing a standalone MSA on a server located on a segmented network (site) with no access to writable DCs but only RODCs (e.g. perimeter network or DMZ). In this case you should create the standalone MSA, link it with the appropriate computer account and assign a well-known password that needs to be passed when installing the standalone MSA on the server on the RODC-only site with no access to writable DCs. If you pass both AccountPassword and PromptForPassword parameters the AccountPassword parameter

takes precedence.

Parameters

Parameter :**AccountPassword**

Description :The AccountPassword SecureString parameter will allow you to inline pass in the password of a standalone Managed Service Account (MSA) that you have pre-provisioned early on and is ignored for group MSAs. This is required when you are installing a standalone MSA on a server located on a segmented network (site) with no access to writable DCs but only RODCs (e.g. perimeter network or DMZ). In this case you should create the standalone MSA, link it with the appropriate computer account and assign a well-known password that needs to be passed when installing the standalone MSA on the server on the RODC-only site with no access to writable DCs. If you pass both AccountPassword and PromptForPassword parameters the AccountPassword parameter takes precedence.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Force**

Description :Forces installation of the service account.

Required	false
Position	named
Default value	

Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory account object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :PromptForPassword

Description :The PromptForPassword switch parameter will allow you to enter the password of a standalone Managed Service Account (MSA) that you have pre-provisioned early on and ignored for group MSAs. This is required when you are installing a standalone MSA on a server located on a segmented network (site) with no access to writable DCs but only RODCs (e.g. perimeter network or DMZ). In this case you should create the standalone MSA, link it with the appropriate computer account and assign a well-known password that needs to be passed when installing the standalone MSA on the server on the RODC-only site with no access to writable DCs. If you pass both AccountPassword and PromptForPassword parameters the AccountPassword parameter takes precedence.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Confirm

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false

Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A managed service account object is received by the Identity parameter.

Type : Microsoft.ActiveDirectory.Management.ADSERVICEACCOUNT

Notes

Examples

----- EXAMPLE 1 -----

Description

Install a Managed Service Account with name 'SQL-HR-svc-01' on the local computer. (If a Group Managed Service Account is used, the service account must have the PrincipalsAllowedToRetrieveManagedPassword property set.)

```
C:\PS>Install-ADServiceAccount -Identity 'SQL-HR-svc-01'
```

----- EXAMPLE 2 -----

Description

Get a Managed Service Account with name 'SQL-HR-svc-01' from the default directory and install it on the local machine. (If a Group Managed Service Account is used, the service account must have the PrincipalsAllowedToRetrieveManagedPassword property set.)

```
C:\PS>$a = Get-ADServiceAccount -Filter { Name -eq 'SQL-HR-svc-01'}
Install-ADServiceAccount $a
```

----- EXAMPLE 3 -----

Description

Installs a standalone Managed Service Account with name 'SQL-HR-svc-01' in a RODC-only site with not access to writable DCs. (If a Group Managed Service Account is used, the service account must have the PrincipalsAllowedToRetrieveManagedPassword property set.)

```
C:\PS>Install-ADServiceAccount -Identity 'SQL-HR-svc-01' -  
PromptForPassword
```

```
Please enter the current password for 'CN=SQL-HR-svc-  
01,CN=Managed Service Accounts,DC=contoso,DC=com'  
Password: ******
```

----- EXAMPLE 4 -----

Description

Installs a standalone Managed Service Account with name 'SQL-HR-svc-01' in a RODC-only site with not access to writable DCs passing the account password as a secure string. (If a Group Managed Service Account is used, the service account must have the PrincipalsAllowedToRetrieveManagedPassword property set.)

```
C:\PS>Install-ADServiceAccount -Identity 'SQL-HR-svc-01' -  
AccountPassword (ConvertTo-SecureString -AsPlainText  
"p@ssw0rd" -Force)
```

Cmdlet: Move-ADDirectoryServer

Synops

Moves a directory server in Active Directory to a new site.

Syntax

```
Move-ADDirectoryServer [-Identity] <ADDirectoryServer> [-Site]
    <ADReplicationSite> [-AuthType {Negotiate | Basic}] [-
Credential
    <PSCredential>] [-Server <String>] [-Confirm] [-WhatIf]
    [<CommonParameters>]
```

Description

The Move-ADDirectoryServer cmdlet moves a directory server in Active Directory to a new site within the same domain.

The Identity parameter specifies the directory server to move. You can specify a directory server object by one of the following values:

Name of the server object (name)

Distinguished Name (DN) of the NTDS Settings object

Distinguished Name (DN) of the server object that represents the directory server

GUID (objectGUID) of server object under the configuration partition

GUID (objectGUID) of NTDS settings object under the configuration partition

You can also set the Identity parameter to a directory server object variable such as \$<localDirectoryServerObject>, or you can pass an object through the pipeline to the Identity parameter. For example, you can use the Get-ADDomainController to get a directory server object and then pass that object through the pipeline to the Move-ADDirectoryServer cmdlet.

The Site parameter specifies the new site for the directory server. You can identify a site by its distinguished name (DN) or GUID.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory server object by providing one of the following values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named

Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Site**

Description :Specifies the new site for the directory server. You can identify the site by one of the following property values. Note: The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	2
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A directory server object is received by the Identity parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADDirectoryServer

Notes

Examples

----- EXAMPLE 1 -----

Description

Move the domain controller "FABRIKAM-DC2" to the site "Branch-Office-Site".

```
C:\PS>Move-ADDirectoryServer -Identity "FABRIKAM-DC2" -Site  
"Branch-Office-Site"
```

----- EXAMPLE 2 -----

Description

Move all Read Only Domain Controllers to the site "RODC-Site-Name".

```
C:\PS>Get-ADDomainController -Filter {IsReadOnly -eq $true} |  
Move-ADDirectoryServer -site "RODC-Site-Name"
```

Cmdlet: Move-ADDirectoryServerOperationMasterRole

Synops

Moves operation master roles to an Active Directory directory server.

Syntax

```
Move-ADDirectoryServerOperationMasterRole [-Identity]
<ADDirectoryServer>
    [-OperationMasterRole] {PDCEmulator | RIDMaster |
InfrastructureMaster |
    SchemaMaster | DomainNamingMaster} [-AuthType {Negotiate |
Basic}]
    [-Credential <PSCredential>] [-Force] [-PassThru] [-Server
<String>]
    [-Confirm] [-WhatIf] [<CommonParameters>]
```

Description

The Move-ADDirectoryServerOperationMasterRole cmdlet moves one or more operation master roles to a directory server. You can move operation master roles to a directory server in a different domain if the credentials are the same in both domains.

The Identity parameter specifies the directory server that receives the roles. You can specify a directory server object by one of the following values:

Name of the server object (name)

Distinguished Name (DN) of the NTDS Settings object

Distinguished Name (DN) of the server object that represents the directory server

GUID (objectGUID) of server object under the configuration partition

GUID (objectGUID) of NTDS settings object under the configuration partition

For AD LDS instances the syntax for the server object name is <computer-name>\$<instance-name>. The following is an example of this syntax:

asia-w7-vm4\$instance1

When you type this value in Windows PowerShell, you must use the backtick (`) as an escape character for the dollar sign (\$). Therefore, for this example, you would type the following:

asia-w7-vm4`\$instance1

You can also set the parameter to a directory server object variable, such as `$<localDirectoryServerObject>`.

The `Move-ADDirectoryServerOperationMasterRole` cmdlet provides two options for moving operation master roles:

1. Role transfer, which involves transferring roles to be moved by running the cmdlet using the `Identity` parameter to specify the current role holder and the `OperationMasterRole` parameter to specify the roles for transfer. This is the recommended option.

Operation roles include `PDCEmulator`, `RIDMaster`, `InfrastructureMaster`, `SchemaMaster`, or `DomainNamingMaster`. To specify more than one role, use a comma-separated list.

2. Role seizure, which involves seizing roles you previously attempted to transfer by running the cmdlet a second time using the same parameters as the transfer operation, and adding the `Force` parameter. The `Force` parameter must be used as a switch to indicate that seizure (instead of transfer) of operation master roles is being performed. This operation still attempts graceful transfer first, then seizes if transfer is not possible.

Unlike using `Ntdsutil.exe` to move operation master roles, the `Move-ADDirectoryServerOperationMasterRole` cmdlet can be remotely executed from any domain joined computer where the Active Directory PowerShell administration module is installed and available for use. This can make the process of moving roles simpler and easier to centrally administer as each of the two command operations required can be run remotely and do not have to be locally executed at each of the corresponding role holders involved in the movement of the roles (i.e. role transfer only allowed at the old role holder, role seizure only allowed at the new role holder).

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is

run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Force**

Description :This parameter is used for seize operations on domain controllers with the flexible single master operations (FSMO) role.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Identity**

Description :Specifies an Active Directory server object by providing one of the following values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :**OperationMasterRole**

Description :Specifies one or more operation master roles to move to the specified directory server in Active Directory Domain Services. Possible values for this parameter include:

Required	true
Position	2
Default value	

Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PassThru

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	See notes
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Confirm

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :WhatIf

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A directory server object is received by the Identity parameter.

Type : Microsoft.ActiveDirectory.Management.ADDirectoryServer

Outputs

Returns the modified directory server object when the PassThru parameter is specified.

By default, this cmdlet does not generate any output.

Type : None or Microsoft.ActiveDirectory.Management.ADDirectoryServer

Notes

Examples

----- EXAMPLE 1 -----

Description

Move the PDC Emulator role to the Domain Controller "FABRIKAM-DC1".

```
C:\PS>Move-ADDirectoryServerOperationMasterRole "FABRIKAM-DC1"
PDCemulator
```

----- EXAMPLE 2 -----

Description

Move the PDC Emulator and Schema Master roles to the Domain Controller "FABRIKAM-DC2".

```
C:\PS>Move-ADDirectoryServerOperationMasterRole -Identity
"FABRIKAM-DC2" -OperationMasterRole PDCemulator,SchemaMaster
```

----- EXAMPLE 3 -----

Description

Move the schema master FSMO owner to the AD LDS instance "instance1" on the server "Fabrikam-DC".

```
C:\PS>Move-ADDirectoryServerOperationMasterRole Fabrikam-DC`$instance1 -OperationMasterRole schemaMaster -server Fabrikam-DC:50000
```

----- EXAMPLE 4 -----

Description

Seizes the specified roles (RID master, infrastructure master, domain naming master).

```
C:\PS>Move-ADDirectoryServerOperationMasterRole -Identity FABRIKAM-DC1 -OperationMasterRole RIDMaster,InfrastructureMaster,DomainNamingMaster -Force
```

----- EXAMPLE 5 -----

Description

Transfers the flexible single master operations (FSMO) role to the specified domain controller. When using the fully qualified domain name (FQDN) to identify the domain controller, the Get-ADDomainController cmdlet must be used first as a preliminary step. There is a known issue where the Move-ADDirectoryServerOperationMasterRole cmdlet fails when an FQDN is specified directly as the value of the -Identity parameter.

```
PS C:\>$server = Get-ADDomainController -Identity "TK5-CORP-DC-10.fabrikam.com"
```

```
PS C:\>Move-ADDirectoryServerOperationMasterRole -Identity $server -OperationMasterRole SchemaMaster,DomainNamingMaster,PDCEmulator,RIDMaster,InfrastructureMaster
```

Cmdlet: Move-ADObject

Synops

Moves an Active Directory object or a container of objects to a different container or domain.

Syntax

```
Move-ADObject [-Identity] <ADObject> [-TargetPath] <String> [-AuthType  
    {Negotiate | Basic}] [-Credential <PSCredential>] [-Partition  
    <String>]  
    [-PassThru] [-Server <String>] [-TargetServer <String>] [-Confirm]  
    [-WhatIf] [<CommonParameters>]
```

Description

The Move-ADObject cmdlet moves an object or a container of objects from one container to another or from one domain to another.

The Identity parameter specifies the Active Directory object or container to move. You can identify an object or container by its distinguished name (DN) or GUID. You can also set the Identity parameter to an object variable such as \$<localObject>, or you can pass an object through the pipeline to the Identity parameter. For example, you can use the Get-ADObject cmdlet to retrieve an object and then pass the object through the pipeline to the Move-ADObject cmdlet. You can also use the Get-ADGroup, Get-ADUser, Get-ADComputer, Get-ADServiceAccount, Get-ADOrganizationalUnit and Get-ADFineGrainedPasswordPolicy cmdlets to get an object that you can pass through the pipeline to this cmdlet.

The TargetPath parameter must be specified. This parameter identifies the new location for the object or container.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Partition

Description :Specifies the distinguished name of an Active Directory partition. The distinguished name must be one of the naming contexts on the current directory server. The cmdlet searches this partition to find the object defined by the Identity parameter.

Required	false
Position	named
Default value	
Accept pipeline input?	false

Accept wildcard characters?	false
-----------------------------	-------

Parameter :PassThru

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :TargetPath

Description :Specifies the new location for the object. This location must be the path to a container or organizational unit.

Required	true
Position	2
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :TargetServer

Description :Specifies the Active Directory instance to use by providing the following value for a corresponding domain name or directory server.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

An Active Directory object is received by the Identity parameter. Derived types, such as the following are also accepted:

Microsoft.ActiveDirectory.Management.ADGroup

Microsoft.ActiveDirectory.Management.ADUser

Microsoft.ActiveDirectory.Management.ADComputer

Microsoft.ActiveDirectory.Management.ADSERVICEACCOUNT

Microsoft.ActiveDirectory.Management.ADOrganizationalUnit

Microsoft.ActiveDirectory.Management.ADFineGrainedPasswordPolicy

Type : Microsoft.ActiveDirectory.Management.AObject

Notes

Examples

----- EXAMPLE 1 -----

Description

Moves the Organizational Unit 'ManagedGroups' to a new location. The OU 'ManagedGroups' must NOT be protected from accidental deletion for the successful move.

```
C:\PS>Move-ADObject -Identity  
"OU=ManagedGroups,DC=Fabrikam,DC=Com" -TargetPath  
"OU=Managed,DC=Fabrikam,DC=Com"
```

----- EXAMPLE 2 -----

Description

Moves the object identified by the specified GUID to the new location.

```
C:\PS>Move-ADObject "8d0bcc44-c826-4dd8-af5c-2c69960fbd47" -  
TargetPath "OU=Managed,DC=Fabrikam,DC=Com"
```

----- EXAMPLE 3 -----

Description

Moves an object to a new location. Both the object and the target path are specified using GUIDs.

```
C:\PS>Move-ADObject "8d0bcc44-c826-4dd8-af5c-2c69960fbd47" -  
TargetPath "1c2ea8a8-c2b7-4a87-8190-0e8a166aee16"
```

----- EXAMPLE 4 -----

Description

Moves an object with DistinguishedName 'CN=Peter Bankov,OU=Accounting,DC=Fabrikam,DC=com' to a different domain.

```
C:\PS>Move-ADObject -Identity "CN=Peter  
Bankov,OU=Accounting,DC=Fabrikam,DC=com" -TargetPath  
"OU=Accounting,DC=Europe,DC=Fabrikam,DC=com" -TargetServer  
"server01.europe.fabrikam.com"
```

----- EXAMPLE 5 -----

Description

Moves an object to a new location within an LDS instance.

```
C:\PS>Move-ADObject -Identity "CN=AccountLeads,DC=AppNC" -  
TargetPath "OU=AccountDeptOU,DC=AppNC" -server "FABRIKAM-  
SRV1:60000"
```

Cmdlet: New-ADAuthenticationPolicy

Synops

Creates an Active Directory Domain Services authentication policy object.

Syntax

```
New-ADAuthenticationPolicy [-Name] <String> [-AuthType {Negotiate
|
    Basic}] [-ComputerAllowedToAuthenticateTo <String>]
    [-ComputerTGTLifetimeMins <Int32>] [-Credential
<PSCredential>]
    [-Description <String>] [-Enforce] [-Instance
<ADAuthenticationPolicy>]
    [-OtherAttributes <Hashtable>] [-PassThru]
    [-ProtectedFromAccidentalDeletion <Boolean>] [-Server
<String>]
    [-ServiceAllowedToAuthenticateFrom <String>]
    [-ServiceAllowedToAuthenticateTo <String>] [-
ServiceTGTLifetimeMins
    <Int32>] [-UserAllowedToAuthenticateFrom <String>]
    [-UserAllowedToAuthenticateTo <String>] [-UserTGTLifetimeMins
<Int32>]
    [-Confirm] [-WhatIf] [<CommonParameters>]
```

Description

The New-ADAuthenticationPolicy creates an authentication policy object in Active Directory® Domain Services.

Commonly used attributes of the object can be specified by the parameters of this cmdlet. To set attributes for the object that are not represented by the parameters of this cmdlet, specify the OtherAttributes parameter.

You can use the pipeline operator and the Import-Csv cmdlet to pass a list for bulk creation of objects in the directory. You can also specify a template object by using the Instance parameter to create objects from a template.

Parameters

Parameter :AuthType

Description :Specifies the authentication method to use. The acceptable values for this parameter are:

--Negotiate or 0

--Basic or 1

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**ComputerAllowedToAuthenticateTo**

Description :Specifies the security descriptor definition language (SDDL) string of the security descriptor used to determine if the computer can authenticate to this account.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**ComputerTGTLifetimeMins**

Description :Specifies the lifetime in minutes for non-renewable ticket granting tickets (TGTs) for computer accounts.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies a user account that has permission to perform the task. The default is the current user. Type a user name, such as "User01" or "Domain01\User01", or enter a PSCredential object, such as one generated by the Get-Credential cmdlet.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Description**

Description :Specifies a description for the object. This parameter sets the value of the description property for the object. The LDAP Display Name (ldapDisplayName) for this property is "description".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**Enforce**

Description :Indicates that the authentication policy is enforced.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**Instance**

Description :Specifies an instance of an ADAuthenticationPolicy object to use as a template for a new ADAuthenticationPolicy object. To get the ADAuthenticationPolicy object to use as a template, use the Get-ADAuthenticationPolicy cmdlet.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Name

Description :Specifies the name of the object. This parameter sets the Name property of the Active Directory Domain Services object. The LDAP Display Name (ldapDisplayName) of this property is "name".

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :OtherAttributes

Description :Specifies a list of object attribute values for attributes that are not represented by other parameters. You can set one or more attributes at the same time with this parameter, and if an attribute takes more than one value you can assign multiple values. To identify an attribute, specify the LDAPDisplayName (ldapDisplayName) defined for it in the Active Directory Domain Services schema.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PassThru

Description :Returns an object representing the item with which you are working. By default, this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ProtectedFromAccidentalDeletion

Description :Indicates whether to prevent the object from being deleted. When this property is set to true, you cannot delete the corresponding object without changing the

value of the property. The acceptable values for this parameter are:

--\$False or 0

--\$True or 1

Required	false
Position	named
Default value	\$true
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to which to connect, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ServiceAllowedToAuthenticateFrom

Description :Specifies an access control expression used to determine from which devices the service can authenticate.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :ServiceAllowedToAuthenticateTo

Description :Specifies the SDDL string of the security descriptor used to determine if the service can authenticate to this account.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**ServiceTGTLifetimeMins**

Description :Specifies the lifetime in minutes for non-renewable TGTs for service accounts.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**UserAllowedToAuthenticateFrom**

Description :Specifies an access control expression used to determine from which devices the users can authenticate.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**UserAllowedToAuthenticateTo**

Description :Specifies the SDDL string of the security descriptor used to determine if the users can authenticate to this account.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**UserTGTLifetimeMins**

Description :Specifies the lifetime in minutes for non-renewable TGTs for user accounts.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Examples

Example 1: Create an authentication policy with a user TGT lifetime

This command creates an authentication policy object named AuthenticationPolicy01 and sets the TGT lifetime for a user account to 60 minutes. Because the Enforce parameter is not specified, the authentication policy created is in audit mode.

```
PS C:\> New-ADAuthenticationPolicy AuthenticationPolicy01 -
UserTGTLifetimeMins 60
```

Example 2: Create an enforced authentication policy

This command creates an authentication policy named AuthenticationPolicy02 and

enforces it by specifying the Enforce parameter.

```
PS C:\> New-ADAuthenticationPolicy AuthenticationPolicy02 -  
Enforce
```

Example 3:

This command creates an authentication policy named TestAuthenticationPolicy. The UserAllowedToAuthenticationFrom parameter specifies the devices from which users are allowed to authenticate by an SDDL string in the file named someFile.txt

```
PS C:\> New-ADAuthenticationPolicy testAuthenticationPolicy -  
UserAllowedToAuthenticateFrom (Get-Acl .\someFile.txt).sddl
```

Cmdlet: New-ADAuthenticationPolicySilo

Synops

Creates an Active Directory Domain Services authentication policy silo object.

Syntax

```
New-ADAuthenticationPolicySilo [-Name] <String> [-AuthType
{Negotiate |
    Basic}] [-ComputerAuthenticationPolicy
<ADAuthenticationPolicy>]
    [-Credential <PSCredential>] [-Description <String>] [-
Enforce] [-Instance
    <ADAuthenticationPolicySilo>] [-OtherAttributes <Hashtable>]
[-PassThru]
    [-ProtectedFromAccidentalDeletion <Boolean>] [-Server
<String>]
    [-ServiceAuthenticationPolicy <ADAuthenticationPolicy>]
    [-UserAuthenticationPolicy <ADAuthenticationPolicy>] [-
Confirm] [-WhatIf]
    [<CommonParameters>]
```

Description

The New-ADAuthenticationPolicySilo cmdlet creates an authentication policy silo object in Active Directory® Domain Services.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. The acceptable values for this parameter are:

--Negotiate or 0

--Basic or 1

Required	false
Position	named

Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**ComputerAuthenticationPolicy**

Description :Specifies the authentication policy that applies to computer accounts.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies a user account that has permission to perform the task. The default is the current user. Type a user name, such as "User01" or "Domain01\User01", or enter a PSCredential object, such as one generated by the Get-Credential cmdlet.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Description**

Description :Specifies a description for the object. This parameter sets the value of the description property for the object. The LDAP Display Name (ldapDisplayName) for this property is "description".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**Enforce**

Description :Indicates that the authentication policy silo is enforced.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**Instance**

Description :Specifies an instance of an ADAuthenticationPolicySilo object to use as a template for a new ADAuthenticationPolicySilo object. To get the ADAuthenticationPolicySilo object to use as a template, use the Get-ADAuthenticationPolicySilo cmdlet.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Name**

Description :Specifies the name of the object. This parameter sets the Name property of the Active Directory Domain Services object. The LDAP Display Name (ldapDisplayName) of this property is "name".

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**OtherAttributes**

Description :Specifies a list of object attribute values for attributes that are not represented by other parameters. You can set one or more attributes at the same time with this parameter, and if an attribute takes more than one value you can assign multiple values. To identify an attribute, specify the LDAPDisplayName (ldapDisplayName) defined for it in the Active Directory Domain Services schema.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**PassThru**

Description :Returns an object representing the item with which you are working. By default, this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**ProtectedFromAccidentalDeletion**

Description :Indicates whether to prevent the object from being deleted. When this property is set to true, you cannot delete the corresponding object without changing the value of the property. The acceptable values for this parameter are:

--\$False or 0

--\$True or 1

Required	false
Position	named
Default value	\$true
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to which to connect, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
----------	-------

Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**ServiceAuthenticationPolicy**

Description :Specifies the authentication policy that applies to managed service accounts.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**UserAuthenticationPolicy**

Description :Specifies the authentication policy that applies to user accounts.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
----------	-------

Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Examples

Example 1: Create an authentication policy silo and enforce it

This command creates an authentication policy silo object and enforces it.

```
PS C:\>New-ADAuthenticationPolicySilo -Name  
AuthenticationPolicySilo01 -Enforce
```

Example 2: Create an authentication policy silo without enforcement

This command creates an authentication policy silo object but does not enforce it.

```
PS C:\>New-ADAuthenticationPolicySilo -Name  
AuthenticationPolicySilo02
```

Cmdlet: New-ADCentralAccessPolicy

Synops

Creates a new central access policy in Active Directory containing a set of central access rules.

Syntax

```
New-ADCentralAccessPolicy [-Name] <String> [-AuthType {Negotiate  
| Basic}]  
    [-Credential <PSCredential>] [-Description <String>] [-  
Instance  
    <ADCentralAccessPolicy>] [-PassThru] [-  
ProtectedFromAccidentalDeletion  
    <Boolean>] [-Server <String>] [-Confirm] [-WhatIf]  
[<CommonParameters>]
```

Description

The New-ADCentralAccessPolicy cmdlet creates a new central access policy in Active Directory. A central access policy in Active Directory contains a set of central access rules.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Manage ment.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The

default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Description**

Description :Specifies a description of the object. This parameter sets the value of the Description property for the object. The LDAP Display Name (ldapDisplayName) for this property is "description".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**Instance**

Description :Specifies an instance of an Active Directory object to use as a template for a new Active Directory object.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Name**

Description :Specifies the name of the object. This parameter sets the Name property of the Active Directory object. The LDAP Display Name (ldapDisplayName) of this property is "name".

Required	true
----------	------

Position	2
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :PassThru

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ProtectedFromAccidentalDeletion

Description :Specifies whether to prevent the object from being deleted. When this property is set to true, you cannot delete the corresponding object without changing the value of the property. Possible values for this parameter include:

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

An Active Directory object that is a template for the new object is received by the Instance parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADCentralAccessPolicy

Outputs

Returns the new central access policy object when the PassThru parameter is specified. By default, this cmdlet does not generate any output.

Type : None or Microsoft.ActiveDirectory.Management.ADCentralAccessPolicy

Notes

Examples

----- EXAMPLE 1 -----

Description

Create a new central access rule named "Finance Documents Rule" with a new resource condition. The resource condition scopes the resources to ones containing the value 'Finance' in their 'Department' resource property.

```
C:\PS>$departmentResourceProperty = Get-ADResourceProperty
Department
$resourceCondition = "(@RESOURCE." +
$departmentResourceProperty.Name + " Contains {`"Finance`"})"
New-ADCentralAccessRule "Finance Documents Rule" -
ResourceCondition $resourceCondition
```

----- EXAMPLE 2 -----

Description

Create a new central access rule named "Finance Documents Rule" with a new resource condition and new permissions.

The new rule specifies that documents should only be read by members of the Finance department. Members of the Finance department should only be able to access documents in their own country. Only Finance Administrators should have write access. The rule allows an exception for members of the FinanceException group. This group will have read access.

Targeting:

Resource.Department Contains Finance

Access rules:

Allow Read User.Country=Resource.Country AND User.department =
Resource.Department

Allow Full control User.MemberOf(FinanceAdmin)

Allow Read User.Country=Resource.Country AND User.department =
Resource.Department
Allow Read User.MemberOf(FinanceException)

```

C:\PS>$countryClaimType = Get-ADClaimType Country;
$departmentClaimType = Get-ADClaimType Department;
$countryResourceProperty = Get-ADResourceProperty Country;
$departmentResourceProperty = Get-ADResourceProperty
Department;
$financeException = Get-ADGroup FinanceException;
$financeAdmin = Get-ADGroup FinanceAdmin;

$resourceCondition = "(@RESOURCE." +
$departmentResourceProperty.Name + " Contains {"Finance`"})"

$currentAcl =
"O:SYG:SYD:AR(A;;FA;;;OW)(A;;FA;;;BA)(A;;0x1200a9;;; " +
$financeException.SID.Value + ")(A;;0x1301bf;;; " +
$financeAdmin.SID.Value +
")(A;;FA;;;SY)(XA;;0x1200a9;;;AU;(@USER." +
$countryClaimType.Name + " Any_of @RESOURCE." +
$countryResourceProperty.Name + ") && (@USER." +
$departmentClaimType.Name + " Any_of @RESOURCE." +
$departmentResourceProperty.Name + ")))";

Set-ADCentralAccessRule "Finance Documents Rule" -
ResourceCondition $resourceCondition -CurrentAcl $currentAcl

```

----- EXAMPLE 3 -----

Description

Create a new central access policy named "Human Resources Policy" using the property values from 'Finance Policy', and set the description to "For the Human Resources Department."

```

C:\PS>Get-ADCentralAccessPolicy "Finance Policy" | New-
ADCentralAccessPolicy "Human Resources Policy" -Description
"For the Human Resources Department."

```

Cmdlet: New-ADCentralAccessRule

Synops

Creates a new central access rule in Active Directory.

Syntax

```
New-ADCentralAccessRule [-Name] <String> [-AuthType {Negotiate |
Basic}]
    [-Credential <PSCredential>] [-CurrentAcl <String>] [-
Description
    <String>] [-Instance <ADCentralAccessRule>] [-PassThru] [-
ProposedAcl
    <String>] [-ProtectedFromAccidentalDeletion <Boolean>] [-
ResourceCondition
    <String>] [-Server <String>] [-Confirm] [-WhatIf]
[<CommonParameters>]
```

Description

The New-ADCentralAccessRule cmdlet creates a new central access rule in Active Directory.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Manage ment.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The

default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :CurrentAcl

Description :This parameter specifies the currently effective access control list (ACL) of the rule.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :Description

Description :Specifies a description of the object. This parameter sets the value of the Description property for the object. The LDAP Display Name (ldapDisplayName) for this property is "description".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :Instance

Description :Specifies an instance of an Active Directory object to use as a template for a new Active Directory object.

Required	false
Position	named

Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Name

Description :Specifies the name of the object. This parameter sets the Name property of the Active Directory object. The LDAP Display Name (ldapDisplayName) of this property is "name".

Required	true
Position	2
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :PassThru

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ProposedAcl

Description :This parameter specifies the proposed accessed control list (ACL) of the rule.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :ProtectedFromAccidentalDeletion

Description :Specifies whether to prevent the object from being deleted. When this

property is set to true, you cannot delete the corresponding object without changing the value of the property. Possible values for this parameter include:

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**ResourceCondition**

Description :This parameter specifies the resource condition of the rule.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false

Accept wildcard characters?	false
-----------------------------	-------

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

An Active Directory object that is a template for the new object is received by the Instance parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADCentralAccessRule

Outputs

Returns the new central access rule object when the PassThru parameter is specified. By default, this cmdlet does not generate any output.

Type : None or Microsoft.ActiveDirectory.Management.ADCentralAccessRule

Notes

Cmdlet: New-ADClaimTransformPolicy

Synops

Creates a new claim transformation policy object in Active Directory.

Syntax

```
New-ADClaimTransformPolicy [-Name] <String> [-AuthType {Negotiate  
|  
    Basic}] [-Credential <PSCredential>] [-Description <String>]  
[-PassThru]  
    [-ProtectedFromAccidentalDeletion <Boolean>] [-Server  
<String>] -AllowAll  
    [-Confirm] [-WhatIf] [<CommonParameters>]
```

```
New-ADClaimTransformPolicy [-Name] <String> [-AuthType {Negotiate  
|  
    Basic}] [-Credential <PSCredential>] [-Description <String>]  
[-PassThru]  
    [-ProtectedFromAccidentalDeletion <Boolean>] [-Server  
<String>]  
    -AllowAllExcept <ADClaimType[]> [-Confirm] [-WhatIf]  
[<CommonParameters>]
```

```
New-ADClaimTransformPolicy [-Name] <String> [-AuthType {Negotiate  
|  
    Basic}] [-Credential <PSCredential>] [-Description <String>]  
[-PassThru]  
    [-ProtectedFromAccidentalDeletion <Boolean>] [-Server  
<String>] -DenyAll  
    [-Confirm] [-WhatIf] [<CommonParameters>]
```

```
New-ADClaimTransformPolicy [-Name] <String> [-AuthType {Negotiate  
|  
    Basic}] [-Credential <PSCredential>] [-Description <String>]  
[-PassThru]  
    [-ProtectedFromAccidentalDeletion <Boolean>] [-Server  
<String>]
```

```
-DenyAllExcept <ADClaimType[]> [-Confirm] [-WhatIf]
[<CommonParameters>]
```

```
New-ADClaimTransformPolicy [-Name] <String> [-AuthType {Negotiate
|
    Basic}] [-Credential <PSCredential>] [-Description <String>]
[-Instance
    <ADClaimTransformPolicy>] [-PassThru] [-
ProtectedFromAccidentalDeletion
    <Boolean>] [-Server <String>] -Rule <String> [-Confirm] [-
WhatIf]
    [<CommonParameters>]
```

Description

The New-ADClaimTransformPolicy cmdlet creates a new claims transformation policy object in Active Directory. A claims transformation policy object contains a set of rules authored in the transformation rule language. After creating a policy object, you can link it with a forest trust to apply the claims transformation to the trust.

Parameters

Parameter :**AllowAll**

Description :When this parameter is specified, the policy sets a claims transformation rule that would allow all claims to be sent or received.

Required	true
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**AllowAllExcept**

Description :When this parameter is specified, the policy sets a claims transformation rule that would allow all claims to be sent or received except for the specified claim types.

Required	true
Position	named

Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies a user account that has permission to perform this action. The default is the current user.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**DenyAll**

Description :When this parameter is specified, the policy sets a claims transformation rule that would deny all claims to be sent or received.

Required	true
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**DenyAllExcept**

Description :When this parameter is specified, the policy sets a claims transformation rule

that would deny all claims to be sent or received except for the specified claim types.

Required	true
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**Description**

Description :Specifies a description of the object. This parameter sets the value of the Description property for the object. The LDAP Display Name (ldapDisplayName) for this property is "description".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Instance**

Description :Specifies an instance of an Active Directory object to use as a template for a new claims transformation policy object.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Name**

Description :Specifies the name of the object. This parameter sets the Name property of the Active Directory object. The LDAP Display Name (ldapDisplayName) of this property is "name".

Required	true
Position	1
Default value	

Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PassThru

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ProtectedFromAccidentalDeletion

Description :Specifies whether to prevent the object from being deleted. When this property is set to true, you cannot delete the corresponding object without changing the value of the property. Possible values for this parameter include:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Rule

Description :Represents the claims transformation rule. To specify the rule, you can either (1) type the rule in a text file, and then pass the file to the cmdlet (recommended), or (2) type the rule inline.

Required	true
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by

providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A claims transformation policy object that is a template for the new claims transformation policy object is received by the Instance parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADClaimTransformPolicy

Notes

Examples

----- EXAMPLE 1 -----

Description

Create a new claims transformation policy named 'DenyAllPolicy' that denies all claims, both those that are sent as well as those that are received.

```
C:\PS>New-ADClaimTransformPolicy DenyAllPolicy -DenyAll
```

----- EXAMPLE 2 -----

Description

Create a new claims transformation policy named 'AllowAllExceptCompanyAndDepartmentPolicy' that allows all claims to be sent or received except for the claims 'Company' and 'Department'.

```
C:\PS>New-ADClaimTransformPolicy  
AllowAllExceptCompanyAndDepartmentPolicy -AllowAllExcept  
Company, Department
```

----- EXAMPLE 3 -----

Description

Create a new claims transformation policy named 'HumanResourcesToHrPolicy' that transforms the value 'Human Resources' to 'HR' in the claim 'Department'.

```
C:\PS>New-ADClaimTransformPolicy HumanResourcesToHrPolicy -  
Rule 'C1:[Type=="ad://ext/Department:88ceb0fe88a125db",  
Value=="Human Resources", ValueType=="string"] =>  
issue(Type=C1.Type, Value="HR", ValueType=C1.ValueType);'
```

----- EXAMPLE 4 -----

Description

Create a new claims transformation policy named 'MyRule' with the rule specified in C:\rule.txt.

```
C:\PS>$rule = Get-Content C:\rule.txt;  
New-ADClaimTransformPolicy MyRule -Rule $rule
```


Cmdlet: New-ADClaimType

Synops

Creates a new claim type in Active Directory.

Syntax

```
New-ADClaimType [-DisplayName] <String> [-AppliesToClasses
<String[]>]
    [-AuthType {Negotiate | Basic}] [-Credential <PSCredential>]
[-Description
    <String>] [-Enabled <Boolean>] [-ID <String>] [-Instance
<ADClaimType>]
    [-IsSingleValued <Boolean>] [-OtherAttributes <Hashtable>] [-
PassThru]
    [-ProtectedFromAccidentalDeletion <Boolean>] [-RestrictValues
<Boolean>]
    [-Server <String>] [-SuggestedValues
<ADSuggestedValueEntry[]>]
    -SourceAttribute <String> [-Confirm] [-WhatIf]
[<CommonParameters>]
```

```
New-ADClaimType [-DisplayName] <String> [-AppliesToClasses
<String[]>]
    [-AuthType {Negotiate | Basic}] [-Credential <PSCredential>]
[-Description
    <String>] [-Enabled <Boolean>] [-ID <String>] [-Instance
<ADClaimType>]
    [-IsSingleValued <Boolean>] [-OtherAttributes <Hashtable>] [-
PassThru]
    [-ProtectedFromAccidentalDeletion <Boolean>] [-RestrictValues
<Boolean>]
    [-Server <String>] -SourceOID <String> [-Confirm] [-WhatIf]
[<CommonParameters>]
```

```
New-ADClaimType [-DisplayName] <String> [-AppliesToClasses
<String[]>]
    [-AuthType {Negotiate | Basic}] [-Credential <PSCredential>]
[-Description
```

```

    <String>] [-Enabled <Boolean>] [-ID <String>] [-Instance
<ADClaimType>]
    [-IsSingleValued <Boolean>] [-OtherAttributes <Hashtable>] [-
PassThru]
    [-ProtectedFromAccidentalDeletion <Boolean>] [-RestrictValues
<Boolean>]
    [-Server <String>] [-SuggestedValues
<ADSuggestedValueEntry[]>]
    -SourceTransformPolicy -ValueType {Invalid | Int64 | UInt64 |
String |
    FQBN | SID | Boolean | OctetString} [-Confirm] [-WhatIf]
    [<CommonParameters>]

```

Description

The New-ADClaimType cmdlet creates a new claim type in Active Directory.

Parameters

Parameter :**AppliesToClasses**

Description :This parameter is used to specify the security principal classes to which this claim applies. Possible values for this parameter include the following (or any Active Directory type that derives from these base types):

Required	false
Position	named
Default value	Depending on SourceAttribute / SourceOID, the value is set to User / Computer respectively
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named

Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Description

Description :Specifies a description of the object. This parameter sets the value of the Description property for the object. The LDAP Display Name (ldapDisplayName) for this property is "description".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :DisplayName

Description :Specifies the display name of the claim type, which must be unique. The display name of a claim type can be used as an identity in other Active Directory cmdlets. For example, if the display name of a claim type is "Employee Type", then you can use 'Get-ADClaimType -Identity "Employee Type"' to retrieve the claim type.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByPropertyName)

Accept wildcard characters?	false
-----------------------------	-------

Parameter :**Enabled**

Description :Specifies if the claim type is enabled.

Required	false
Position	named
Default value	True
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**ID**

Description :Specifies the claim type ID. This is an optional parameter. By default, New-ADClaimType generates the ID automatically.

Required	false
Position	named
Default value	Auto-generated
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**Instance**

Description :Specifies an instance of an claim type object to use as a template for a new claim type object.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**IsSingleValued**

Description :Specifies whether the claim type is single valued or multi-valued.

Required	false
Position	named
Default value	True

Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :OtherAttributes

Description :Specifies object attribute values for attributes that are not represented by cmdlet parameters. You can set one or more parameters at the same time with this parameter. If an attribute takes more than one value, you can assign multiple values. To identify an attribute, specify the LDAPDisplayName (ldapDisplayName) defined for it in the Active Directory schema.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PassThru

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ProtectedFromAccidentalDeletion

Description :Specifies whether to prevent the object from being deleted. When this property is set to true, you cannot delete the corresponding object without changing the value of the property. Possible values for this parameter include:

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**RestrictValues**

Description :This parameter is used to specify whether the claim type may have values outside of the SuggestedValues. If this is set to true, then the claim should only have values specified in the SuggestedValues.

Required	false
Position	named
Default value	True
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**SourceAttribute**

Description :Specifies an Active Directory attribute from which this claim type is based, and from which the claim value is obtained. The input must be the distinguished name (DN), Name, or GUID of the attribute definition in the schema.

Required	true
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**SourceOID**

Description :Can be used to configure a certificate-based claim type source. For example, use this parameter to create certificate-based claim types when you want to use smartcard logon claims for authorization decisions. The SourceOID parameter uses

the string representation of an object identifier (OID) from the issuance policy found in the certificate and on the certificate template when using Active Directory Certificate Services. An example of an OID is "1.3.6.1.4.1.311.47.2.5".

Required	true
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**SourceTransformPolicy**

Description :Indicates that the claim type is sourced from the claims transformation policy engine.

Required	true
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**SuggestedValues**

Description :Specifies one or more suggested values for the claim type. An application may choose to present this list of suggested values for the user to choose from. When the RestrictValues switch is set (to a value of True), the application should limit the user to selecting values from this list only.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**ValueType**

Description :Specifies the value type for this claim type. Below is a list of the valid value types:

- Int64

- UInt64

- String

- FQBN

- SID

- Boolean

- OctetString

Required	true
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named

Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Notes

Examples

----- EXAMPLE 1 -----

Description

Create a new user claim type with display name 'Title' that is sourced from the AD attribute 'title'.

```
C:\PS>New-ADClaimType Title -SourceAttribute title
```

----- EXAMPLE 2 -----

Description

Create a new user claim type with display name 'Employee Type' that is sourced from the AD attribute 'employeeType'. The suggested values are set to 'FTE', 'Intern', and 'Contractor'. Applications using this claim type would allow their users to specify one of the suggested values as this claim type's value.

```
C:\PS>$fullTime = New-Object
Microsoft.ActiveDirectory.Management.ADSuggestedValueEntry("FT
E", "Full-Time", "Full-time employee");
$intern = New-Object
Microsoft.ActiveDirectory.Management.ADSuggestedValueEntry("In
tern", "Intern", "Student employee");
$contractor = New-Object
Microsoft.ActiveDirectory.Management.ADSuggestedValueEntry("Co
ntractor", "Contractor", "Contract employee");
New-ADClaimType "Employee Type" -SourceAttribute employeeType
-SuggestedValues $fullTime,$intern,$contractor
```

----- EXAMPLE 3 -----

Description

Create a new device claim type with display name 'Bitlocker Enabled' with the source OID '1.3.6.1.4.1.311.67.1.1'. The claim type set to disabled.

```
C:\PS>New-ADClaimType "Bitlocker Enabled" -SourceOID  
"1.3.6.1.4.1.311.67.1.1" -Enabled $FALSE
```

----- EXAMPLE 4 -----

Description

Create a new user claim type with display name 'Title' that is sourced from the AD attribute 'title' and ID set to 'ad://ext/title'.

The ID should only be set manually in a multi-forest environment where the same claim type needs to work across forests. By default, New-ADClaimType generates the ID automatically. For claim types to be considered identical across forests, their ID must be the same.

```
PS C:\>New-ADClaimType Title -SourceAttribute title -ID  
"ad://ext/title"
```

----- EXAMPLE 5 -----

Create a new claim type with display name 'SourceForest' that is sourced from the claims transformation policy engine.

```
PS C:\>New-ADClaimType SourceForest -SourceTransformPolicy -  
ValueType String
```

Cmdlet: New-ADComputer

Synops

Creates a new Active Directory computer.

Syntax

```
New-ADComputer [-Name] <String> [-AccountExpirationDate
<DateTime>]
    [-AccountNotDelegated <Boolean>] [-AccountPassword
<SecureString>]
    [-AllowReversiblePasswordEncryption <Boolean>] [-
AuthenticationPolicy
    <ADAuthenticationPolicy>] [-AuthenticationPolicySilo
    <ADAuthenticationPolicySilo>] [-AuthType {Negotiate | Basic}]

    [-CannotChangePassword <Boolean>] [-Certificates
<X509Certificate[]>]
    [-ChangePasswordAtLogon <Boolean>] [-
CompoundIdentitySupported <Boolean>]
    [-Credential <PSCredential>] [-Description <String>] [-
DisplayName
    <String>] [-DNSHostName <String>] [-Enabled <Boolean>] [-
HomePage
    <String>] [-Instance <ADComputer>] [-KerberosEncryptionType
{None | DES |
    RC4 | AES128 | AES256}] [-Location <String>] [-ManagedBy
<ADPrincipal>]
    [-OperatingSystem <String>] [-OperatingSystemHotfix <String>]

    [-OperatingSystemServicePack <String>] [-
OperatingSystemVersion <String>]
    [-OtherAttributes <Hashtable>] [-PassThru] [-
PasswordNeverExpires
    <Boolean>] [-PasswordNotRequired <Boolean>] [-Path <String>]
    [-PrincipalsAllowedToDelegateToAccount <ADPrincipal[]>] [-
SAMAccountName
    <String>] [-Server <String>] [-ServicePrincipalNames
<String[]>]
    [-TrustedForDelegation <Boolean>] [-UserPrincipalName
<String>] [-Confirm]
```

[-WhatIf] [<CommonParameters>]

Description

The New-ADComputer cmdlet creates a new Active Directory computer object. This cmdlet does not join a computer to a domain. You can set commonly used computer property values by using the cmdlet parameters. Property values that are not associated with cmdlet parameters can be modified by using the OtherAttributes parameter.

You can use this cmdlet to provision a computer account before the computer is added to the domain. These pre-created computer objects can be used with offline domain join, unsecure domain Join and RODC domain join scenarios.

The Path parameter specifies the container or organizational unit (OU) for the new computer. When you do not specify the Path parameter, the cmdlet creates a computer account in the default container for computer objects in the domain.

The following methods explain different ways to create an object by using this cmdlet.

Method 1: Use the New-ADComputer cmdlet, specify the required parameters, and set any additional property values by using the cmdlet parameters.

Method 2: Use a template to create the new object. To do this, create a new computer object or retrieve a copy of an existing computer object and set the Instance parameter to this object. The object provided to the Instance parameter is used as a template for the new object. You can override property values from the template by setting cmdlet parameters. For examples and more information, see the Instance parameter description for this cmdlet.

Method 3: Use the Import-CSV cmdlet with the Add-ADComputer cmdlet to create multiple Active Directory computer objects. To do this, use the Import-CSV cmdlet to create the custom objects from a comma-separated value (CSV) file that contains a list of object properties. Then pass these objects through the pipeline to the New-ADComputer cmdlet to create the computer objects.

Parameters

Parameter :**AccountExpirationDate**

Description :Specifies the expiration date for an account. When you set this parameter to 0, the account never expires. This parameter sets the AccountExpirationDate property of an account object. The LDAP Display name (ldapDisplayName) for this property is accountExpires.

Required	false
Position	named

Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :AccountNotDelegated

Description :Specifies whether the security context of the user is delegated to a service. When this parameter is set to true, the security context of the account is not delegated to a service even when the service account is set as trusted for Kerberos delegation. This parameter sets the AccountNotDelegated property for an Active Directory account. This parameter also sets the ADS_UF_NOT_DELEGATED flag of the Active Directory User Account Control (UAC) attribute. Possible values for this parameter include

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :AccountPassword

Description :Specifies a new password value for an account. This value is stored as an encrypted string.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :AllowReversiblePasswordEncryption

Description :Specifies whether reversible password encryption is allowed for the account. This parameter sets the AllowReversiblePasswordEncryption property of the account. This parameter also sets the ADS_UF_ENCRYPTED_TEXT_PASSWORD_ALLOWED flag of the Active Directory User Account Control (UAC) attribute. Possible values for this parameter include:

Required	false
Position	named
Default value	

Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**AuthenticationPolicy**

Description :

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**AuthenticationPolicySilo**

Description :

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**CannotChangePassword**

Description :Specifies whether the account password can be changed. This parameter sets the CannotChangePassword property of an account. Possible values for this parameter include:

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :Certificates

Description :Modifies the DER-encoded X.509v3 certificates of the account. These certificates include the public key certificates issued to this account by the Microsoft Certificate Service. This parameter sets the Certificates property of the account object. The LDAP Display Name (ldapDisplayName) for this property is "userCertificate".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :ChangePasswordAtLogon

Description :Specifies whether a password must be changed during the next logon attempt. Possible values for this parameter include:

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :CompoundIdentitySupported

Description :Specifies whether an account supports Kerberos service tickets which includes the authorization data for the user's device. This value sets the compound identity supported flag of the Active Directory msDS-SupportedEncryptionTypes attribute. Possible values for this parameter are:

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)

Accept wildcard characters?	false
-----------------------------	-------

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :DNSHostName

Description :Specifies the fully qualified domain name (FQDN) of the computer. This parameter sets the DNSHostName property for a computer object. The LDAP Display Name for this property is "DNSHostName".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :Description

Description :Specifies a description of the object. This parameter sets the value of the Description property for the object. The LDAP Display Name (ldapDisplayName) for this property is "description".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :DisplayName

Description :Specifies the display name of the object. This parameter sets the DisplayName property of the object. The LDAP Display Name (ldapDisplayName) for this property is "displayName".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**Enabled**

Description :Specifies if an account is enabled. An enabled account requires a password. This parameter sets the Enabled property for an account object. This parameter also sets the ADS_UF_ACCOUNTDISABLE flag of the Active Directory User Account Control (UAC) attribute. Possible values for this parameter include:

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**HomePage**

Description :Specifies the URL of the home page of the object. This parameter sets the homePage property of an Active Directory object. The LDAP Display Name (ldapDisplayName) for this property is "wWWHomePage".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**Instance**

Description :Specifies an instance of a computer object to use as a template for a new computer object.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :KerberosEncryptionType

Description :Specifies whether an account supports Kerberos encryption types which are used during creation of service tickets. This value sets the encryption types supported flags of the Active Directory msDS-SupportedEncryptionTypes attribute. Possible values for this parameter are:

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :Location

Description :Specifies the location of the computer, such as an office number. This parameter sets the Location property of a computer. The LDAP display name (ldapDisplayName) of this property is "location".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :ManagedBy

Description :Specifies the user or group that manages the object by providing one of the following property values. Note: The identifier in parentheses is the LDAP display name for the property.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)

Accept wildcard characters?	false
-----------------------------	-------

Parameter :Name

Description :Specifies the name of the object. This parameter sets the Name property of the Active Directory object. The LDAP Display Name (ldapDisplayName) of this property is "name".

Required	true
Position	2
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :OperatingSystem

Description :Specifies an operating system name. This parameter sets the OperatingSystem property of the computer object. The LDAP Display Name (ldapDisplayName) for this property is "operatingSystem".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :OperatingSystemHotfix

Description :Specifies an operating system hotfix name. This parameter sets the operatingSystemHotfix property of the computer object. The LDAP display name for this property is "operatingSystemHotfix".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :OperatingSystemServicePack

Description :Specifies the name of an operating system service pack. This parameter

sets the OperatingSystemServicePack property of the computer object. The LDAP display name (ldapDisplayName) for this property is "operatingSystemServicePack".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :OperatingSystemVersion

Description :Specifies an operating system version. This parameter sets the OperatingSystemVersion property of the computer object. The LDAP display name (ldapDisplayName) for this property is "operatingSystemVersion".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :OtherAttributes

Description :Specifies object attribute values for attributes that are not represented by cmdlet parameters. You can set one or more parameters at the same time with this parameter. If an attribute takes more than one value, you can assign multiple values. To identify an attribute, specify the LDAPDisplayName (ldapDisplayName) defined for it in the Active Directory schema.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PassThru

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PasswordNeverExpires

Description :Specifies whether the password of an account can expire. This parameter sets the PasswordNeverExpires property of an account object. This parameter also sets the ADS_UF_DONT_EXPIRE_PASSWD flag of the Active Directory User Account Control attribute. Possible values for this parameter include:

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :PasswordNotRequired

Description :Specifies whether the account requires a password. This parameter sets the PasswordNotRequired property of an account, such as a user or computer account. This parameter also sets the ADS_UF_PASSWD_NOTREQD flag of the Active Directory User Account Control attribute. Possible values for this parameter are:

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :Path

Description :Specifies the X.500 path of the Organizational Unit (OU) or container where the new object is created.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)

Accept wildcard characters?	false
-----------------------------	-------

Parameter :PrincipalsAllowedToDelegateToAccount

Description :Specifies the accounts which can act on the behalf of users to services running as this computer account. This parameter sets the msDS-AllowedToActOnBehalfOfOtherIdentity attribute of a computer account object.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :SAMAccountName

Description :Specifies the Security Account Manager (SAM) account name of the user, group, computer, or service account. The maximum length of the description is 256 characters. To be compatible with older operating systems, create a SAM account name that is 15 characters or less. This parameter sets the SAMAccountName for an account object. The LDAP display name (ldapDisplayName) for this property is "sAMAccountName".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ServicePrincipalNames

Description :Specifies the service principal names for the account. This parameter sets the ServicePrincipalNames property of the account. The LDAP display name (ldapDisplayName) for this property is servicePrincipalName. This parameter uses the following syntax to add remove, replace or clear service principal name values.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :TrustedForDelegation

Description :Specifies whether an account is trusted for Kerberos delegation. A service that runs under an account that is trusted for Kerberos delegation can assume the identity of a client requesting the service. This parameter sets the TrustedForDelegation property of an account object. This value also sets the ADS_UF_TRUSTED_FOR_DELEGATION flag of the Active Directory User Account Control attribute. Possible values for this parameter are:

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :UserPrincipalName

Description :Each user account has a user principal name (UPN) in the format <user>@<DNS-domain-name>. A UPN is a friendly name assigned by an administrator that is shorter than the LDAP distinguished name used by the system and easier to remember. The UPN is independent of the user object's DN, so a user object can be moved or renamed without affecting the user logon name. When logging on using a UPN, users no longer have to choose a domain from a list on the logon dialog box.

Required	false
Position	named
Default value	

Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A computer object that is a template for the new computer object is received by the Instance parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADComputer

Outputs

Returns the new computer object when the PassThru parameter is specified. By default, this cmdlet does not generate any output.

Type : None or Microsoft.ActiveDirectory.Management.ADComputer

Notes

Examples

----- EXAMPLE 1 -----

Description

Create a new computer account in the OU:

"OU=ApplicationServers,OU=ComputerAccounts,OU=Managed,DC=FABRIKAM,DC=COM".

```
C:\PS>New-ADComputer -Name "FABRIKAM-SRV2" -SamAccountName  
"FABRIKAM-SRV2" -Path  
"OU=ApplicationServers,OU=ComputerAccounts,OU=Managed,DC=FABRI  
KAM,DC=COM"
```

----- EXAMPLE 2 -----

Description

Create a new computer account under a particular OU, which is enabled and located in "Redmond,WA".

```
C:\PS>New-ADComputer -Name "FABRIKAM-SRV3" -SamAccountName  
"FABRIKAM-SRV3" -Path  
"OU=ApplicationServers,OU=ComputerAccounts,OU=Managed,DC=FABRI  
KAM,DC=COM" -Enabled $true -Location "Redmond,WA"
```

----- EXAMPLE 3 -----

Description

Creates a new computer account from a template object.

```
C:\PS>$templateComp = get-adcomputer "LabServer-00" -  
properties  
"Location","OperatingSystem","OperatingSystemHotfix","Operatin  
gSystemServicePack","OperatingSystemVersion"; New-ADComputer -  
Instance $templateComp -Name "LabServer-01"
```

Cmdlet: New-ADDCCloneConfigFile

Synops

Performs prerequisite checks for cloning a domain controller and generates a clone configuration file if all checks succeed.

Syntax

```
New-ADDCCloneConfigFile [-CloneComputerName <String>] [-IPv4DNSResolver  
    <String[]>] [-Path <String>] [-SiteName <String>]  
[<CommonParameters>]
```

```
New-ADDCCloneConfigFile [-AlternateWINSServer <String>]  
    [-CloneComputerName <String>] [-IPv4DefaultGateway <String>]  
[-Path  
    <String>] [-PreferredWINSServer <String>] [-SiteName  
<String>]  
    -IPv4Address <String> -IPv4DNSResolver <String[]> -  
IPv4SubnetMask <String>  
    -Static [<CommonParameters>]
```

```
New-ADDCCloneConfigFile [-AlternateWINSServer <String>]  
    [-CloneComputerName <String>] [-IPv4Address <String>] [-  
IPv4DefaultGateway  
    <String>] [-IPv4DNSResolver <String[]>] [-IPv4SubnetMask  
<String>]  
    [-IPv6DNSResolver <String[]>] [-PreferredWINSServer <String>]  
[-SiteName  
    <String>] [-Static] -Offline -Path <String>  
[<CommonParameters>]
```

```
New-ADDCCloneConfigFile [-CloneComputerName <String>] [-Path  
<String>]  
    [-SiteName <String>] -IPv6DNSResolver <String[]> -Static  
[<CommonParameters>]
```

```
New-ADDCCloneConfigFile [-CloneComputerName <String>] [-IPv6DNSResolver <String[]>] [-Path <String>] [-SiteName <String>] [<CommonParameters>]
```

Description

The New-DCCloneConfigFile cmdlet performs prerequisite checks for cloning a domain controller (DC) when run locally on the DC being prepared for cloning. This cmdlet generates a clone configuration file, DCCloneConfig.xml, at an appropriate location, if all prerequisite checks succeed.

There are two mode of operation for this cmdlet, depending on where it is executed. When run on the domain controller that is being prepared for cloning, it will run the following pre-requisite checks to make sure this DC is adequately prepared for cloning:

- (1) Is the PDC emulator FSMO role hosted on a DC running Windows Server 2012?
- (2) Is this computer authorized for DC cloning (i.e. is the computer a member of the Cloneable Domain Controllers group)?
- (3) Are all program and services listed in the output of the Get-ADDCCloneExcludedApplicationList cmdlet captured in CustomDCCloneAllowList.xml?

If these pre-requisite checks all pass, the New-DCCloneConfigFile cmdlet will generate a DCCloneConfig.xml file at a suitable location based on the parameter values supplied. This cmdlet can also be run from a client (with RSAT) and used to generate a DCCloneConfig.xml against offline media of the DC being cloned, however, none of the pre-requisite checks will be performed in this usage mode. This usage is intended to generate DCCloneConfig.xml files with specific configuration values for each clone on copies of the offline media.

Parameters

Parameter :**AlternateWINS**Server

Description :Specifies the name of the alternate Windows Internet Naming Service (WINS) server for the cloned DC to use if the preferred WINS Server is not available.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :CloneComputerName

Description :Specifies the computer name for the cloned DC. If this parameter is not specified as a unique name within the enterprise of 15 characters or less, the following formula is used to programmatically generate a name:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :IPv4Address

Description :Specifies the Internet Protocol version 4 (IPv4) address to be assigned to the cloned DC.

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :IPv4DefaultGateway

Description :Specifies the Internet Protocol version 4 (IPv4) address for the default gateway to be used by the cloned DC.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :IPv4DNSResolver

Description :Specifies the Internet Protocol version 4 (IPv4) address for the DNS server to be used by the cloned DC to resolve names. A maximum of 4 string values can be provided.

Required	false
----------	-------

Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :IPv4SubnetMask

Description :Specifies the Internet Protocol version 4 (IPv4) subnet mask to use for the subnet where the cloned DC is to be located.

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :IPv6DNSResolver

Description :Specifies the Internet Protocol version 6 (IPv6) address for the DNS server to be used by the cloned DC to resolve names.

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Offline

Description :Indicates whether the cmdlet is being run against an offline media or on the DC being prepared for cloning.

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Path

Description :Specifies the folder path to use when writing the clone configuration file. If

the cmdlet is run and all prerequisite checks succeed, a DCCloneConfig.xml file will be written and appear in this location as output. The Path parameter is optional when running the cmdlet on the DC being prepared for cloning. In this case, the default location of the DIT folder will be used and this parameter does not need to be specified. When running the New-DCCLoneConfigFile cmdlet in offline mode (i.e. when the Offline parameter is specified), however, the Path parameter is required.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PreferredWINSServer

Description :Specifies the name of the primary Windows Internet Naming Service (WINS) server to use as the preferred WINS Server for the cloned DC.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :SiteName

Description :Specifies the name of the Active Directory site in which to place the cloned DC.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Static

Description :Indicates whether the TCP/IP configuration specified for the cloned DC is static or dynamic IP configuration.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

Type : None

Outputs

Type : None

Examples

----- EXAMPLE 1 -----

Creates a clone domain controller named VirtualDC2 with a static IPv4 address.

```
PS C:\>New-ADDCCloneConfigFile -Static -IPv4Address "10.0.0.2"
-IPv4DNSResolver "10.0.0.1" -IPv4SubnetMask "255.255.255.0" -
CloneComputerName "VirtualDC2" -IPv4DefaultGateway "10.0.0.3"
-PreferredWINSServer "10.0.0.1" -SiteName "REDMOND"
```

----- EXAMPLE 2 -----

Creates a clone domain controller named Clone1 with a static IPv6 settings.

```
PS C:\>New-ADDCCloneConfigFile -Static -CloneComputerName
"Clone1" -IPv6DNSResolver "FEC0:0:0:FFFF::1"
```

----- EXAMPLE 3 -----

Creates a clone domain controller named Clone2 with dynamic IPv4 settings.

```
PS C:\>New-ADDCCloneConfigFile -AlternateWINSServer "10.0.0.3"
-CloneComputerName "Clone2"-IPv4DNSResolver "10.0.0.1" -
PreferredWINSServer "10.0.0.1"
```

----- EXAMPLE 4 -----

Creates a clone domain controller with dynamic IPv6 settings.

```
PS C:\>New-ADDCCloneConfigFile -IPv6DNSResolver  
"FEC0:0:0:FFFF::1" -SiteName "REDMOND"
```

----- EXAMPLE 5 -----

Creates a clone domain controller named Clone2 with static IPv4 and static IPv6 settings.

```
PS C:\>New-ADDCCloneConfigFile -Static -IPv4Address "10.0.0.2" -  
-IPv4DNSResolver "10.0.0.1" -IPv4SubnetMask "255.255.255.0" -  
Static -IPv6DNSResolver "FEC0:0:0:FFFF::1" -CloneComputerName  
"Clone2" -PreferredWINSServer "10.0.0.1"
```

----- EXAMPLE 6 -----

Creates a clone domain controller named Clone2 with static IPv4 and dynamic IPv6 settings.

```
PS C:\>New-ADDCCloneConfigFile -IPv4Address "10.0.0.2" -  
IPv4DNSResolver "10.0.0.1" -IPv4SubnetMask "255.255.255.0" -  
IPv4DefaultGateway "10.0.0.3" -IPv6DNSResolver  
"FEC0:0:0:FFFF::1"
```

----- EXAMPLE 7 -----

Creates a clone domain controller named Clone1 with dynamic IPv4 and static IPv6 settings.

```
PS C:\>New-ADDCCloneConfigFile -Static -IPv6DNSResolver  
"FEC0:0:0:FFFF::1" -CloneComputerName "Clone1" -  
PreferredWINSServer "10.0.0.1" -SiteName "REDMOND"
```

----- EXAMPLE 8 -----

Creates a clone domain controller with dynamic IPv4 and dynamic IPv6 settings.

```
PS C:\>New-ADDCCloneConfigFile -IPv4DNSResolver "10.0.0.1" -  
IPv6DNSResolver "FEC0:0:0:FFFF::1"
```

----- EXAMPLE 9 -----

Creates a clone domain controller named CloneDC1 in offline mode, in a site called "REDMOND" with a dynamic IPv4 address. This command also uses the -Force parameter to force overwrite of any previous DCCloneConfig.xml file created at the

specified path (F:\Windows\NTDS).

```
PS C:\>New-DCCloneConfig -Offline -CloneComputerName ClonedC1  
-SiteName REDMOND -Path F:\Windows\NTDS -Force
```

Cmdlet: New-ADFineGrainedPasswordPolicy

Synops

Creates a new Active Directory fine grained password policy.

Syntax

```
New-ADFineGrainedPasswordPolicy [-Name] <String> [-Precedence]
<Int32>
    [-AuthType {Negotiate | Basic}] [-ComplexityEnabled
<Boolean>]
    [-Credential <PSCredential>] [-Description <String>] [-
DisplayName
    <String>] [-Instance <ADFineGrainedPasswordPolicy>] [-
LockoutDuration
    <TimeSpan>] [-LockoutObservationWindow <TimeSpan>] [-
LockoutThreshold
    <Int32>] [-MaxPasswordAge <TimeSpan>] [-MinPasswordAge
<TimeSpan>]
    [-MinPasswordLength <Int32>] [-OtherAttributes <Hashtable>]
[-PassThru]
    [-PasswordHistoryCount <Int32>] [-
ProtectedFromAccidentalDeletion
    <Boolean>] [-ReversibleEncryptionEnabled <Boolean>] [-Server
<String>]
    [-Confirm] [-WhatIf] [<CommonParameters>]
```

Description

The New-ADFineGrainedPasswordPolicy cmdlet creates a new Active Directory fine grained password policy. You can set commonly used fine grained password policy property values by using the cmdlet parameters. Property values that are not associated with cmdlet parameters can be set by using the OtherAttributes parameter.

You must set the Name and Precedence parameters to create a new fine grained password policy.

The following methods explain different ways to create an object by using this cmdlet.

Method 1: Use the New-ADFineGrainedPasswordPolicy cmdlet, specify the required parameters, and set any additional property values by using the cmdlet parameters.

Method 2: Use a template to create the new object. To do this, create a new fine grained password policy object or retrieve a copy of an existing fine grained password policy object and set the Instance parameter to this object. The object provided to the Instance parameter is used as a template for the new object. You can override property values from the template by setting cmdlet parameters. For examples and more information, see the Instance parameter description for this cmdlet.

Method 3: Use the Import-CSV cmdlet with the New-ADFineGrainedPasswordPolicy cmdlet to create multiple Active Directory fine grained password policy objects. To do this, use the Import-CSV cmdlet to create the custom objects from a comma-separated value (CSV) file that contains a list of object properties. Then pass these objects through the pipeline to the New-ADFineGrainedPasswordPolicy cmdlet to create the fine grained password policy objects.

Parameters

Parameter :AuthType

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ComplexityEnabled

Description :Specifies whether password complexity is enabled for the password policy. If enabled, the password must contain three of the following five character types:

Required	false
Position	named
Default value	\$true
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a

provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Description**

Description :Specifies a description of the object. This parameter sets the value of the Description property for the object. The LDAP Display Name (ldapDisplayName) for this property is "description".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**DisplayName**

Description :Specifies the display name of the object. This parameter sets the DisplayName property of the object. The LDAP Display Name (ldapDisplayName) for this property is "displayName".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**Instance**

Description :Specifies an instance of a fine-grained password policy object to use as a template for a new fine-grained password policy object.

Required	false
Position	named
Default value	

Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :LockoutDuration

Description :Specifies the length of time that an account is locked after the number of failed login attempts exceeds the lockout threshold. You cannot login to an account that is locked until the lockout duration time period has expired. This parameter sets the lockoutDuration property of a password policy object. The LDAP display name (ldapDisplayName) of this property is "msDS-LockoutDuration".

Required	false
Position	named
Default value	0.00:30:00 (30 Minutes)
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :LockoutObservationWindow

Description :Specifies the maximum time interval between two unsuccessful login attempts before the number of unsuccessful login attempts is reset to 0. An account is locked when the number of unsuccessful login attempts exceeds the password policy lockout threshold. This parameter sets the lockoutObservationWindow property of a password policy object. The LDAP Display Name (ldapDisplayName) of this property is "msDS-lockoutObservationWindow".

Required	false
Position	named
Default value	0.00.30.00 (30 Minutes)
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :LockoutThreshold

Description :Specifies the number of unsuccessful login attempts that are permitted before an account is locked out. This number increases when the time between unsuccessful login attempts is less than the time specified for the lockout observation time window. This parameter sets the LockoutThreshold property of a password policy.

Required	false
Position	named

Default value	0
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**MaxPasswordAge**

Description :Specifies the maximum length of time that you can have the same password. After this time period, the password expires and you must create a new one.

Required	false
Position	named
Default value	42.00:00:00 (42 days)
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**MinPasswordAge**

Description :Specifies the minimum length of time before you can change a password.

Required	false
Position	named
Default value	1.00:00:00 (1day)
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**MinPasswordLength**

Description :Specifies the minimum number of characters that a password must contain. This parameter sets the MinPasswordLength property of the password policy.

Required	false
Position	named
Default value	7
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**Name**

Description :Specifies the name of the object. This parameter sets the Name property of the Active Directory object. The LDAP Display Name (ldapDisplayName) of this property is "name".

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**OtherAttributes**

Description :Specifies object attribute values for attributes that are not represented by cmdlet parameters. You can set one or more parameters at the same time with this parameter. If an attribute takes more than one value, you can assign multiple values. To identify an attribute, specify the LDAPDisplayName (ldapDisplayName) defined for it in the Active Directory schema.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**PassThru**

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**PasswordHistoryCount**

Description :Specifies the number of previous passwords to save. A user cannot reuse a password in the list of saved passwords. This parameter sets the PasswordHistoryCount property for a password policy.

Required	false
Position	named
Default value	24

Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :Precedence

Description :Specifies a value that defines the precedence of a fine-grained password policy among all fine-grained password policies. This parameter sets the Precedence property for a fine-grained password policy. The LDAP display name (IdapDisplayName) for this property is "msDS-PasswordSettingsPrecedence".

Required	true
Position	2
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :ProtectedFromAccidentalDeletion

Description :Specifies whether to prevent the object from being deleted. When this property is set to true, you cannot delete the corresponding object without changing the value of the property. Possible values for this parameter include:

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :ReversibleEncryptionEnabled

Description :Specifies whether the directory must store passwords using reversible encryption. This parameter sets the ReversibleEncryption property for a password policy. Possible values for this parameter include the following:

Required	false
Position	named
Default value	\$true
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A fine grained password policy object that is a template for the new fine grained password policy object is received by the Instance parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADFineGrainedPasswordPolicy

Outputs

Returns the new fine grained password policy object when the PassThru parameter is

specified. By default, this cmdlet does not generate any output.

Type : None or Microsoft.ActiveDirectory.Management.ADFineGrainedPasswordPolicy

Notes

Examples

----- EXAMPLE 1 -----

Description

Create a new Fine Grained Password Policy object named 'DomainUsersPSO' and set the Precedence, ComplexityEnabled, Description, DisplayName, LockoutDuration, LockoutObservationWindow, and LockoutThreshold properties on the object.

```
C:\PS>New-ADFineGrainedPasswordPolicy -Name "DomainUsersPSO" -
Precedence 500 -ComplexityEnabled $true -Description "The
Domain Users Password Policy" -DisplayName "Domain Users PSO"
-LockoutDuration "0.12:00:00" -LockoutObservationWindow
"0.00:15:00" -LockoutThreshold 10
```

----- EXAMPLE 2 -----

Description

Create two new Fine Grained Password Policy object using a template object.

```
C:\PS>$templatePSO = New-Object
Microsoft.ActiveDirectory.Management.ADFineGrainedPasswordPol
icy
$templatePSO.ComplexityEnabled = $true
$templatePSO.LockoutDuration = [TimeSpan]::Parse("0.12:00:00")
$templatePSO.LockoutObservationWindow =
[TimeSpan]::Parse("0.00:15:00")
$templatePSO.LockoutThreshold = 10
$templatePSO.MinPasswordAge = [TimeSpan]::Parse("0.00:10:00")
$templatePSO.PasswordHistoryCount = 24
$templatePSO.ReversibleEncryptionEnabled = $false

New-ADFineGrainedPasswordPolicy -Instance $templatePSO -Name
"SvcAccPSO" -Precedence 100 -Description "The Service Accounts
Password Policy" -DisplayName "Service Accounts PSO" -
MaxPasswordAge "30.00:00:00" -MinPasswordLength 20
New-ADFineGrainedPasswordPolicy -Instance $templatePSO -Name
"AdminsPSO" -Precedence 200 -Description "The Domain
Administrators Password Policy" -DisplayName "Domain
Administrators PSO" -MaxPasswordAge "15.00:00:00" -
MinPasswordLength 10
```


Cmdlet: New-ADGroup

Synops

Creates an Active Directory group.

Syntax

```
New-ADGroup [-Name] <String> [-GroupScope] {DomainLocal | Global |
    Universal} [-AuthType {Negotiate | Basic}] [-Credential
    <PSCredential>]
    [-Description <String>] [-DisplayName <String>] [-
    GroupCategory
    {Distribution | Security}] [-HomePage <String>] [-Instance
    <ADGroup>]
    [-ManagedBy <ADPrincipal>] [-OtherAttributes <Hashtable>] [-
    PassThru]
    [-Path <String>] [-SamAccountName <String>] [-Server
    <String>] [-Confirm]
    [-WhatIf] [<CommonParameters>]
```

Description

The New-ADGroup cmdlet creates a new Active Directory group object. Many object properties are defined by setting cmdlet parameters. Properties that cannot be set by cmdlet parameters can be set using the OtherAttributes parameter.

The Name and GroupScope parameters specify the name and scope of the group and are required to create a new group. You can define the new group as a security or distribution group by setting the GroupType parameter. The Path parameter specifies the container or organizational unit (OU) for the group.

The following methods explain different ways to create an object by using this cmdlet.

Method 1: Use the New-ADGroup cmdlet, specify the required parameters, and set any additional property values by using the cmdlet parameters.

Method 2: Use a template to create the new object. To do this, create a new group object or retrieve a copy of an existing group object and set the Instance parameter to this object. The object provided to the Instance parameter is used as a template for the new object. You can override property values from the template by setting cmdlet parameters. For examples and more information, see the Instance parameter description for this

cmdlet.

Method 3: Use the Import-CSV cmdlet with the New-ADGroup cmdlet to create multiple Active Directory group objects. To do this, use the Import-CSV cmdlet to create the custom objects from a comma-separated value (CSV) file that contains a list of object properties. Then pass these objects through the pipeline to the New-ADGroup cmdlet to create the group objects.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Description**

Description :Specifies a description of the object. This parameter sets the value of the Description property for the object. The LDAP Display Name (ldapDisplayName) for this property is "description".

Required	false
Position	named

Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :DisplayName

Description :Specifies the display name of the object. This parameter sets the DisplayName property of the object. The LDAP Display Name (ldapDisplayName) for this property is "displayName".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :GroupCategory

Description :Specifies the category of the group. Possible values of this parameter are:

Required	false
Position	named
Default value	Security
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :GroupScope

Description :Specifies the group scope of the group. Possible values of this parameter are:

Required	true
Position	3
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :HomePage

Description :Specifies the URL of the home page of the object. This parameter sets the homePage property of an Active Directory object. The LDAP Display Name

(ldapDisplayName) for this property is "wWWHomePage".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**Instance**

Description :Specifies an instance of a group object to use as a template for a new group object.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**ManagedBy**

Description :Specifies the user or group that manages the object by providing one of the following property values. Note: The identifier in parentheses is the LDAP display name for the property.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**Name**

Description :Specifies the name of the object. This parameter sets the Name property of the Active Directory object. The LDAP Display Name (ldapDisplayName) of this property is "name".

Required	true
Position	2
Default value	

Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :OtherAttributes

Description :Specifies object attribute values for attributes that are not represented by cmdlet parameters. You can set one or more parameters at the same time with this parameter. If an attribute takes more than one value, you can assign multiple values. To identify an attribute, specify the LDAPDisplayName (ldapDisplayName) defined for it in the Active Directory schema.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PassThru

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Path

Description :Specifies the X.500 path of the Organizational Unit (OU) or container where the new object is created.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :SamAccountName

Description :Specifies the Security Account Manager (SAM) account name of the user, group, computer, or service account. The maximum length of the description is 256 characters. To be compatible with older operating systems, create a SAM account name that is 20 characters or less. This parameter sets the SAMAccountName for an account object. The LDAP display name (ldapDisplayName) for this property is "sAMAccountName".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A group object that is a template for the new group object is received by the Instance parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADGroup

Outputs

Returns the new group object when the PassThru parameter is specified. By default, this cmdlet does not generate any output.

Type : None or Microsoft.ActiveDirectory.Management.ADGroup

Notes

Examples

----- EXAMPLE 1 -----

Description

Create a new group named 'RODC Admins' in the container 'CN=Users,DC=Fabrikam,DC=Com' and set the GroupCategory, DisplayName, GroupScope, and Description properties on the new object.

```
C:\PS>New-ADGroup -Name "RODC Admins" -SamAccountName
RODCAdmins -GroupCategory Security -GroupScope Global -
DisplayName "RODC Administrators" -Path
"CN=Users,DC=Fabrikam,DC=Com" -Description "Members of this
group are RODC Administrators"
```

----- EXAMPLE 2 -----

Description

Create a new group using the property values from a current group.

```

C:\PS>Get-ADGroup FabrikamBranch1 -Properties Description |
New-ADGroup -Name Branch1Employees -SamAccountName
Branch1Employees -GroupCategory Distribution -PassThru

GroupScope      : Universal
Name            : Branch1Employees
GroupCategory   : Distribution
SamAccountName  : Branch1Employees
ObjectClass     : group
ObjectGUID      : 8eebce44-5df7-4bed-a98b-b987a702103e
SID             : S-1-5-21-41432690-3719764436-1984117282-
1117
DistinguishedName :
CN=Branch1Employees,CN=Users,DC=Fabrikam,DC=com

```

----- EXAMPLE 3 -----

Description

Create a new group named 'AccountLeads' on an AD LDS instance.

```

C:\PS>New-ADGroup -Server localhost:60000 -Path
"OU=AccountDeptOU,DC=AppNC" -Name AccountLeads -GroupScope
DomainLocal -GroupCategory Distribution

```

Cmdlet: New-ADObject

Synops

Creates an Active Directory object.

Syntax

```
New-ADObject [-Name] <String> [-Type] <String> [-AuthType  
{Negotiate |  
    Basic}] [-Credential <PSCredential>] [-Description <String>]  
[-DisplayName  
    <String>] [-Instance <ADObject>] [-OtherAttributes  
<Hashtable>]  
[-PassThru] [-Path <String>] [-  
ProtectedFromAccidentalDeletion <Boolean>]  
[-Server <String>] [-Confirm] [-WhatIf] [<CommonParameters>]
```

Description

The New-ADObject cmdlet creates a new Active Directory object such as a new organizational unit or new user account. You can use this cmdlet to create any type of Active Directory object. Many object properties are defined by setting cmdlet parameters. Properties that are not set by cmdlet parameters can be set by using the OtherAttributes parameter.

You must set the Name and Type parameters to create a new Active Directory object. The Name specifies the name of the new object. The Type parameter specifies the LDAP display name of the Active Directory Schema Class that represents the type of object you want to create. Examples of Type values include computer, group, organizational unit, and user.

The Path parameter specifies the container where the object will be created.. When you do not specify the Path parameter, the cmdlet creates an object in the default naming context container for Active Directory objects in the domain.

The following methods explain different ways to create an object by using this cmdlet.

Method 1: Use the New-ADObject cmdlet, specify the required parameters, and set any additional property values by using the cmdlet parameters.

Method 2: Use a template to create the new object. To do this, create a new Active Directory object or retrieve a copy of an existing Active Directory object and set the Instance parameter to this object. The object provided to the Instance parameter is used

as a template for the new object. You can override property values from the template by setting cmdlet parameters. For examples and more information, see the Instance parameter description for this cmdlet. For information about Active Directory cmdlets use the Instance parameter, see about [_ActiveDirectory_Instance](#).

Method 3: Use the Import-CSV cmdlet with the New-ADObject cmdlet to create multiple Active Directory objects. To do this, use the Import-CSV cmdlet to create the custom objects from a comma-separated value (CSV) file that contains a list of object properties. Then pass these objects through the pipeline to the New-ADObject cmdlet to create the Active Directory objects.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Description**

Description :Specifies a description of the object. This parameter sets the value of the Description property for the object. The LDAP Display Name (ldapDisplayName) for this property is "description".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :DisplayName

Description :Specifies the display name of the object. This parameter sets the DisplayName property of the object. The LDAP Display Name (ldapDisplayName) for this property is "displayName".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :Instance

Description :Specifies an instance of an Active Directory object to use as a template for a new Active Directory object.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Name

Description :Specifies the name of the object. This parameter sets the Name property of the Active Directory object. The LDAP Display Name (ldapDisplayName) of this property is "name".

Required	true
Position	2
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :OtherAttributes

Description :Specifies object attribute values for attributes that are not represented by cmdlet parameters. You can set one or more parameters at the same time with this parameter. If an attribute takes more than one value, you can assign multiple values. To identify an attribute, specify the LDAPDisplayName (ldapDisplayName) defined for it in the Active Directory schema.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PassThru

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Path

Description :Specifies the X.500 path of the Organizational Unit (OU) or container where the new object is created.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :ProtectedFromAccidentalDeletion

Description :Specifies whether to prevent the object from being deleted. When this property is set to true, you cannot delete the corresponding object without changing the value of the property. Possible values for this parameter include:

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Type

Description :Specifies the type of object to create. Set the Type parameter to the LDAP display name of the Active Directory Schema Class that represents the type of object that you want to create. Examples of type values include user, computer, and group.

Required	true
Position	3
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :Confirm

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

An Active Directory object that is a template for the new object is received by the Instance parameter.

Derived types such as the following are also accepted:

- Microsoft.ActiveDirectory.Management.ADPartition
- Microsoft.ActiveDirectory.Management.ADFineGrainedPasswordPolicy
- Microsoft.ActiveDirectory.Management.ADGroup
- Microsoft.ActiveDirectory.Management.ADUser
- Microsoft.ActiveDirectory.Management.ADComputer

Type : None or Microsoft.ActiveDirectory.Management.ADOject

Outputs

Returns the new Active Directory object when the PassThru parameter is specified. By default, this cmdlet does not generate any output.

Type : None or Microsoft.ActiveDirectory.Management.ADOject

Notes

Examples

----- EXAMPLE 1 -----

Description

Creates a subnet object in the HQ site with the described attributes.

```
C:\PS>New-ADObject -Name '192.168.1.0/26' -Type subnet -
Description '192.168.1.0/255.255.255.192' -OtherAttributes
@{location="Building
A";siteObject="CN=HQ,CN=Sites,CN=Configuration,DC=FABRIKAM,DC=
COM"} -Path
"CN=Subnets,CN=Sites,CN=Configuration,DC=FABRIKAM,DC=COM"
```

----- EXAMPLE 2 -----

Description

Creates a new subnet object, using a different subnet object as a template

```
C:\PS>$subnetTemplate = get-adobject -Identity
"CN=192.168.1.0/26,CN=Subnets,CN=Sites,CN=Configuration,DC=Fab
rikam,DC=com" -properties description,location; new-adobject -
instance $subnetTemplate -name "192.168.1.0/28" -type subnet -
path "CN=Subnets,CN=Sites,CN=Configuration,DC=FABRIKAM,DC=COM"
```

----- EXAMPLE 3 -----

Description

Creates a new contact object, sets the msDS-SourceObjectDN property and protects the object from accidental deletion

```
C:\PS>New-ADObject -name SaraDavisContact -type contact -
ProtectedFromAccidentalDeletion $true -OtherAttributes
@{'msDS-
SourceObjectDN'="CN=FabrikamContacts,DC=CONTOSO,DC=COM"}
```

----- EXAMPLE 4 -----

Description

Creates a new container object named 'Apps' in an LDS instance.

```
C:\PS>new-adobject -name Apps -type container -path "DC=AppNC"
-server "FABRIKAM-SRV1:60000"
```

Cmdlet: New-ADOrganizationalUnit

Synops

Creates a new Active Directory organizational unit.

Syntax

```
New-ADOrganizationalUnit [-Name] <String> [-AuthType {Negotiate |
Basic}]
    [-City <String>] [-Country <String>] [-Credential
<PSCredential>]
    [-Description <String>] [-DisplayName <String>] [-Instance
<ADOrganizationalUnit>] [-ManagedBy <ADPrincipal>] [-
OtherAttributes
    <Hashtable>] [-PassThru] [-Path <String>] [-PostalCode
<String>]
    [-ProtectedFromAccidentalDeletion <Boolean>] [-Server
<String>] [-State
    <String>] [-StreetAddress <String>] [-Confirm] [-WhatIf]
    [<CommonParameters>]
```

Description

The New-ADOrganizationalUnit cmdlet creates a new Active Directory organizational unit. You can set commonly used organizational unit property values by using the cmdlet parameters. Property values that are not associated with cmdlet parameters can be set by using the OtherAttributes parameter.

You must set the Name parameter to create a new organizational unit. When you do not specify the Path parameter, the cmdlet creates an organizational unit under the default NC head for the domain.

The following methods explain different ways to create an object by using this cmdlet.

Method 1: Use the New-ADOrganizationalUnit cmdlet, specify the required parameters, and set any additional property values by using the cmdlet parameters.

Method 2: Use a template to create the new object. To do this, create a new organizational unit object or retrieve a copy of an existing organizational unit object and set the Instance parameter to this object. The object provided to the Instance parameter is used as a template for the new object. You can override property values from the template by setting cmdlet parameters. For examples and more information, see the

Instance parameter description for this cmdlet.

Method 3: Use the Import-CSV cmdlet with the New-ADOrganizationalUnit cmdlet to create multiple Active Directory organizational unit objects. To do this, use the Import-CSV cmdlet to create the custom objects from a comma-separated value (CSV) file that contains a list of object properties. Then pass these objects through the pipeline to the New-ADOrganizationalUnit cmdlet to create the organizational unit objects.

Parameters

Parameter :AuthType

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :City

Description :Specifies the user's town or city. This parameter sets the City property of a user. The LDAP display name (ldapDisplayName) of this property is "l".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :Country

Description :Specifies the country or region code for the user's language of choice. This parameter sets the Country property of a user object. The LDAP Display Name (ldapDisplayName) of this property is "c". This value is not used by Windows 2000.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)

Accept wildcard characters?	false
-----------------------------	-------

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Description

Description :Specifies a description of the object. This parameter sets the value of the Description property for the object. The LDAP Display Name (ldapDisplayName) for this property is "description".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :DisplayName

Description :Specifies the display name of the object. This parameter sets the DisplayName property of the object. The LDAP Display Name (ldapDisplayName) for this property is "displayName".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :Instance

Description :Specifies an instance of an organizational unit object to use as a template for a new organizational unit object.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**ManagedBy**

Description :Specifies the user or group that manages the object by providing one of the following property values. Note: The identifier in parentheses is the LDAP display name for the property.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**Name**

Description :Specifies the name of the object. This parameter sets the Name property of the Active Directory object. The LDAP Display Name (ldapDisplayName) of this property is "name".

Required	true
Position	2
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**OtherAttributes**

Description :Specifies object attribute values for attributes that are not represented by cmdlet parameters. You can set one or more parameters at the same time with this parameter. If an attribute takes more than one value, you can assign multiple values. To identify an attribute, specify the LDAPDisplayName (ldapDisplayName) defined for it in the Active Directory schema.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**PassThru**

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Path**

Description :Specifies the X.500 path of the Organizational Unit (OU) or container where the new object is created.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**PostalCode**

Description :Specifies the user's postal code or zip code. This parameter sets the PostalCode property of a user. The LDAP Display Name (ldapDisplayName) of this property is "postalCode".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**ProtectedFromAccidentalDeletion**

Description :Specifies whether to prevent the object from being deleted. When this property is set to true, you cannot delete the corresponding object without changing the value of the property. Possible values for this parameter include:

Required	false
Position	named
Default value	\$true
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**State**

Description :Specifies the user's or Organizational Unit's state or province. This parameter sets the State property of a User or Organizational Unit object. The LDAP display name (ldapDisplayName) of this property is "st".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**StreetAddress**

Description :Specifies the organizational unit's street address. This parameter sets the StreetAddress property of a organizational unit object. The LDAP display name (ldapDisplayName) of this property is "street".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

An organizational unit object that is a template for the new organizational unit object is received by the Instance parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADOrganizationalUnit

Outputs

Returns the new organizational unit object when the PassThru parameter is specified. By default, this cmdlet does not generate any output.

Type : None or Microsoft.ActiveDirectory.Management.ADOrganizationalUnit

Notes

Examples

----- EXAMPLE 1 -----

Description

Creates a new OrganizationalUnit named 'UserAccounts' which is protected from accidental deletion.

```
C:\PS>New-ADOrganizationalUnit -Name UserAccounts -Path  
"DC=FABRIKAM,DC=COM"
```

----- EXAMPLE 2 -----

Description

Creates a new OrganizationalUnit named 'UserAccounts' which is not protected from deletion.

```
C:\PS>New-ADOrganizationalUnit -Name UserAccounts -Path  
"DC=FABRIKAM,DC=COM" -ProtectedFromAccidentalDeletion $false
```

----- EXAMPLE 3 -----

Description

Creates an OrganizationalUnit name 'UserAccounts' which is protected from accidental deletion with properties 'seeAlso' and 'managedBy' set to the specified values.

```
C:\PS>New-ADOrganizationalUnit -Name UserAccounts -Path  
"DC=FABRIKAM,DC=COM" -OtherAttributes  
@{"seeAlso"="CN=HumanResourceManagers,OU=Groups,OU=Managed,DC=Fa  
brikam,DC=com";managedBy="CN=TomC,DC=FABRIKAM,DC=COM"}
```

----- EXAMPLE 4 -----

Description

Uses the data from the OrganizationalUnit 'OU=UserAccounts,DC=Fabrikam,DC=com' as a template for another new OrganizationalUnit.

```
C:\PS>$souTemplate = Get-ADOrganizationalUnit  
"OU=UserAccounts,DC=Fabrikam,DC=com" -properties  
seeAlso,managedBy; New-ADOrganizationalUnit -name TomCReports  
-instance $souTemplate
```

----- EXAMPLE 5 -----

Description

Creates a new OrganizationalUnit named 'Managed' in an LDS instance.

```
C:\PS>New-ADOrganizationalUnit -name "Managed" -path  
"DC=AppNC" -server "FABRIKAM-SRV1:60000"
```

Cmdlet: New-ADReplicationSite

Synops

Creates a new Active Directory replication site in the directory.

Syntax

```
New-ADReplicationSite [-Name] <String> [-AuthType {Negotiate |
Basic}]
    [-AutomaticInterSiteTopologyGenerationEnabled <Boolean>]
    [-AutomaticTopologyGenerationEnabled <Boolean>] [-Credential
    <PSCredential>] [-Description <String>] [-Instance
    <ADReplicationSite>]
    [-InterSiteTopologyGenerator <ADDirectoryServer>] [-ManagedBy
    <ADPrincipal>] [-OtherAttributes <Hashtable>] [-PassThru]
    [-ProtectedFromAccidentalDeletion <Boolean>]
    [-RedundantServerTopologyEnabled <Boolean>] [-
ReplicationSchedule
    <ActiveDirectorySchedule>] [-ScheduleHashingEnabled
    <Boolean>] [-Server
    <String>] [-TopologyCleanupEnabled <Boolean>] [-
TopologyDetectStaleEnabled
    <Boolean>] [-TopologyMinimumHopsEnabled <Boolean>]
    [-UniversalGroupCachingEnabled <Boolean>]
    [-UniversalGroupCachingRefreshSite <ADReplicationSite>]
    [-WindowsServer2000BridgeheadSelectionMethodEnabled
    <Boolean>]
    [-WindowsServer2000KCCISTGSelectionBehaviorEnabled <Boolean>]

    [-WindowsServer2003KCCBehaviorEnabled <Boolean>]
    [-WindowsServer2003KCCIgnoreScheduleEnabled <Boolean>]
    [-WindowsServer2003KCCSiteLinkBridgingEnabled <Boolean>] [-
Confirm]
    [-WhatIf] [<CommonParameters>]
```

Description

The New-ADReplicationSite cmdlet is used to create new sites in Active Directory

replication. Sites are used in Active Directory to either enable clients to discover network resources (published shares, domain controllers) close to the physical location of a client computer or to reduce network traffic over wide area network (WAN) links. Sites can also be used to optimize replication between domain controllers.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**AutomaticInterSiteTopologyGenerationEnabled**

Description :Prevents the KCC that functions as the intersite topology generator (ISTG) from generating connections for intersite replication. Use this option when you want to create manual intersite connections (disable the ISTG) but retain the KCC to generate intrasite connections.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**AutomaticTopologyGenerationEnabled**

Description :When enabled, prevents the KCC from generating intrasite connections on all servers in the site. Disable this option if you use manual connections and do not want the KCC to build connections automatically.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)

Accept wildcard characters?	false
-----------------------------	-------

Parameter :Credential

Description :Specifies a user account that has permission to perform this action. The default is the current user.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Description

Description :Specifies a description of the object. This parameter sets the value of the Description property for the object. The LDAP Display Name (ldapDisplayName) for this property is "description".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :Instance

Description :Specifies an instance of a site object to use as a template for a new site object.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :InterSiteTopologyGenerator

Description :The server acting as the inter-site topology generator for this site.

Required	false
----------	-------

Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :ManagedBy

Description :Specifies the user or group that manages the object by providing one of the following property values. Note: The identifier in parentheses is the LDAP display name for the property.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :Name

Description :Specifies a name for the replication site object.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :OtherAttributes

Description :Specifies object attribute values for attributes that are not represented by cmdlet parameters. You can set one or more parameters at the same time with this parameter. If an attribute takes more than one value, you can assign multiple values. To identify an attribute, specify the LDAPDisplayName (ldapDisplayName) defined for it in the Active Directory schema.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**PassThru**

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**ProtectedFromAccidentalDeletion**

Description :Specifies whether to prevent the object from being deleted. When this property is set to true, you cannot delete the corresponding object without changing the value of the property. Possible values for this parameter include:

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**RedundantServerTopologyEnabled**

Description :Creates redundant connections between sites before a failure takes place. When enabled, disables KCC failover. Requires that automatic detection of failed connections also be disabled (+IS_TOPL_DETECT_STALE_DISABLED).

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**ReplicationSchedule**

Description :Default replication schedule for connections within this site (intra-site replication).

Required	false
----------	-------

Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**ScheduleHashingEnabled**

Description :Spreads replication start times randomly across the entire schedule interval rather than just the first quarter of the interval.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**TopologyCleanupEnabled**

Description :When enabled, prevents the KCC from removing connection objects that it does not need. Disable this option if you want to take responsibility for removing old redundant connections. Alternatively, to control or augment the topology, you can use manual connections, which the KCC does not delete.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :TopologyDetectStaleEnabled

Description :Prevents the KCC from excluding servers that are unreachable from the topology; that is, the KCC does use an alternate server to reroute replication. Use this option only if network communication is very unstable and brief outages are expected.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :TopologyMinimumHopsEnabled

Description :When enabled, prevents the KCC from generating optimizing connections in the ring topology of intrasite replication. Optimizing connections reduce the replication latency in the site and disabling them is not recommended.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :UniversalGroupCachingEnabled

Description :True if this site caches universal groups (those on GCs); useful in sites with no local GC.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :UniversalGroupCachingRefreshSite

Description :If universal group caching is enabled, the name of the site from which the cache is pulled.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**WindowsServer2000BridgeheadSelectionMethodEnabled**

Description :Implements the Windows 2000 Server method of selecting a single bridgehead server per directory partition and transport.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**WindowsServer2000KCCISTGSelectionBehaviorEnabled**

Description :Off by default. When enabled, implements the Windows 2000 Server method of ISTG selection.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**WindowsServer2003KCCBehaviorEnabled**

Description :Implements KCC operation that is consistent with Windows Server 2003 forest functional level. This option can be set if all domain controllers in the site are running Windows Server 2003.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**WindowsServer2003KCCIgnoreScheduleEnabled**

Description :When the forest functional level Windows Server 2003 or Windows Server 2003 interim is in effect, provides KCC control of the ability to ignore schedules (replication occurs at the designated intervals and is always available).

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**WindowsServer2003KCCSiteLinkBridgingEnabled**

Description :When the forest functional level Windows Server 2003 or Windows Server 2003 interim is in effect, provides KCC control of the ability to enable or disable site link bridging.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false

Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A site object that is a template for the new site object is received by the Instance parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADReplicationSite

Examples

----- EXAMPLE 1 -----

Description

Create a new site named 'NorthAmerica'.

```
C:\PS>New-ADReplicationSite NorthAmerica
```

----- EXAMPLE 2 -----

Description

Create a new site named 'Europe', and set the AutomaticInterSiteTopologyGenerationEnabled property on the new object.

```
C:\PS>New-ADReplicationSite Europe -  
AutomaticInterSiteTopologyGenerationEnabled $FALSE
```

----- EXAMPLE 3 -----

Description

Create a new site named 'Asia', and set the daily ReplicationSchedule from 20:00 to 22:30.

```
C:\PS>$schedule = New-Object -TypeName  
System.DirectoryServices.ActiveDirectory.ActiveDirectorySchedule;  
$schedule.ResetSchedule();  
$schedule.SetDailySchedule("Twenty", "Zero", "TwentyTwo", "Thirty  
");  
New-ADReplicationSite Asia -ReplicationSchedule $schedule
```


Cmdlet: New-ADReplicationSiteLink

Synops

Creates a new Active Directory site link for in managing replication.

Syntax

```
New-ADReplicationSiteLink [-Name] <String> [[-SitesIncluded]
    <ADReplicationSite[]>] [-AuthType {Negotiate | Basic}] [-Cost
<Int32>]
    [-Credential <PSCredential>] [-Description <String>] [-
Instance
    <ADReplicationSiteLink>] [-InterSiteTransportProtocol {IP |
SMTP}]
    [-OtherAttributes <Hashtable>] [-PassThru] [-
ReplicationFrequencyInMinutes
    <Int32>] [-ReplicationSchedule <ActiveDirectorySchedule>] [-
Server
    <String>] [-Confirm] [-WhatIf] [<CommonParameters>]
```

Description

The New-ADReplicationSiteLink cmdlet can be used to create a new Active Directory site link. A site link connects two or more sites. Site links reflect the administrative policy for how sites are to be interconnected and the methods used to transfer replication traffic. You must connect sites with site links so that domain controllers at each site can replicate Active Directory changes.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Manage ment.AuthType.Negotiate
Accept pipeline input?	false

Accept wildcard characters?	false
-----------------------------	-------

Parameter :Cost

Description :Specifies the cost to be placed on the site link. For more information on determining the cost, see the following topic called "Determining the Cost" in the TechNet Library: <http://go.microsoft.com/fwlink/?LinkId=221871>

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Description

Description :Specifies a description of the object. This parameter sets the value of the Description property for the object. The LDAP Display Name (ldapDisplayName) for this property is "description".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :Instance

Description :Specifies an instance of a site link object to use as a template for a new site link object.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**InterSiteTransportProtocol**

Description :Specifies a valid intersite transport protocol option. Supported protocol options for the New-ADReplicationSiteLink cmdlet include the following: IP, SMTP.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**Name**

Description :Specifies the name of the site link. This parameter sets the Name property of the Active Directory object. The LDAP Display Name (ldapDisplayName) of this property is "name".

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**OtherAttributes**

Description :Specifies object attribute values for attributes that are not represented by cmdlet parameters. You can set one or more parameters at the same time with this parameter. If an attribute takes more than one value, you can assign multiple values. To identify an attribute, specify the LDAPDisplayName (ldapDisplayName) defined for it in the Active Directory schema.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PassThru

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ReplicationFrequencyInMinutes

Description :Species the frequency (in minutes) for which replication will occur where this site link is in use between sites. Active Directory preserves bandwidth between sites by minimizing the frequency of replication and by allowing you to schedule the availability of site links for replication. By default, intersite replication across each site link occurs every 180 minutes (3 hours). You can adjust this frequency to match your specific needs. Be aware that increasing this frequency increases the amount of bandwidth used by replication.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :ReplicationSchedule

Description :Specifies the default replication schedule for any connections within this site link (intra-site replication). This allows you to schedule the availability of site links for use by replication. By default, a site link is available to carry replication traffic 24 hours a day, 7 days a week. You can limit this schedule to specific days of the week and times of day. You can, for example, schedule intersite replication so that it only occurs after normal business hours.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**SitesIncluded**

Description :Specifies the list of sites included in the site link.

Required	false
Position	2
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A site link object that is a template for the new site link object is received by the Instance parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADReplicationSiteLink

Examples

----- EXAMPLE 1 -----

Description

Create a new site link named 'NorthAmerica-Europe' linking the two sites 'NorthAmerica' and 'Europe'.

```
C:\PS>New-ADReplicationSiteLink "NorthAmerica-Europe" -  
SitesIncluded NorthAmerica,Europe
```

----- EXAMPLE 2 -----

Description

Create a new site link named 'Europe-Asia' linking two sites 'Europe' and 'Asia', and set the Cost, ReplicationFrequencyInMinutes and InterSiteTransportProtocol on the new object.

```
C:\PS>New-ADReplicationSiteLink "Europe-Asia" -SitesIncluded  
Europe,Asia -Cost 100 -ReplicationFrequencyInMinutes 15 -  
InterSiteTransportProtocol IP
```

----- EXAMPLE 3 -----

Description

Create a new site link named 'NorthAmerica-SouthAmerica' linking two sites 'NorthAmerica' and 'SouthAmerica', and set the daily ReplicationSchedule from 20:00 to 22:30.

```
C:\PS>$schedule = New-Object -TypeName
System.DirectoryServices.ActiveDirectory.ActiveDirectorySchedule;
$schedule.ResetSchedule();
$schedule.SetDailySchedule("Twenty","Zero","TwentyTwo","Thirty
");
New-ADReplicationSiteLink "NorthAmerica-SouthAmerica" -
SitesIncluded NorthAmerica,SouthAmerica -ReplicationSchedule
$schedule
```

----- EXAMPLE 4 -----

Description

Create a new site link named 'Europe-Asia' linking two sites 'Europe' and 'Asia', and enable change notification on the new object.

```
C:\PS>New-ADReplicationSiteLink "Europe-Asia" -SitesIncluded
Europe,Asia -OtherAttributes @{'options'=1}
```

Cmdlet: New-ADReplicationSiteLinkBridge

Synops

Creates a new site link bridge in Active Directory for replication.

Syntax

```
New-ADReplicationSiteLinkBridge [-Name] <String> [[-
SiteLinksIncluded]
    <ADReplicationSiteLink[]>] [-AuthType {Negotiate | Basic}] [-
Credential
    <PSCredential>] [-Description <String>] [-Instance
    <ADReplicationSiteLinkBridge>] [-InterSiteTransportProtocol
{IP | SMTP}]
    [-OtherAttributes <Hashtable>] [-PassThru] [-Server <String>]
[-Confirm]
    [-WhatIf] [<CommonParameters>]
```

Description

The New-ADReplicationSiteLinkBridge cmdlet creates a new site link bridge in Active Directory for use in replication. A site link bridge connects two or more site links and enables transitivity between site links. Each site link in a bridge must have a site in common with another site link in the bridge.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Manage ment.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Description**

Description :Specifies a description of the object. This parameter sets the value of the Description property for the object. The LDAP Display Name (ldapDisplayName) for this property is "description".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**Instance**

Description :Specifies an instance of a site link bridge object to use as a template for a new site link bridge object.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**InterSiteTransportProtocol**

Description :Specifies the valid InterSite Transport Protocol for use with this site link bridge. Acceptable options for this parameter include the following:

Required	false
----------	-------

Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :Name

Description :Specifies the name of the replication site link bridge object.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :OtherAttributes

Description :Specifies object attribute values for attributes that are not represented by cmdlet parameters. You can set one or more parameters at the same time with this parameter. If an attribute takes more than one value, you can assign multiple values. To identify an attribute, specify the LDAPDisplayName (ldapDisplayName) defined for it in the Active Directory schema.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PassThru

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**SiteLinksIncluded**

Description :Contains an array of site links that are included in this site link bridge. Accepted values for this parameter are the distinguished name (DN), a GUID, or the name of a site link. This parameter must contain two sites upon creation or else the Instance parameter must be included and used.

Required	false
Position	2
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
----------	-------

Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A site link bridge object that is a template for the new site link bridge object is received by the Instance parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADReplicationSiteLinkBridge

Notes

Examples

----- EXAMPLE 1 -----

Description

Create a new site link bridge named 'NorthAmerica-Asia' bridging the two sites links 'NorthAmerica-Europe' and 'Europe-Asia'.

```
C:\PS>New-ADReplicationSiteLinkBridge "NorthAmerica-Asia" -
SiteLinksIncluded "NorthAmerica-Europe", "Europe-Asia"
```

----- EXAMPLE 2 -----

Description

Create a new site link bridge named 'NorthAmerica-Asia' bridging the two sites links 'NorthAmerica-Europe' and 'Europe-Asia', and set the InterSiteTransportProtocol on the new object.

```
C:\PS>New-ADReplicationSiteLinkBridge "NorthAmerica-Asia" -
SiteLinksIncluded "NorthAmerica-Europe", "Europe-Asia" -
InterSiteTransportProtocol IP
```

Cmdlet: New-ADReplicationSubnet

Synops

Creates a new Active Directory replication subnet object.

Syntax

```
New-ADReplicationSubnet [-Name] <String> [[-Site]
<ADReplicationSite>]
    [-AuthType {Negotiate | Basic}] [-Credential <PSCredential>]
[-Description
    <String>] [-Instance <ADReplicationSubnet>] [-Location
<String>]
    [-OtherAttributes <Hashtable>] [-PassThru] [-Server <String>]
[-Confirm]
    [-WhatIf] [<CommonParameters>]
```

Description

The New-ADReplicationSubnet cmdlet creates a new Active Directory subnet object. Subnet objects (class subnet) define network subnets in Active Directory. A network subnet is a segment of a TCP/IP network to which a set of logical IP addresses is assigned. Subnets group computers in a way that identifies their physical proximity on the network. Subnet objects in Active Directory are used to map computers to sites.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Manage ment.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies a user account that has permission to perform this action. The default is the current user.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Description**

Description :Specifies a description of the object. This parameter sets the value of the Description property for the object. The LDAP Display Name (ldapDisplayName) for this property is "description".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**Instance**

Description :Specifies an instance of a subnet object to use as a template for a new subnet object.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Location**

Description :A description of the physical location of this subnet.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)

Accept wildcard characters?	false
-----------------------------	-------

Parameter :Name

Description :Specifies the name of the subnet. This parameter sets the Name property of the Active Directory object. The LDAP Display Name (ldapDisplayName) of this property is "name".

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :OtherAttributes

Description :Specifies object attribute values for attributes that are not represented by cmdlet parameters. You can set one or more parameters at the same time with this parameter. If an attribute takes more than one value, you can assign multiple values. To identify an attribute, specify the ldapDisplayName (ldapDisplayName) defined for it in the Active Directory schema.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PassThru

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Site**

Description :The site associated with this subnet.

Required	false
Position	2
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A subnet object that is a template for the new subnet object is received by the Instance parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADReplicationSubnet

Examples

----- EXAMPLE 1 -----

Description

Create a new subnet named '10.0.0.0/25'.

```
C:\PS>New-ADReplicationSubnet -Name "10.0.0.0/25"
```

----- EXAMPLE 2 -----

Description

Create a new subnet named '10.10.0.0/22' with 'Asia' as its associated site, and set the Location property to "Tokyo,Japan".

```
C:\PS>New-ADReplicationSubnet -Name "10.10.0.0/22" -Site Asia  
-Location "Tokyo, Japan"
```

Cmdlet: New-ADResourceProperty

Synops

Creates a new resource property in Active Directory.

Syntax

```
New-ADResourceProperty [-DisplayName] <String> [-
AppliesToResourceTypes
    <String[]>] [-AuthType {Negotiate | Basic}] [-Credential
<PSCredential>]
    [-Description <String>] [-Enabled <Boolean>] [-ID <String>]
[-Instance
    <ADResourceProperty>] [-IsSecured <Boolean>] [-
OtherAttributes
    <Hashtable>] [-PassThru] [-ProtectedFromAccidentalDeletion
<Boolean>]
    [-Server <String>] [-SharesValuesWith <ADClaimType>] [-
SuggestedValues
    <ADSuggestedValueEntry[]>] -ResourcePropertyValueType
    <ADResourcePropertyValueType> [-Confirm] [-WhatIf]
[<CommonParameters>]
```

Description

The New-ADResourceProperty cmdlet creates a new resource property in the directory.

Parameters

Parameter :**AppliesToResourceTypes**

Description :Specifies the resource types to which this resource property is applied.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :AuthType

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Description

Description :Specifies a description of the object. This parameter sets the value of the Description property for the object. The LDAP Display Name (ldapDisplayName) for this property is "description".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :DisplayName

Description :Specifies the display name of the resource property. The display name of the resource property must be unique.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**Enabled**

Description :Specifies if the resource property is enabled.

Required	false
Position	named
Default value	False
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**ID**

Description :Specifies the resource property ID. This is an optional parameter. By default, New-ADResourceProperty generates the ID automatically.

Required	false
Position	named
Default value	Auto-generated
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**Instance**

Description :Specifies an instance of a resource property object to use as a template for a new resource property object.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**IsSecured**

Description :Used to configure whether the resource property is secure or not. Only

secure resource properties can be used for authorization decisions or used within central access rules. Unsecured resource properties cannot be used for these purposes.

Required	false
Position	named
Default value	True
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :OtherAttributes

Description :Specifies object attribute values for attributes that are not represented by cmdlet parameters. You can set one or more parameters at the same time with this parameter. If an attribute takes more than one value, you can assign multiple values. To identify an attribute, specify the LDAPDisplayName (IdapDisplayName) defined for it in the Active Directory schema.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PassThru

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ProtectedFromAccidentalDeletion

Description :Specifies whether to prevent the object from being deleted. When this property is set to true, you cannot delete the corresponding object without changing the value of the property. Possible values for this parameter include:

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :ResourcePropertyValue

Description :The parameter specifies the value type for this resource property. When a resource property is passed to a resource manager (e.g., File Server), the resource manager leverages the resource property value type to determine how the resource property should be handled.

Required	true
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :SharesValuesWith

Description :Use this parameter to create a reference resource property. Reference resource properties do not provide their own suggested values, but rather use the suggested values from the claim type object specified in this parameter. This enables the resource property to always remain valid for use in comparisons to its referred claim type within a central access rule.

Required	false
----------	-------

Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :SuggestedValues

Description :Specifies one or more suggested values for the resource property. An application may choose to present this list of suggested values for the user to choose from. When RestrictValues is set to true, the application should restrict the user to pick values from this list only.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :Confirm

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :WhatIf

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Notes

Examples

----- EXAMPLE 1 -----

Description

Create a new resource property with display name 'Authors'. The resource property allows the names of multiple authors to be specified.

```
C:\PS>New-ADResourceProperty Authors -  
ResourcePropertyValueType MS-DS-MultivaluedText
```

----- EXAMPLE 2 -----

Description

Create a new resource property with display name 'Country'. The suggested values are set to 'US' and 'JP'. Applications using this resource property would allow their users to specify one of the suggested values as this resource property's value.

```
C:\PS>$us = New-Object  
Microsoft.ActiveDirectory.Management.ADSuggestedValueEntry("US",  
"United States of America", "United States of America");  
$jp = New-Object  
Microsoft.ActiveDirectory.Management.ADSuggestedValueEntry("JP",  
"Japan", "Japan");  
New-ADResourceProperty Country -ResourcePropertyValueType MS-  
DS-MultivaluedChoice -SuggestedValues $us,$jp
```

----- EXAMPLE 3 -----

Description

Create a new reference resource property with display name 'Country'. It uses an existing claim type named 'Country' for its suggested values. This enables the resource property to be always valid for comparisons with the referenced claim type in a central access rule.

```
C:\PS>New-ADResourceProperty Country -  
ResourcePropertyValueType MS-DS-MultivaluedChoice -  
SharesValuesWith Country
```

----- EXAMPLE 4 -----

Description

Create a new resource property with display name 'Authors', and set its ID to 'Authors_60DB20331638'.

The ID should only be set manually in a multi-forest environment where the same resource property needs to work across forests. By default, New-ADResourceProperty generates the ID automatically. For resource properties to be considered identical across forests, their ID must be the same.

```
C:\PS>New-ADResourceProperty Authors -  
ResourcePropertyValueType MS-DS-MultivaluedText -ID  
Authors_60DB20331638
```

Cmdlet: New-ADResourcePropertyList

Synops

Creates a new resource property list in Active Directory.

Syntax

```
New-ADResourcePropertyList [-Name] <String> [-AuthType {Negotiate  
|  
Basic}] [-Credential <PSCredential>] [-Description <String>]  
[-Instance  
    <ADResourcePropertyList>] [-PassThru] [-  
ProtectedFromAccidentalDeletion  
    <Boolean>] [-Server <String>] [-Confirm] [-WhatIf]  
[<CommonParameters>]
```

Description

The New-ADResourcePropertyList cmdlet creates a resource property list in Active Directory.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Manage ment.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a

provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Description**

Description :Specifies a description of the object. This parameter sets the value of the Description property for the object. The LDAP Display Name (ldapDisplayName) for this property is "description".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**Instance**

Description :Specifies an instance of an resource property list object to use as a template for a new resource property list object.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Name**

Description :Specifies the name of the object. This parameter sets the Name property of the Active Directory object. The LDAP Display Name (ldapDisplayName) of this property is "name".

Required	true
Position	2
Default value	

Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :PassThru

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ProtectedFromAccidentalDeletion

Description :Specifies whether to prevent the object from being deleted. When this property is set to true, you cannot delete the corresponding object without changing the value of the property. Possible values for this parameter include:

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Confirm

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Notes

Examples

----- EXAMPLE 1 -----

Description

Creates a new resource property list named "Corporate Resource Property List".

```
C:\PS>New-ADResourcePropertyList "Corporate Resource Property List"
```

----- EXAMPLE 2 -----

Description

Creates a new resource property list named "Corporate Resource Property List" with the description "For corporate documents."

```
C:\PS>New-ADResourcePropertyList "Corporate Resource Property List" -Description "For corporate documents."
```

----- EXAMPLE 3 -----

Description

Create a new resource property list using the property values from a 'Corporate Resource Property List'.

```
C:\PS>Get-ADResourcePropertyList "Corporate Resource Property  
List" | New-ADResourcePropertyList "Finance Resource Property  
List"
```

Cmdlet: New-ADServiceAccount

Synops

Creates a new Active Directory managed service account or group managed service account object.

Syntax

```
New-ADServiceAccount [-Name] <String> [-AccountExpirationDate
<DateTime>]
    [-AccountNotDelegated <Boolean>] [-AuthenticationPolicy
    <ADAuthenticationPolicy>] [-AuthenticationPolicySilo
    <ADAuthenticationPolicySilo>] [-AuthType {Negotiate | Basic}]

    [-Certificates <String[]>] [-CompoundIdentitySupported
<Boolean>]
    [-Credential <PSCredential>] [-Description <String>] [-
DisplayName
    <String>] [-Enabled <Boolean>] [-HomePage <String>] [-
Instance
    <ADServiceAccount>] [-KerberosEncryptionType {None | DES |
RC4 | AES128 |
    AES256}] [-ManagedPasswordIntervalInDays <Int32>] [-
OtherAttributes
    <Hashtable>] [-PassThru] [-Path <String>]
    [-PrincipalsAllowedToDelegateToAccount <ADPrincipal[]>]
    [-PrincipalsAllowedToRetrieveManagedPassword <ADPrincipal[]>]

    [-SamAccountName <String>] [-Server <String>] [-
ServicePrincipalNames
    <String[]>] [-TrustedForDelegation <Boolean>] -DNSHostName
<String>
    [-Confirm] [-WhatIf] [<CommonParameters>]
```

```
New-ADServiceAccount [-Name] <String> [-AccountExpirationDate
<DateTime>]
    [-AccountNotDelegated <Boolean>] [-AccountPassword
<SecureString>]
    [-AuthenticationPolicy <ADAuthenticationPolicy>]
    [-AuthenticationPolicySilo <ADAuthenticationPolicySilo>] [-
```

```

AuthType
    {Negotiate | Basic}} [-Certificates <String[]>] [-Credential
    <PSCredential>] [-Description <String>] [-DisplayName
<String>] [-Enabled
    <Boolean>] [-HomePage <String>] [-Instance
<ADServiceAccount>]
    [-KerberosEncryptionType {None | DES | RC4 | AES128 |
AES256}]
    [-OtherAttributes <Hashtable>] [-PassThru] [-Path <String>]
    [-SamAccountName <String>] [-Server <String>] [-
ServicePrincipalNames
    <String[]>] [-TrustedForDelegation <Boolean>] -
RestrictToSingleComputer
    [-Confirm] [-WhatIf] [<CommonParameters>]

New-ADServiceAccount [-Name] <String> [-AccountExpirationDate
<DateTime>]
    [-AccountNotDelegated <Boolean>] [-AuthenticationPolicy
    <ADAuthenticationPolicy>] [-AuthenticationPolicySilo
    <ADAuthenticationPolicySilo>] [-AuthType {Negotiate | Basic}}

    [-Certificates <String[]>] [-Credential <PSCredential>] [-
Description
    <String>] [-DisplayName <String>] [-Enabled <Boolean>] [-
HomePage
    <String>] [-Instance <ADServiceAccount>] [-
KerberosEncryptionType {None |
    DES | RC4 | AES128 | AES256}] [-OtherAttributes <Hashtable>]
[-PassThru]
    [-Path <String>] [-SamAccountName <String>] [-Server
<String>]
    [-ServicePrincipalNames <String[]>] [-TrustedForDelegation
<Boolean>]
    -RestrictToOutboundAuthenticationOnly [-Confirm] [-WhatIf]
    [<CommonParameters>]

```

Description

The New-ADServiceAccount cmdlet creates a new Active Directory managed service account (MSA). By default a group MSA is created. To create a standalone MSA which is

linked to a specific computer, the `-Standalone` parameter is used. To create a group MSA which can only be used in client roles, the `-Agent` parameter is used. This creates a group MSA which can be used for outbound connections only and attempts to connect to services using this account will fail since the account does not have enough information for authentication to be successful. You can set commonly used MSA property values by using the cmdlet parameters. Property values that are not associated with cmdlet parameters can be set by using the `OtherAttributes` parameter.

The `Path` parameter specifies the container or organizational unit (OU) for the new MSA object. When you do not specify the `Path` parameter, the cmdlet creates an object in the default Managed Service Accounts container for MSA objects in the domain.

The following methods explain different ways to create an object by using this cmdlet.

Method 1: Use the `New-ADServiceAccount` cmdlet, specify the required parameters, and set any additional property values by using the cmdlet parameters.

Method 2: Use a template to create the new object. To do this, create a new MSA object or retrieve a copy of an existing MSA object and set the `Instance` parameter to this object. The object provided to the `Instance` parameter is used as a template for the new object. You can override property values from the template by setting cmdlet parameters. For examples and more information, see the `Instance` parameter description for this cmdlet.

Method 3: Use the `Import-CSV` cmdlet with the `New-ADServiceAccount` cmdlet to create multiple Active Directory MSA objects. To do this, use the `Import-CSV` cmdlet to create the custom objects from a comma-separated value (CSV) file that contains a list of object properties. Then pass these objects through the pipeline to the `New-ADServiceAccount` cmdlet to create the MSA objects.

Parameters

Parameter :**AccountExpirationDate**

Description : Specifies the expiration date for an account. When you set this parameter to 0, the account never expires. This parameter sets the `AccountExpirationDate` property of an account object. The LDAP Display name (`IdapDisplayName`) for this property is `accountExpires`.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**AccountNotDelegated**

Description :Specifies whether the security context of the user is delegated to a service. When this parameter is set to true, the security context of the account is not delegated to a service even when the service account is set as trusted for Kerberos delegation. This parameter sets the AccountNotDelegated property for an Active Directory account. This parameter also sets the ADS_UF_NOT_DELEGATED flag of the Active Directory User Account Control (UAC) attribute. Possible values for this parameter include

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**AccountPassword**

Description :Specifies a new password value for the service account. This value is stored as an encrypted string.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**AuthenticationPolicy**

Description :

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**AuthenticationPolicySilo**

Description :

Required	false
Position	named

Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :AuthType

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Certificates

Description :Modifies the DER-encoded X.509v3 certificates of the account. These certificates include the public key certificates issued to this account by the Microsoft Certificate Service. This parameter sets the Certificates property of the account object. The LDAP Display Name (ldapDisplayName) for this property is "userCertificate".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :CompoundIdentitySupported

Description :Specifies whether an account supports Kerberos service tickets which includes the authorization data for the user's device. This value sets the compound identity supported flag of the Active Directory msDS-SupportedEncryptionTypes attribute. Possible values for this parameter are:

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the service account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :DNSHostName

Description :Specifies the Domain Name System (DNS) host name.

Required	true
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :Description

Description :Specifies a description of the object. This parameter sets the value of the Description property for the object. The LDAP Display Name (ldapDisplayName) for this property is "description".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :DisplayName

Description :Specifies the display name of the object. This parameter sets the DisplayName property of the object. The LDAP Display Name (ldapDisplayName) for this property is "displayName".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :Enabled

Description :Specifies if an account is enabled. An enabled account requires a password. This parameter sets the Enabled property for an account object. This parameter also sets the ADS_UF_ACCOUNTDISABLE flag of the Active Directory User Account Control (UAC) attribute. Possible values for this parameter include:

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :HomePage

Description :Specifies the URL of the home page of the object. This parameter sets the homePage property of an Active Directory object. The LDAP Display Name (ldapDisplayName) for this property is "wwwHomePage".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :Instance

Description :Specifies an instance of a service account object to use as a template for a new service account object.

Required	false
Position	named
Default value	
Accept pipeline input?	false

Accept wildcard characters?	false
-----------------------------	-------

Parameter :KerberosEncryptionType

Description :Specifies whether an account supports Kerberos encryption types which are used during creation of service tickets. This value sets the encryption types supported flags of the Active Directory msDS-SupportedEncryptionTypes attribute. Possible values for this parameter are:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ManagedPasswordIntervalInDays

Description :Specifies the number of days for the password change interval. If set to 0 then the default is used. This can only be set on object creation. After that the setting is read only. This value returns the msDS-ManagedPasswordInterval of the group managed service account object.

Required	false
Position	named
Default value	30
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :Name

Description :Specifies the name of the object. This parameter sets the Name property of the Active Directory object. The LDAP Display Name (ldapDisplayName) of this property is "name".

Required	true
Position	2
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :OtherAttributes

Description :Specifies object attribute values for attributes that are not represented by cmdlet parameters. You can set one or more parameters at the same time with this parameter. If an attribute takes more than one value, you can assign multiple values. To identify an attribute, specify the LDAPDisplayName (IdapDisplayName) defined for it in the Active Directory schema.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PassThru

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Path

Description :Specifies the X.500 path of the Organizational Unit (OU) or container where the new object is created.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :PrincipalsAllowedToDelegateToAccount

Description :Specifies the accounts which can act on the behalf of users to services running as this Managed Service Account or Group Managed Service Account. This parameter sets the msDS-AllowedToActOnBehalfOfOtherIdentity attribute of the object.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :PrincipalsAllowedToRetrieveManagedPassword

Description :Specifies the membership policy for systems which can use a group managed service account. For a service to run under a group managed service account, the system must be in the membership policy of the account. This parameter sets the msDS-GroupMSAMembership attribute of a group managed service account object. This parameter should be set to the principals allowed to use this group managed service account.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :RestrictToOutboundAuthenticationOnly

Description :Switch which is used to create a group managed service account which on success can be used by a service for successful outbound authentication requests only. This allows creating a group managed service account without the parameters required for successful inbound authentication.

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :RestrictToSingleComputer

Description :Switch which is used to create a managed service account that can be used only for a single computer. These managed service accounts which are linked to a single computer account were introduced in Windows Server 2008 R2.

Required	true
----------	------

Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**SamAccountName**

Description :Specifies the Security Account Manager (SAM) account name of the user, group, computer, or service account. The maximum length of the description is 256 characters. To be compatible with older operating systems, create a SAM account name that is 20 characters or less. This parameter sets the SAMAccountName for an account object. The LDAP display name (ldapDisplayName) for this property is "sAMAccountName".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**ServicePrincipalNames**

Description :Specifies the service principal names for the account. This parameter sets the ServicePrincipalNames property of the account. The LDAP display name (ldapDisplayName) for this property is servicePrincipalName. This parameter uses the following syntax to add remove, replace or clear service principal name values.

Required	false
----------	-------

Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :TrustedForDelegation

Description :Specifies whether an account is trusted for Kerberos delegation. A service that runs under an account that is trusted for Kerberos delegation can assume the identity of a client requesting the service. This parameter sets the TrustedForDelegation property of an account object. This value also sets the ADS_UF_TRUSTED_FOR_DELEGATION flag of the Active Directory User Account Control attribute. Possible values for this parameter are:

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :Confirm

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :WhatIf

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A managed service account object that is a template for the new managed service account object is received by the Instance parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADServiceAccount

Outputs

Returns the new managed service account object when the PassThru parameter is specified. By default, this cmdlet does not generate any output.

Type : None or Microsoft.ActiveDirectory.Management.ADServiceAccount

Notes

Examples

----- EXAMPLE 1 -----

Description

Create a new enabled managed service account in AD DS.

```
C:\PS>New-ADServiceAccount service1 -DNSHostName  
service1.contoso.com -Enabled $true
```

----- EXAMPLE 2 -----

Description

Create a new managed service account and register its service principal name.

```
C:\PS>New-ADServiceAccount service1 -ServicePrincipalNames  
"MSSQLSVC/Machine3.corp.contoso.com" -DNSHostName  
service1.contoso.com
```

----- EXAMPLE 3 -----

Description

Create a new managed service account and restrict its use to only a single computer.

```
C:\PS>New-ADServiceAccount service1 -RestrictToSingleComputer
```

----- EXAMPLE 4 -----

Description

Create a new managed service account and restrict its use to only outbound authentication.

```
C:\PS>New-ADServiceAccount service1 -  
RestrictToOutboundAuthenticationOnly
```

Cmdlet: New-ADUser

Synops

Creates a new Active Directory user.

Syntax

```
New-ADUser [-Name] <String> [-AccountExpirationDate <DateTime>]
    [-AccountNotDelegated <Boolean>] [-AccountPassword
<SecureString>]
    [-AllowReversiblePasswordEncryption <Boolean>] [-
AuthenticationPolicy
    <ADAuthenticationPolicy>] [-AuthenticationPolicySilo
    <ADAuthenticationPolicySilo>] [-AuthType {Negotiate | Basic}]

    [-CannotChangePassword <Boolean>] [-Certificates
<X509Certificate[]>]
    [-ChangePasswordAtLogon <Boolean>] [-City <String>] [-Company
<String>]
    [-CompoundIdentitySupported <Boolean>] [-Country <String>] [-
Credential
    <PSCredential>] [-Department <String>] [-Description
<String>]
    [-DisplayName <String>] [-Division <String>] [-EmailAddress
<String>]
    [-EmployeeID <String>] [-EmployeeNumber <String>] [-Enabled
<Boolean>]
    [-Fax <String>] [-GivenName <String>] [-HomeDirectory
<String>]
    [-HomeDrive <String>] [-HomePage <String>] [-HomePhone
<String>]
    [-Initials <String>] [-Instance <ADUser>] [-
KerberosEncryptionType {None |
    DES | RC4 | AES128 | AES256}] [-LogonWorkstations <String>]
[-Manager
    <ADUser>] [-MobilePhone <String>] [-Office <String>] [-
OfficePhone
    <String>] [-Organization <String>] [-OtherAttributes
<Hashtable>]
    [-OtherName <String>] [-PassThru] [-PasswordNeverExpires
<Boolean>]
```

```

    [-PasswordNotRequired <Boolean>] [-Path <String>] [-POBox
<String>]
    [-PostalCode <String>] [-PrincipalsAllowedToDelegateToAccount
    <ADPrincipal[]>] [-ProfilePath <String>] [-SamAccountName
<String>]
    [-ScriptPath <String>] [-Server <String>] [-
ServicePrincipalNames
    <String[]>] [-SmartcardLogonRequired <Boolean>] [-State
<String>]
    [-StreetAddress <String>] [-Surname <String>] [-Title
<String>]
    [-TrustedForDelegation <Boolean>] [-Type <String>] [-
UserPrincipalName
    <String>] [-Confirm] [-WhatIf] [<CommonParameters>]

```

Description

The New-ADUser cmdlet creates a new Active Directory user. You can set commonly used user property values by using the cmdlet parameters.

Property values that are not associated with cmdlet parameters can be set by using the OtherAttributes parameter. When using this parameter be sure to place single quotes around the attribute name as in the following example.

```

New-ADUser -SamAccountName "glenjohn" -GivenName "Glen" -Surname "John" -
DisplayName "Glen John" -Path 'CN=Users,DC=fabrikam,DC=local' -OtherAttributes
@{'msDS-PhoneticDisplayName'="GlenJohn"}

```

You must specify the SAMAccountName parameter to create a user.

You can use the New-ADUser cmdlet to create different types of user accounts such as iNetOrgPerson accounts. To do this in AD DS, set the Type parameter to the LDAP display name for the type of account you want to create. This type can be any class in the Active Directory schema that is a subclass of user and that has an object category of person.

The Path parameter specifies the container or organizational unit (OU) for the new user. When you do not specify the Path parameter, the cmdlet creates a user object in the default container for user objects in the domain.

The following methods explain different ways to create an object by using this cmdlet.

Method 1: Use the New-ADUser cmdlet, specify the required parameters, and set any additional property values by using the cmdlet parameters.

Method 2: Use a template to create the new object. To do this, create a new user object

or retrieve a copy of an existing user object and set the Instance parameter to this object. The object provided to the Instance parameter is used as a template for the new object. You can override property values from the template by setting cmdlet parameters. For examples and more information, see the Instance parameter description for this cmdlet.

Method 3: Use the Import-CSV cmdlet with the New-ADUser cmdlet to create multiple Active Directory user objects. To do this, use the Import-CSV cmdlet to create the custom objects from a comma-separated value (CSV) file that contains a list of object properties. Then pass these objects through the pipeline to the New-ADUser cmdlet to create the user objects.

Parameters

Parameter :**AccountExpirationDate**

Description :Specifies the expiration date for an account. When you set this parameter to 0, the account never expires. This parameter sets the AccountExpirationDate property of an account object. The LDAP Display name (IdapDisplayName) for this property is accountExpires.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**AccountNotDelegated**

Description :Specifies whether the security context of the user is delegated to a service. When this parameter is set to true, the security context of the account is not delegated to a service even when the service account is set as trusted for Kerberos delegation. This parameter sets the AccountNotDelegated property for an Active Directory account. This parameter also sets the ADS_UF_NOT_DELEGATED flag of the Active Directory User Account Control (UAC) attribute. Possible values for this parameter include

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**AccountPassword**

Description :Specifies a new password value for an account. This value is stored as an encrypted string.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**AllowReversiblePasswordEncryption**

Description :Specifies whether reversible password encryption is allowed for the account. This parameter sets the AllowReversiblePasswordEncryption property of the account. This parameter also sets the ADS_UF_ENCRYPTED_TEXT_PASSWORD_ALLOWED flag of the Active Directory User Account Control (UAC) attribute. Possible values for this parameter include:

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**AuthenticationPolicy**

Description :

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**AuthenticationPolicySilo**

Description :

Required	false
Position	named
Default value	

Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**CannotChangePassword**

Description :Specifies whether the account password can be changed. This parameter sets the CannotChangePassword property of an account. Possible values for this parameter include:

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**Certificates**

Description :Modifies the DER-encoded X.509v3 certificates of the account. These certificates include the public key certificates issued to this account by the Microsoft Certificate Service. This parameter sets the Certificates property of the account object. The LDAP Display Name (ldapDisplayName) for this property is "userCertificate".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**ChangePasswordAtLogon**

Description :Specifies whether a password must be changed during the next logon attempt. Possible values for this parameter include:

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :City

Description :Specifies the user's town or city. This parameter sets the City property of a user. The LDAP display name (ldapDisplayName) of this property is "I".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :Company

Description :Specifies the user's company. This parameter sets the Company property of a user object. The LDAP display name (ldapDisplayName) of this property is "company".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :CompoundIdentitySupported

Description :Specifies whether an account supports Kerberos service tickets which includes the authorization data for the user's device. This value sets the compound identity supported flag of the Active Directory msDS-SupportedEncryptionTypes attribute. Possible values for this parameter are:

Required	false
Position	named

Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**Country**

Description :Specifies the country or region code for the user's language of choice. This parameter sets the Country property of a user object. The LDAP Display Name (ldapDisplayName) of this property is "c". This value is not used by Windows 2000.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Department**

Description :Specifies the user's department. This parameter sets the Department property of a user. The LDAP Display Name (ldapDisplayName) of this property is "department".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :Description

Description :Specifies a description of the object. This parameter sets the value of the Description property for the object. The LDAP Display Name (ldapDisplayName) for this property is "description".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :DisplayName

Description :Specifies the display name of the object. This parameter sets the DisplayName property of the object. The LDAP Display Name (ldapDisplayName) for this property is "displayName".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :Division

Description :Specifies the user's division. This parameter sets the Division property of a user object. The LDAP Display Name (ldapDisplayName) of this property is "division".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :EmailAddress

Description :Specifies the user's e-mail address. This parameter sets the EmailAddress property of a user object. The LDAP Display Name (ldapDisplayName) of this property is "mail".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :EmployeeID

Description :Specifies the user's employee ID. This parameter sets the EmployeeID property of a user object. The LDAP Display Name (IdapDisplayName) of this property is "employeeID".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :EmployeeNumber

Description :Specifies the user's employee number. This parameter sets the EmployeeNumber property of a user object. The LDAP Display Name (IdapDisplayName) of this property is "employeeNumber".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :Enabled

Description :Specifies if an account is enabled. An enabled account requires a password. This parameter sets the Enabled property for an account object. This parameter also sets the ADS_UF_ACCOUNTDISABLE flag of the Active Directory User Account Control (UAC) attribute. Possible values for this parameter include:

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)

Accept wildcard characters?	false
-----------------------------	-------

Parameter :Fax

Description :Specifies the user's fax phone number. This parameter sets the Fax property of a user object. The LDAP Display Name (ldapDisplayName) of this property is "facsimileTelephoneNumber".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :GivenName

Description :Specifies the user's given name. This parameter sets the GivenName property of a user object. The LDAP Display Name (ldapDisplayName) of this property is "givenName".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :HomeDirectory

Description :Specifies a user's home directory. This parameter sets the HomeDirectory property of a user object. The LDAP Display Name (ldapDisplayName) for this property is "homeDirectory".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :HomeDrive

Description :Specifies a drive that is associated with the UNC path defined by the

HomeDirectory property. The drive letter is specified as "<DriveLetter>:" where <DriveLetter> indicates the letter of the drive to associate. The <DriveLetter> must be a single, uppercase letter and the colon is required. This parameter sets the HomeDrive property of the user object. The LDAP Display Name (ldapDisplayName) for this property is "homeDrive".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**HomePage**

Description :Specifies the URL of the home page of the object. This parameter sets the homePage property of an Active Directory object. The LDAP Display Name (ldapDisplayName) for this property is "wwwHomePage".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**HomePhone**

Description :Specifies the user's home telephone number. This parameter sets the HomePhone property of a user. The LDAP Display Name (ldapDisplayName) of this property is "homePhone".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**Initials**

Description :Specifies the initials that represent part of a user's name. You can use this value for the user's middle initial. This parameter sets the Initials property of a user. The LDAP Display Name (ldapDisplayName) of this property is "initials".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :Instance

Description :Specifies an instance of a user object to use as a template for a new user object.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :KerberosEncryptionType

Description :Specifies whether an account supports Kerberos encryption types which are used during creation of service tickets. This value sets the encryption types supported flags of the Active Directory msDS-SupportedEncryptionTypes attribute. Possible values for this parameter are:

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :LogonWorkstations

Description :Specifies the computers that the user can access. To specify more than one computer, create a single comma-separated list. You can identify a computer by using the Security Accounts Manager (SAM) account name (sAMAccountName) or the DNS host name of the computer. The SAM account name is the same as the NetBIOS name of the computer.

Required	false
Position	named

Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**Manager**

Description :Specifies the user's manager. This parameter sets the Manager property of a user. This parameter is set by providing one of the following property values. Note: The identifier in parentheses is the LDAP display name for the property.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**MobilePhone**

Description :Specifies the user's mobile phone number. This parameter sets the MobilePhone property of a user object. The LDAP Display Name (ldapDisplayName) of this property is "mobile".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**Name**

Description :Specifies the name of the object. This parameter sets the Name property of the Active Directory object. The LDAP Display Name (ldapDisplayName) of this property is "name".

Required	true
Position	2
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :Office

Description :Specifies the location of the user's office or place of business. This parameter sets the Office property of a user object. The LDAP display name (ldapDisplayName) of this property is "office".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :OfficePhone

Description :Specifies the user's office telephone number. This parameter sets the OfficePhone property of a user object. The LDAP display name (ldapDisplayName) of this property is "telephoneNumber".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :Organization

Description :Specifies the user's organization. This parameter sets the Organization property of a user object. The LDAP display name (ldapDisplayName) of this property is "o".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :OtherAttributes

Description :Specifies object attribute values for attributes that are not represented by cmdlet parameters. You can set one or more parameters at the same time with this parameter. If an attribute takes more than one value, you can assign multiple values. To identify an attribute, specify the LDAPDisplayName (ldapDisplayName) defined for it in

the Active Directory schema.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :OtherName

Description :Specifies a name in addition to a user's given name and surname, such as the user's middle name. This parameter sets the OtherName property of a user object. The LDAP Display Name (ldapDisplayName) of this property is "middleName".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :POBox

Description :Specifies the user's post office box number. This parameter sets the POBox property of a user object. The LDAP Display Name (ldapDisplayName) of this property is "postOfficeBox".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :PassThru

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	

Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PasswordNeverExpires

Description :Specifies whether the password of an account can expire. This parameter sets the PasswordNeverExpires property of an account object. This parameter also sets the ADS_UF_DONT_EXPIRE_PASSWD flag of the Active Directory User Account Control attribute. Possible values for this parameter include:

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :PasswordNotRequired

Description :Specifies whether the account requires a password. A password is not required for a new account. This parameter sets the PasswordNotRequired property of an account object.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :Path

Description :Specifies the X.500 path of the Organizational Unit (OU) or container where the new object is created.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :PostalCode

Description :Specifies the user's postal code or zip code. This parameter sets the PostalCode property of a user. The LDAP Display Name (ldapDisplayName) of this property is "postalCode".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**PrincipalsAllowedToDelegateToAccount**

Description :This parameter sets the msDS-AllowedToActOnBehalfOfOtherIdentity attribute of a computer account object.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**ProfilePath**

Description :Specifies a path to the user's profile. This value can be a local absolute path or a Universal Naming Convention (UNC) path. This parameter sets the ProfilePath property of the user object. The LDAP display name (ldapDisplayName) for this property is "profilePath".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :**SamAccountName**

Description :Specifies the Security Account Manager (SAM) account name of the user, group, computer, or service account. The maximum length of the description is 256 characters. To be compatible with older operating systems, create a SAM account name that is 20 characters or less. This parameter sets the SAMAccountName for an account object. The LDAP display name (ldapDisplayName) for this property is

"sAMAccountName".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :ScriptPath

Description :Specifies a path to the user's log on script. This value can be a local absolute path or a Universal Naming Convention (UNC) path. This parameter sets the ScriptPath property of the user. The LDAP display name (IdapDisplayName) for this property is "scriptPath".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ServicePrincipalNames

Description :Specifies the service principal names for the account. This parameter sets the ServicePrincipalNames property of the account. The LDAP display name (IdapDisplayName) for this property is servicePrincipalName. This parameter uses the following syntax to add remove, replace or clear service principal name values.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :SmartcardLogonRequired

Description :Specifies whether a smart card is required to logon. This parameter sets the SmartCardLoginRequired property for a user. This parameter also sets the ADS_UF_SMARTCARD_REQUIRED flag of the Active Directory User Account Control attribute. Possible values for this parameter are:

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :State

Description :Specifies the user's or Organizational Unit's state or province. This parameter sets the State property of a User or Organizational Unit object. The LDAP display name (ldapDisplayName) of this property is "st".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :StreetAddress

Description :Specifies the user's street address. This parameter sets the StreetAddress property of a user object. The LDAP display name (ldapDisplayName) of this property is "streetAddress".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)

Accept wildcard characters?	false
-----------------------------	-------

Parameter :Surname

Description :Specifies the user's last name or surname. This parameter sets the Surname property of a user object. The LDAP display name (ldapDisplayName) of this property is "sn".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :Title

Description :Specifies the user's title. This parameter sets the Title property of a user object. The LDAP display name (ldapDisplayName) of this property is "title".

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :TrustedForDelegation

Description :Specifies whether an account is trusted for Kerberos delegation. A service that runs under an account that is trusted for Kerberos delegation can assume the identity of a client requesting the service. This parameter sets the TrustedForDelegation property of an account object. This value also sets the ADS_UF_TRUSTED_FOR_DELEGATION flag of the Active Directory User Account Control attribute. Possible values for this parameter are:

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :Type

Description :Specifies the type of object to create. Set the Type parameter to the LDAP display name of the Active Directory Schema Class that represents the type of object that you want to create. The selected type must be a subclass of the User schema class. If this parameter is not specified it will default to "User".

Required	false
Position	named
Default value	user
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :UserPrincipalName

Description :Each user account has a user principal name (UPN) in the format <user>@<DNS-domain-name>. A UPN is a friendly name assigned by an administrator that is shorter than the LDAP distinguished name used by the system and easier to remember. The UPN is independent of the user object's DN, so a user object can be moved or renamed without affecting the user logon name. When logging on using a UPN, users no longer have to choose a domain from a list on the logon dialog box.

Required	false
Position	named
Default value	
Accept pipeline input?	True (ByPropertyName)
Accept wildcard characters?	false

Parameter :Confirm

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :WhatIf

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A user object that is a template for the new user object is received by the Instance parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADUser

Outputs

Returns the new user object when the PassThru parameter is specified. By default, this cmdlet does not generate any output.

Type : None or Microsoft.ActiveDirectory.Management.ADUser

Notes

Examples

----- EXAMPLE 1 -----

Description

Create a new user named 'GlenJohn' with a certificate imported from the file "export.cer".

```
C:\PS>New-ADUser GlenJohn -Certificate (new-object
System.Security.Cryptography.X509Certificates.X509Certificate
-ArgumentList "export.cer")
```

----- EXAMPLE 2 -----

Description

Create a new user named 'GlenJohn' and set the title and mail properties on the new object.

```
C:\PS>New-ADUser GlenJohn -OtherAttributes
@{title="director";mail="glenjohn@fabrikam.com"}
```

----- EXAMPLE 3 -----

Description

Create a new inetOrgPerson named 'GlenJohn' on an AD LDS instance.

```
C:\PS>New-ADUser GlenJohn -Type inetOrgPerson -Path "DC=AppNC"  
-server lds.Fabrikam.com:50000
```

Cmdlet: Remove-ADAuthenticationPolicy

Synops

Removes an Active Directory Domain Services authentication policy object.

Syntax

```
Remove-ADAuthenticationPolicy [-Identity]
<ADAuthenticationPolicy>
    [-AuthType {Negotiate | Basic}] [-Credential <PSCredential>]
[-Server
    <String>] [-Confirm] [-WhatIf] [<CommonParameters>]
```

Description

The Remove-ADAuthenticationPolicy cmdlet removes an Active Directory® Domain Services authentication policy.

The Identity parameter specifies the Active Directory Domain Services authentication policy to remove. You can identify an authentication policy by its distinguished name (DN), GUID or name. You can also use the Identity parameter to specify a variable that contains an authentication policy object, or you can use the pipeline operator to pass an authentication policy object to the Identity parameter.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. The acceptable values for this parameter are:

--Negotiate or 0

--Basic or 1

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Manage ment.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies a user account that has permission to perform the task. The default is the current user. Type a user name, such as "User01" or "Domain01\User01", or enter a PScredential object, such as one generated by the Get-Credential cmdlet.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Identity**

Description :Specifies an Active Directory Domain Services authentication policy object. Specify the authentication policy object in one of the following formats:

--Distinguished Name

--GUID

--Name

Required	true
Position	0
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to which to connect, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false

Accept wildcard characters?	false
-----------------------------	-------

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

This cmdlet accepts an authentication policy object.

Type : None or Microsoft.ActiveDirectory.Management.ADAuthenticationPolicy

Examples

Example 1: Remove an authentication policy by specifying a name

This command removes the authentication policy specified by the Identity parameter.

```
PS C:\> Remove-ADAuthenticationPolicy -Identity
AuthenticationPolicy01
```

Example 2: Remove multiple authentication policies

This command uses the Get-ADAuthenticationPolicy cmdlet with the Filter parameter to get all authentication policies that are not enforced. The pipeline operator then passes the result of the filter to the Remove-ADAuthenticationPolicy cmdlet.

```
PS C:\> Get-ADAuthenticationPolicy -Filter 'Enforce -eq  
$false' | Remove-ADAuthenticationPolicy
```

Cmdlet: Remove-ADAuthenticationPolicySilo

Synops

Removes an Active Directory Domain Services authentication policy silo object.

Syntax

```
Remove-ADAuthenticationPolicySilo [-Identity]
<ADAuthenticationPolicySilo>
    [-AuthType {Negotiate | Basic}] [-Credential <PSCredential>]
[-Server
    <String>] [-Confirm] [-WhatIf] [<CommonParameters>]
```

Description

The Remove-ADAuthenticationPolicySilo cmdlet removes an Active Directory® Domain Services authentication policy silo object.

The Identity parameter specifies the Active Directory Domain Services authentication policy silo to remove. You can identify an authentication policy silo by its distinguished name (DN), GUID or name. You can also use the Identity parameter to specify a variable that contains an authentication policy silo object, or you can use the pipeline operator to pass an authentication policy silo object to the Identity parameter.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. The acceptable values for this parameter are:

--Negotiate or 0

--Basic or 1

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Manage ment.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies a user account that has permission to perform the task. The default is the current user. Type a user name, such as "User01" or "Domain01\User01", or enter a PSCredential object, such as one generated by the Get-Credential cmdlet.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory Domain Services authentication policy silo object. Specify the authentication policy silo object in one of the following formats:

--Distinguished Name

--GUID

--Name

Required	true
Position	0
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to which to connect, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false

Accept wildcard characters?	false
-----------------------------	-------

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

This cmdlet accepts an authentication policy silo object.

Type : None or Microsoft.ActiveDirectory.Management.ADAuthenticationPolicySilo

Examples

Example 1: Remove an authentication policy silo object

This command removes the authentication policy silo object named AuthenticationPolicySilo01.

```
PS C:\>Remove-ADAuthenticationPolicySilo -Identity
AuthenticationPolicySilo01
```

Example 2: Remove all authentication policy silo objects that match a filter

This command uses the Get-ADAuthenticationPolicySilo cmdlet with the Filter parameter to get all authentication policy silos that are not enforced. The pipeline operator then passes the result of the filter to the Remove-ADAuthenticationPolicySilo cmdlet.

```
PS C:\>Get-ADAuthenticationPolicySilo -Filter 'Enforce -eq $False' | Remove-ADAuthenticationPolicySilo
```

Example 3: Remove all matching authentication policy silos without confirmation

This command uses the Get-ADAuthenticationPolicySilo cmdlet with the Filter parameter to get all authentication policy silos that are not enforced. The pipeline operator then passes the result of the filter to the Remove-ADAuthenticationPolicySilo cmdlet. However, because the Confirm parameter is set to \$False, no confirmation messages appear.

```
PS C:\>Get-ADAuthenticationPolicySilo -Filter 'Enforce -eq $False' | Remove-ADAuthenticationPolicySilo -Confirm:$False
```

Cmdlet: Remove-ADCentralAccessPolicy

Synops

Removes a central access policy from Active Directory.

Syntax

```
Remove-ADCentralAccessPolicy [-Identity] <ADCentralAccessPolicy>
    [-AuthType {Negotiate | Basic}] [-Credential <PSCredential>]
[-Server
    <String>] [-Confirm] [-WhatIf] [<CommonParameters>]
```

Description

The Remove-ADCentralAccessPolicy cmdlet can be used to remove a central access policy from Active Directory.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named

Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Confirm

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :WhatIf

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

An Active Directory object is received by the Identity parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADCentralAccessPolicy

Notes

Examples

----- EXAMPLE 1 -----

Description

Removes the central access policy named "Finance Policy".

```
C:\PS>Remove-ADCentralAccessPolicy "Finance Policy"
```

----- EXAMPLE 2 -----

Description

Get all resource property lists whose name starts with 'Finance' and then remove them.

```
C:\PS>Get-ADCentralAccessPolicy -Filter 'Name -Like "Finance*"' | Remove-ADCentralAccessPolicy
```

Cmdlet: Remove-ADCentralAccessPolicyMember

Synops

Removes central access rules from a central access policy in Active Directory.

Syntax

```
Remove-ADCentralAccessPolicyMember [-Identity]
<ADCentralAccessPolicy>
    [-Members] <ADCentralAccessRule[]> [-AuthType {Negotiate |
Basic}]
    [-Credential <PSCredential>] [-PassThru] [-Server <String>]
[-Confirm]
    [-WhatIf] [<CommonParameters>]
```

Description

The Remove-ADCentralAccessPolicyMember cmdlet removes central access rules from a central access policy in Active Directory.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Manage ment.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Members

Description :Specifies a set of central access rule (CAR) objects in a comma-separated list to add to a central access policy (CAP).

Required	true
Position	2
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PassThru

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A ADCentralAccessPolicy object is received by the Identity parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADCentralAccessPolicy

Outputs

Returns the modified ADCentralAccessPolicy object when the PassThru parameter is specified. By default, this cmdlet does not generate any output.

Type : None or Microsoft.ActiveDirectory.ADCentralAccessPolicy

Notes

Examples

----- EXAMPLE 1 -----

Description

Remove the resource property named 'Finance Documents Rule' from the central access policy named 'Finance Policy'.

```
C:\PS>Remove-ADCentralAccessPolicyMember "Finance Policy" -  
Members "Finance Documents Rule"
```

----- EXAMPLE 2 -----

Description

Remove the central access rules named 'Finance Documents Rule' and 'Corporate Documents Rule' from the central access policy 'Finance Policy'.

```
C:\PS>Remove-ADCentralAccessPolicyMember "Finance Policy"  
"Finance Documents Rule", "Corporate Documents Rule"
```

----- EXAMPLE 3 -----

Description

Gets the central access policies that begin with "Corporate" in its name, and then pipes that result to the Remove-ADCentralAccessPolicyMember, which then removes the central access rules named 'Finance Documents Rule' and 'Corporate Documents Rule' from the policies.

```
C:\PS>Get-ADCentralAccessPolicy -Filter { Name -like  
"Corporate*" } | Remove-ADCentralAccessPolicyMember "Finance  
Documents Rule", "Corporate Documents Rule"
```

Cmdlet: Remove-ADCentralAccessRule

Synops

Removes a central access rule from Active Directory.

Syntax

```
Remove-ADCentralAccessRule [-Identity] <ADCentralAccessRule> [-AuthType  
    {Negotiate | Basic}] [-Credential <PSCredential>] [-Server  
<String>]  
    [-Confirm] [-WhatIf] [<CommonParameters>]
```

Description

The Remove-ADCentralAccessRule cmdlet can be used to remove a central access rule from Active Directory.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
----------	-------

Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Confirm

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :WhatIf

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

An Active Directory object is received by the Identity parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADCentralAccessPolicyEntry

Notes

Examples

----- EXAMPLE 1 -----

Description

Removes the specified central access rule ("Finance Documents Rule").

```
C:\PS>Remove-ADCentralAccessRule "Finance Documents Rule"
```

----- EXAMPLE 2 -----

Description

Removes the central access rules with 'Department' in their resource conditions.

```
C:\PS>Get-ADCentralAccessRule -Filter { ResourceCondition -  
like "*Department*" } | Remove-ADCentralAccessRule
```

Cmdlet: Remove-ADClaimTransformPolicy

Synops

Removes a claim transformation policy object from Active Directory.

Syntax

```
Remove-ADClaimTransformPolicy [-Identity]
<ADClaimTransformPolicy>
    [-AuthType {Negotiate | Basic}] [-Credential <PSCredential>]
[-Server
    <String>] [-Confirm] [-WhatIf] [<CommonParameters>]
```

Description

The Remove-ADClaimTransformPolicy cmdlet can be used to remove a claim transformation policy object from Active Directory.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
----------	-------

Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Confirm

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :WhatIf

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A claim transform policy object is received by the Identity parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADClaimTransformPolicy

Notes

Examples

----- EXAMPLE 1 -----

Description

Removes the claims transformation policy with the name 'DenyAllPolicy'.

```
C:\PS>Remove-ADClaimTransformPolicy DenyAllPolicy
```

----- EXAMPLE 2 -----

Description

Gets all claims transformation policies that were marked in their description as "For testing only" and removes them.

```
C:\PS>Get-ADClaimTransformPolicy -Filter {Description -eq "For  
testing only."} | Remove-ADClaimTransformPolicy
```

Cmdlet: Remove-ADClaimType

Synops

Removes a claim type from Active Directory.

Syntax

```
Remove-ADClaimType [-Identity] <ADClaimType> [-AuthType  
{Negotiate |  
    Basic}] [-Credential <PSCredential>] [-Force] [-Server  
<String>]  
    [-Confirm] [-WhatIf] [<CommonParameters>]
```

Description

The Remove-ADClaimType cmdlet can be used to remove a claim type from Active Directory.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Manage ment.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
----------	-------

Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Force

Description :Allows the cmdlet to remove objects that cannot otherwise be changed due to some attribute validation failure.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Notes

Examples

----- EXAMPLE 1 -----

Description

Remove the claim type with the name 'Title'.

```
C:\PS>Remove-ADClaimType Title
```

----- EXAMPLE 2 -----

Description

Get all the disabled claim types and remove them.

```
C:\PS>Get-ADClaimType -Filter { Enabled -eq $FALSE } | Remove-ADClaimType
```

Cmdlet: Remove-ADComputer

Synops

Removes an Active Directory computer.

Syntax

```
Remove-ADComputer [-Identity] <ADComputer> [-AuthType {Negotiate  
| Basic}]  
    [-Credential <PSCredential>] [-Partition <String>] [-Server  
<String>]  
    [-Confirm] [-WhatIf] [<CommonParameters>]
```

Description

The Remove-ADComputer cmdlet removes an Active Directory computer.

The Identity parameter specifies the Active Directory computer to remove. You can identify a computer by its distinguished name Members (DN), GUID, security identifier (SID), or Security Accounts Manager (SAM) account name. You can also set the Identity parameter to a computer object variable, such as \$<localComputerObject>, or you can pass a computer object through the pipeline to the Identity parameter. For example, you can use the Get-ADComputer cmdlet to retrieve a computer object and then pass the object through the pipeline to the Remove-ADComputer cmdlet.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Manage ment.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Identity**

Description :Specifies an Active Directory computer object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :**Partition**

Description :Specifies the distinguished name of an Active Directory partition. The distinguished name must be one of the naming contexts on the current directory server. The cmdlet searches this partition to find the object defined by the Identity parameter.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A computer object is received by the Identity parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADComputer

Notes

Examples

----- EXAMPLE 1 -----

Description

Remove one particular computer.

```
C:\PS>Remove-ADComputer -Identity "FABRIKAM-SRV4"
```

----- EXAMPLE 2 -----

Description

Remove all computers in a given location.

```
C:\PS>Get-ADComputer -Filter 'Location -eq "NA/HQ/Building A"'
| Remove-ADComputer

Confirm
Are you sure you want to perform this action?
Performing operation "Remove" on Target "CN=LabServer-
01,CN=Computers,DC=Fabrikam,DC=com".
[Y] Yes [A] Yes to All [N] No [L] No to All [S] Suspend
[?] Help (default is "Y"): a
```

----- EXAMPLE 3 -----

Description

Remove all computers from a given location and disables the confirm prompt.

```
C:\PS>Get-ADComputer -Filter 'Location -eq "NA/HQ/Building A"'
| Remove-ADComputer -confirm:$false
```

----- EXAMPLE 4 -----

Description

Remove a computer and all leaf objects that are located underneath it in the directory. (Note that only a few computer objects create child objects, such as servers running the Clustering service. This example can be useful for removing those objects and any child objects owned by and associated with them.)

```
C:\PS>Get-ADComputer "FABRIKAM-SRV4" | Remove-ADObject -
Recursive
```

Cmdlet: Remove-ADComputerServiceAccount

Synops

Removes one or more service accounts from a computer.

Syntax

```
Remove-ADComputerServiceAccount [-Identity] <ADComputer> [-  
ServiceAccount]  
    <ADServiceAccount[]> [-AuthType {Negotiate | Basic}] [-  
Credential  
    <PSCredential>] [-Partition <String>] [-PassThru] [-Server  
<String>]  
    [-Confirm] [-WhatIf] [<CommonParameters>]
```

Description

The Remove-ADComputerServiceAccount cmdlet removes service accounts from an Active Directory computer.

The Computer parameter specifies the Active Directory computer that contains the service accounts to remove. You can identify a computer by its distinguished name (DN), GUID, security identifier (SID) or Security Accounts Manager (SAM) account name. You can also set the Computer parameter to a computer object variable, such as \$<localComputerobject>, or pass a computer object through the pipeline to the Computer parameter. For example, you can use the Get-ADComputer cmdlet to retrieve a computer object and then pass the object through the pipeline to the Remove-ADComputerServiceAccount cmdlet.

The ServiceAccount parameter specifies the service accounts to remove. You can identify a service account by its distinguished name (DN), GUID, security identifier (SID) or security accounts manager (SAM) account name. You can also specify service account object variables, such as \$<localServiceAccountObject>. If you are specifying more than one service account, use a comma-separated list.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory computer object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Partition

Description :Specifies the distinguished name of an Active Directory partition. The distinguished name must be one of the naming contexts on the current directory server. The cmdlet searches this partition to find the object defined by the Identity parameter.

Required	false
Position	named
Default value	

Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PassThru

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ServiceAccount

Description :Specifies one or more Active Directory service accounts. You can identify a service account by using one of the following property values:

Required	true
Position	2
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Confirm

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A computer object is received by the Computer parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADComputer

Outputs

Returns an object that represents the modified computer object when the PassThru parameter is specified. By default, this cmdlet does not generate any output.

Type : None or Microsoft.ActiveDirectory.Management.ADComputer

Notes

Examples

----- EXAMPLE 1 -----

Description

Remove a service account 'SvcAcct1' from a Computer Account 'ComputerAcct1'.

```
C:\PS>Remove-ADComputerServiceAccount -Computer ComputerAcct1
-serviceAccount SvcAcct1
```

----- EXAMPLE 2 -----

Description

Remove service accounts: 'SvcAcct1,SvcAcct2' from a Computer Account:
'ComputerAcct1'.

```
C:\PS>Remove-ADComputerServiceAccount -Computer ComputerAcct1  
-serviceAccount SvcAcct1,SvcAcct2
```

Cmdlet: Remove-ADDomainControllerPasswordReplicationPolicy

Synops

Removes users, computers and groups from the allowed or denied list of a read-only domain controller password replication policy.

Syntax

```
Remove-ADDomainControllerPasswordReplicationPolicy [-Confirm] [-WhatIf]  
    [<CommonParameters>]
```

Description

The Remove-ADDomainControllerPasswordReplicationPolicy cmdlet removes one or more users, computers and groups from the allowed or denied list of a read-only domain controller (RODC) password replication policy.

The Identity parameter specifies the RODC that uses the allowed and denied lists to apply the password replication policy. You can identify a domain controller by its GUID, IPV4Address, global IPV6Address, or DNS host name. You can also identify a domain controller by the name of the server object that represents the domain controller, the Distinguished Name (DN) of the NTDS settings object or the server object, the GUID of the NTDS settings object or the server object under the configuration partition, or the DN of the computer object that represents the domain controller. You can also set the Identity parameter to a domain controller object variable, such as \$<localDomainControllerObject>, or pass a domain controller object through the pipeline to the Identity parameter. For example, you can use the Get-ADDomainController cmdlet to retrieve a domain controller object and then pass the object through the pipeline to the Remove-ADDomainControllerPasswordReplicationPolicy cmdlet. You must provide a read-only domain controller.

The AllowedList parameters specify the users, computers and groups to remove from the allowed list. Similarly, the DeniedList parameter specifies the users, computers and groups to remove from the denied list. You must specify either one or both of the AllowedList and DeniedList parameters. You can identify a user, computer or group by distinguished name (DN), GUID, security identifier (SID) or security accounts manager (SAM) account name. You can also specify user, computer or group variables, such as \$<localUserObject>. If you are specifying more than one item, use a comma-separated list.

Parameters

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A read-only domain controller (RODC) object is received by the Identity parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADDomainController

Outputs

Returns the modified read-only domain controller object when the PassThru parameter is specified. By default, this cmdlet does not generate any output.

Type : None or Microsoft.ActiveDirectory.Management.ADDomainController

Notes

Examples

----- EXAMPLE 1 -----

Description

Remove the users with samAccountNames 'JesperAaberg' and 'AdrianaAdams' from the Allowed list on the RODC 'FABRIKAM-RODC1'.

```
C:\PS>Remove-ADDomainControllerPasswordReplicationPolicy -  
Identity "FABRIKAM-RODC1" -AllowedList "JesperAaberg",  
"AdrianaAdams"
```

----- EXAMPLE 2 -----

Description

Remove the users with samAccountNames 'MichaelAllen' and 'ElizabethAndersen' from the Denied list on the RODC 'FABRIKAM-RODC1'.

```
C:\PS>Remove-ADDomainControllerPasswordReplicationPolicy -  
Identity "FABRIKAM-RODC1" -DeniedList "MichaelAllen",  
"ElizabethAndersen"
```

Cmdlet: Remove-ADFineGrainedPasswordPolicy

Synops

Removes an Active Directory fine grained password policy.

Syntax

```
Remove-ADFineGrainedPasswordPolicy [-Identity]
    <ADFineGrainedPasswordPolicy> [-AuthType {Negotiate | Basic}]
[-Credential
    <PSCredential>] [-Server <String>] [-Confirm] [-WhatIf]
    [<CommonParameters>]
```

Description

The Remove-ADFineGrainedPasswordPolicy cmdlet removes an Active Directory fine grained password policy.

The Identity parameter specifies the Active Directory fine grained password policy to remove. You can identify a fine grained password policy by its distinguished name, or GUID. You can also set the Identity parameter to a fine grained password object variable, such as `$<localFineGrainedPasswordPolicyObject>`, or you can pass a fine grained password policy object through the pipeline to the Identity parameter. For example, you can use the Get-ADFineGrainedPasswordPolicy cmdlet to retrieve a fine grained password policy object and then pass the object through the pipeline to the Remove-ADFineGrainedPasswordPolicy cmdlet.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Manage ment.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory fine-grained password policy object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Confirm

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A fine grained password policy object is received by the Identity parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADFineGrainedPasswordPolicy

Notes

Examples

----- EXAMPLE 1 -----

Description

Remove the Fine Grained Password Policy object named 'MyPolicy'.

```
C:\PS>Remove-ADFineGrainedPasswordPolicy MyPolicy
```

----- EXAMPLE 2 -----

Description

Remove the Fine Grained Password Policy object with DistinguishedName
'CN=MyPolicy,CN=Password Settings
Container,CN=System,DC=FABRIKAM,DC=COM'.

```
C:\PS>Remove-ADFineGrainedPasswordPolicy -Identity  
'CN=MyPolicy,CN=Password Settings  
Container,CN=System,DC=FABRIKAM,DC=COM'
```

----- EXAMPLE 3 -----

Description

Remove all File Grained Password Policy objects that contain user in their names.

```
C:\PS>Get-ADFineGrainedPasswordPolicy -Filter {Name -like  
"*user*"} | Remove-ADFineGrainedPasswordPolicy
```

Cmdlet: Remove-ADFineGrainedPasswordPolicySubject

Synops

Removes one or more users from a fine grained password policy.

Syntax

```
Remove-ADFineGrainedPasswordPolicySubject [-Identity]
    <ADFineGrainedPasswordPolicy> [-Subjects] <ADPrincipal[]> [-
AuthType
    {Negotiate | Basic}] [-Credential <PSCredential>] [-Partition
<String>]
    [-PassThru] [-Server <String>] [-Confirm] [-WhatIf]
[<CommonParameters>]
```

Description

The Remove-ADFineGrainedPasswordPolicySubject cmdlet removes one or more global security groups and users from a fine grained password policy.

The Identity parameter specifies the fine grained password policy. You can identify a fine grained password policy by its distinguished name or GUID. You can also set the Identity parameter to a fine grained password policy object variable, such as

\$<localFineGrainedPasswordPolicyObject>, or pass a fine grained password policy object through the pipeline to the Identity parameter. For example, you can use the Get-ADFineGrainedPasswordPolicy cmdlet to retrieve a fine grained password policy object and then pass the object through the pipeline to the Remove-ADFineGrainedPasswordPolicySubject cmdlet.

The Subjects parameter specifies the users and groups to remove from the password policy. You can identify a user or group by its distinguished name (DN), GUID, security identifier (SID), security accounts manager (SAM) account name, or canonical name. You can also specify user or group object variables, such as \$<localUserObject>. If you are specifying more than one user or group, use a comma-separated list.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory fine-grained password policy object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Partition

Description :Specifies the distinguished name of an Active Directory partition. The distinguished name must be one of the naming contexts on the current directory server. The cmdlet searches this partition to find the object defined by the Identity parameter.

Required	false
Position	named

Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**PassThru**

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Subjects**

Description :Specifies one or more users or groups. To specify more than one user or group, use a comma-separated list. You can identify a user or group by one of the following property values.

Required	true
Position	2
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A fine grained password policy object is received by the Identity parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADFineGrainedPasswordPolicy

Outputs

Returns an object that represents the modified fine grained password policy object when the PassThru parameter is specified. By default, this cmdlet does not generate any output.

Type : None or Microsoft.ActiveDirectory.Management.ADFineGrainedPasswordPolicy

Notes

Examples

----- EXAMPLE 1 -----

Description

Remove the Fine-Grained Password Policy named 'DlgtAdminsPSO' from two users, with SamAccountNames 'BobKe' and 'KimAb'.

```
C:\PS>Remove-ADFineGrainedPasswordPolicySubject DlgtdAdminsPSO  
-Subjects BobKe, KimAb
```

----- EXAMPLE 2 -----

Description

Remove any subjects that have names ending with 'Price' from the name list on which the Fine-Grained Password Policy named DlgtdAdminsPSO applies.

```
C:\PS>Get-ADFineGrainedPasswordPolicySubject DlgtdAdminsPSO |  
where {$_.Name -like "*Price"} | Remove-  
ADFineGrainedPasswordPolicySubject DlgtdAdminsPSO
```

Cmdlet: Remove-ADGroup

Synops

Removes an Active Directory group.

Syntax

```
Remove-ADGroup [-Identity] <ADGroup> [-AuthType {Negotiate |  
Basic}]  
    [-Credential <PSCredential>] [-Partition <String>] [-Server  
<String>]  
    [-Confirm] [-WhatIf] [<CommonParameters>]
```

Description

The Remove-ADGroup cmdlet removes an Active Directory group object. You can use this cmdlet to remove security and distribution groups.

The Identity parameter specifies the Active Directory group to remove. You can identify a group by its distinguished name (DN), GUID, security identifier (SID), Security Accounts Manager (SAM) account name, or canonical name. You can also set the Identity parameter to an object variable such as \$<localADGroupObject>, or you can pass an object through the pipeline to the Identity parameter. For example, you can use the Get-ADGroup cmdlet to retrieve a group object and then pass the object through the pipeline to the Remove-ADGroup cmdlet.

If the ADGroup is being identified by its DN, the Partition parameter will be automatically determined.

For AD LDS environments, the Partition parameter must be specified except in the following two conditions:

- The cmdlet is run from an Active Directory provider drive.
- A default naming context or partition is defined for the AD LDS environment. To specify a default naming context for an AD LDS environment, set the msDS-defaultNamingContext property of the Active Directory directory service agent (DSA) object (nTDSDSA) for the AD LDS instance.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this

parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory group object by providing one of the following values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Partition

Description :Specifies the distinguished name of an Active Directory partition. The distinguished name must be one of the naming contexts on the current directory server. The cmdlet searches this partition to find the object defined by the Identity parameter.

Required	false
Position	named

Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A group object is received by the Identity parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADGroup

Notes

Examples

----- EXAMPLE 1 -----

Description

Remove the group that has samAccountName 'SanjaysReports'.

```
C:\PS>remove-adgroup SanjaysReports

Confirm
Are you sure you want to perform this action?
Performing operation "Remove" on Target
"CN=SanjayReports,DC=Fabrikam,DC=com".
[Y] Yes  [A] Yes to All  [N] No  [L] No to All  [S] Suspend
[?] Help (default is "Y"):
```

----- EXAMPLE 2 -----

Description

Get all groups whose name starts with 'Sanjay' and then remove them.

```
C:\PS>get-adgroup -filter 'Name -like "Sanjay*"' | remove-
adgroup

Confirm
Are you sure you want to perform this action?
Performing operation "Remove" on Target
"CN=SanjaysReports,DC=Fabrikam,DC=com".
[Y] Yes  [A] Yes to All  [N] No  [L] No to All  [S] Suspend
[?] Help (default is "Y"):
```

Cmdlet: Remove-ADGroupMember

Synops

Removes one or more members from an Active Directory group.

Syntax

```
Remove-ADGroupMember [-Identity] <ADGroup> [-Members]
<ADPrincipal[]>
    [-AuthType {Negotiate | Basic}] [-Credential <PSCredential>]
[-Partition
    <String>] [-PassThru] [-Server <String>] [-Confirm] [-WhatIf]

    [<CommonParameters>]
```

Description

The Remove-ADGroupMember cmdlet removes one or more users, groups, service accounts, or computers from an Active Directory group.

The Identity parameter specifies the Active Directory group that contains the members to remove. You can identify a group by its distinguished name (DN), GUID, security identifier (SID), or Security Accounts Manager (SAM) account name. You can also specify a group object variable, such as \$<localGroupObject>, or pass a group object through the pipeline to the Identity parameter. For example, you can use the Get-ADGroup cmdlet to retrieve a group object and then pass the object through the pipeline to the Remove-ADGroupMember cmdlet.

The Members parameter specifies the users, computers and groups to remove from the group specified by the Identity parameter. You can identify a user, computer or group by its distinguished name (DN), GUID, security identifier (SID), or Security Accounts Manager (SAM) account name. You can also specify user, computer, and group object variables, such as \$<localUserObject>. If you are specifying more than one new member, use a comma-separated list. You cannot pass user, computer, or group objects through the pipeline to this cmdlet. To remove user, computer, or group objects from a group by using the pipeline, use the Remove-ADPrincipalGroupMembership cmdlet.

For AD LDS environments, the Partition parameter must be specified except in the following two conditions:

- The cmdlet is run from an Active Directory provider drive.
- A default naming context or partition is defined for the AD LDS environment. To specify

a default naming context for an AD LDS environment, set the msDS-defaultNamingContext property of the Active Directory directory service agent (DSA) object (nTDSDSA) for the AD LDS instance.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Identity**

Description :Specifies an Active Directory group object by providing one of the following values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Members

Description :Specifies a set of users, groups, and computers to remove from a group. You can identify users, groups, and computers by specifying one of the following values.

Note: The identifier in parentheses is the LDAP display name.

Required	true
Position	2
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Partition

Description :Specifies the distinguished name of an Active Directory partition. The distinguished name must be one of the naming contexts on the current directory server. The cmdlet searches this partition to find the object defined by the Identity parameter.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PassThru

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A group object is received by the Identity parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADGroup

Outputs

Returns the modified group object when the PassThru parameter is specified. By default, this cmdlet does not generate any output.

Type : None or Microsoft.ActiveDirectory.Management.ADGroup

Notes

Examples

----- EXAMPLE 1 -----

Description

Remove the user with samAccountName 'WilsonPais' from the group 'DocumentReaders'.

```
C:\PS>remove-adgroupmember -Identity "DocumentReaders" -Member "WilsonPais"
```

Confirm

Are you sure you want to perform this action?

Performing operation "Set" on Target

"CN=DocumentReaders,CN=Users,DC=Fabrikam,DC=com".

[Y] Yes [A] Yes to All [N] No [L] No to All [S] Suspend

[?] Help (default is "Y"):

----- EXAMPLE 2 -----

Description

Remove the users with samAccountNames 'administrator' and 'WilsonPais' from the group 'DocumentReaders'.

```
C:\PS>remove-adgroupmember "DocumentReaders" "administrator","Wilson Pais"
```

----- EXAMPLE 3 -----

Description

Remove the user with DistinguishedName 'CN=GlenJohns,DC=AppNC' from the AccessControl group on an AD LDS instance using the pipeline.

```
C:\PS>get-adgroup -server localhost:60000  
"CN=AccessControl,DC=AppNC" | remove-adgroupmember -member  
"CN=GlenJohns,DC=AppNC"
```

Confirm

Are you sure you want to perform this action?

Performing operation "Set" on Target

"CN=AccessControl,DC=AppNC".

[Y] Yes [A] Yes to All [N] No [L] No to All [S] Suspend

[?] Help (default is "Y"):

Cmdlet: Remove-ADObject

Synops

Removes an Active Directory object.

Syntax

```
Remove-ADObject [-Identity] <ADObject> [-AuthType {Negotiate |  
Basic}]  
    [-Credential <PSCredential>] [-IncludeDeletedObjects] [-  
Partition  
    <String>] [-Recursive] [-Server <String>] [-Confirm] [-  
WhatIf]  
    [<CommonParameters>]
```

Description

The Remove-ADObject cmdlet removes an Active Directory object. You can use this cmdlet to remove any type of Active Directory object.

The Identity parameter specifies the Active Directory object to remove. You can identify an object by its distinguished name (DN) or GUID. You can also set the Identity parameter to an Active Directory object variable, such as \$<localObject>, or pass an object through the pipeline to the Identity parameter. For example, you can use the Get-ADObject cmdlet to retrieve an object and then pass the object through the pipeline to the Remove-ADObject cmdlet.

If the object you specify to remove has child objects, you must specify the Recursive parameter.

For AD LDS environments, the Partition parameter must be specified except when:

- Using a DN to identify objects: the partition will be auto-generated from the DN.
- Running cmdlets from an Active Directory provider drive: the current path will be used to set the partition.
- A default naming context or partition is specified.

To specify a default naming context for an AD LDS environment, set the msDS-defaultNamingContext property of the Active Directory directory service agent (DSA) object (nTDSDSA) for the AD LDS instance.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :IncludeDeletedObjects

Description :Specifies to retrieve deleted objects and the deactivated forward and backward links. When this parameter is specified, the cmdlet uses the following LDAP controls:

Required	false
----------	-------

Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Partition

Description :Specifies the distinguished name of an Active Directory partition. The distinguished name must be one of the naming contexts on the current directory server. The cmdlet searches this partition to find the object defined by the Identity parameter.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Recursive

Description :Specifies that the cmdlet should remove the object and any children it contains.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

An Active Directory object is received by the Identity parameter. Derived types, such as the following are also accepted:

Microsoft.ActiveDirectory.Management.ADGroup

Microsoft.ActiveDirectory.Management.ADUser

Microsoft.ActiveDirectory.Management.ADComputer

Microsoft.ActiveDirectory.Management.ADSERVICEACCOUNT

Microsoft.ActiveDirectory.Management.ADOrganizationalUnit

Microsoft.ActiveDirectory.Management.ADFineGrainedPasswordPolicy

Microsoft.ActiveDirectory.Management.ADDomain

Type : None or Microsoft.ActiveDirectory.Management.ADOBJECT

Notes

Examples

----- EXAMPLE 1 -----

Description

Remove the object identified by the DistinguishedName 'CN=AmyAl-

LPTOP,CN=Computers,DC=FABRIKAM,DC=COM'.

```
C:\PS>Remove-ADObject 'CN=AmyA1-  
LPTOP,CN=Computers,DC=FABRIKAM,DC=COM'
```

Confirm

Are you sure you want to perform this action?

Performing operation "Remove" on Target "CN=AmyA1-
LPTOP,CN=Computers,DC=FABRIKAM,DC=COM".

[Y] Yes [A] Yes to All [N] No [L] No to All [S] Suspend
[?] Help (default is "Y"): y

----- EXAMPLE 2 -----

Description

Deletes the container with DistinguishedName

'OU=Finance,OU=UserAccounts,DC=FABRIKAM,DC=COM' including the child objects.

Note: All the children of the container including the ones which are protected from accidental deletion are also deleted.

```
C:\PS>Remove-ADObject  
"OU=Finance,OU=UserAccounts,DC=FABRIKAM,DC=COM" -Recursive
```

Confirm

Are you sure you want to perform this action?

Performing operation "Remove" on Target
"OU=Finance,OU=UserAccounts,DC=FABRIKAM,DC=COM".

[Y] Yes [A] Yes to All [N] No [L] No to All [S] Suspend
[?] Help (default is "Y"): y

----- EXAMPLE 3 -----

Description

Removes the object with objectGUID '65511e76-ea80-45e1-bc93-08a78d8c4853' without giving the confirmation prompt.

```
C:\PS>Remove-ADObject "65511e76-ea80-45e1-bc93-08a78d8c4853" -  
Confirm:$false
```

----- EXAMPLE 4 -----

Description

removes the object with DistinguishedName 'CN=InternalApps,DC=AppNC' from an LDS instance.

```
C:\PS>Remove-ADObject -Identity "CN=InternalApps,DC=AppNC" -
server "FABRIKAM-SRV1:60000"
```

Confirm

Are you sure you want to perform this action?

Performing operation "Remove" on Target

"CN=InternalApps,DC=AppNC".

[Y] Yes [A] Yes to All [N] No [L] No to All [S] Suspend

[?] Help (default is "Y"): y

----- EXAMPLE 5 -----

Description

Recycles all the objects in the recycle bin which used to be in the container 'OU=Accounting,DC=Fabrikam,DC=com'.

```
C:\PS>Get-ADObject -Filter 'isDeleted -eq $true -and -not
(isRecycled -eq $true) -and name -ne "Deleted Objects" -and
lastKnownParent -eq "OU=Accounting,DC=Fabrikam,DC=com"' -
IncludeDeletedObjects | Remove-ADObject
```

Cmdlet: Remove-ADOrganizationalUnit

Synops

Removes an Active Directory organizational unit.

Syntax

```
Remove-ADOrganizationalUnit [-Identity] <ADOrganizationalUnit> [-AuthType  
    {Negotiate | Basic}] [-Credential <PSCredential>] [-Partition  
    <String>]  
    [-Recursive] [-Server <String>] [-Confirm] [-WhatIf]  
    [<CommonParameters>]
```

Description

The Remove-ADOrganizationalUnit cmdlet removes an Active Directory organizational unit.

The Identity parameter specifies the organizational unit to remove. You can identify an organizational unit by its distinguished name (DN) or GUID. You can also set the parameter to an organizational unit object variable, such as \$<localOrganizationUnitObject> or you can pass an object through the pipeline to the Identity parameter. For example, you can use the Get-ADOrganizationalUnit cmdlet to retrieve the object and then pass the object through the pipeline to the Remove-ADOrganizationalUnit cmdlet.

If the object you specify to remove has child objects, you must specify the Recursive parameter.

If the ProtectedFromAccidentalDeletion property of the organizational unit object is set to true, the cmdlet returns a terminating error.

For AD LDS environments, the Partition parameter must be specified except in the following two conditions:

- The cmdlet is run from an Active Directory provider drive.
- A default naming context or partition is defined for the AD LDS environment. To specify a default naming context for an AD LDS environment, set the msDS-defaultNamingContext property of the Active Directory directory service agent (DSA) object (nTDSDSA) for the AD LDS instance.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Identity**

Description :Specifies the identity of an Active Directory organizational unit object. The parameter accepts the following identity formats. The identifier in parentheses is the LDAP display name for the attribute that contains the identity.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :**Partition**

Description :Specifies the distinguished name of an Active Directory partition. The distinguished name must be one of the naming contexts on the current directory server.

The cmdlet searches this partition to find the object defined by the Identity parameter.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Recursive**

Description :Specifies that the cmdlet remove the organizational unit and any child items it contains. You must specify this parameter to remove an organizational unit (OU) that is not empty.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false

Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

An organizational unit object is received by the Identity parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADOrganizationalUnit

Notes

Examples

----- EXAMPLE 1 -----

Description

Removes an OrganizationalUnit and all of it's children. If the OrganizationalUnit is protected from deletion, then the OrganizationalUnit and it's children will not be deleted. If the OrganizationalUnit is not protected but any of the children are, then both the OrganizationalUnit and the children will be deleted.

```
C:\PS>Remove-ADOrganizationalUnit -Identity
"OU=Accounting,DC=FABRIKAM,DC=COM" -Recursive
```

```
Are you sure you want to remove the item and all its children?
Performing recursive remove on Target:
'OU=Accounting,DC=Fabrikam,DC=com'.
[Y] Yes [A] Yes to All [N] No [L] No to All [S] Suspend
[?] Help
(default is "Y"):y
```

----- EXAMPLE 2 -----

Description

Removes an OrganizationalUnit using it's objectGUID as the Identity while suppressing the confirmation prompt.

```
C:\PS>Remove-ADOrganizationalUnit -Identity "1b228aa5-2c14-48b8-ad8a-2685dc22e055" -confirm:$false
```

----- EXAMPLE 3 -----

Description

Removes the Accounting OrganizationalUnit.

```
C:\PS>Remove-ADOrganizationalUnit -Identity
"OU=Accounting,DC=FABRIKAM,DC=COM"

Confirm
Are you sure you want to perform this action?
Performing operation "Remove" on Target
"OU=Accounting,DC=Fabrikam,DC=com".
[Y] Yes  [A] Yes to All  [N] No  [L] No to All  [S] Suspend
[?] Help
(default is "Y"):y
```

----- EXAMPLE 4 -----

Description

Removes an OrganizationalUnit from an LDS instance.

```
C:\PS>Remove-ADOrganizationalUnit -Identity
"OU=Managed,DC=AppNC" -server "FABRIKAM-SRV1:60000" -
confirm:$false
```

Cmdlet: Remove-ADPrincipalGroupMembership

Synops

Removes a member from one or more Active Directory groups.

Syntax

```
Remove-ADPrincipalGroupMembership [-Identity] <ADPrincipal> [-MemberOf]
    <ADGroup[]> [-AuthType {Negotiate | Basic}] [-Credential
    <PSCredential>]
    [-Partition <String>] [-PassThru] [-Server <String>] [-Confirm] [-WhatIf]
    [<CommonParameters>]
```

Description

The Remove-ADPrincipalGroupMembership cmdlet removes a user, group, computer, service account, or any other account object from one or more Active Directory groups.

The Identity parameter specifies the user, group, or computer to remove. You can identify the user, group, or computer by its distinguished name (DN), GUID, security identifier (SID) or SAM account name. You can also specify a user, group, or computer object variable, such as \$<localGroupObject>, or pass an object through the pipeline to the Identity parameter. For example, you can use the Get-ADUser cmdlet to retrieve a user object and then pass the object through the pipeline to the Remove-ADPrincipalGroupMembership cmdlet. Similarly, you can use Get-ADGroup or Get-ADComputer to get group, service account and computer objects to pass through the pipeline.

This cmdlet collects all of the user, computer, service account and group objects from the pipeline, and then removes these objects from the specified group by using one Active Directory operation.

The MemberOf parameter specifies the groups that you want to remove the member from. You can identify a group by its distinguished name (DN), GUID, security identifier (SID) or Security Accounts Manager (SAM) account name. You can also specify group object variable, such as \$<localGroupObject>. To specify more than one group, use a comma-separated list. You cannot pass group objects through the pipeline to the MemberOf parameter. To remove a member from groups that are passed through the pipeline, use the Remove-ADGroupMember cmdlet.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Identity**

Description :Specifies an Active Directory principal object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :**MemberOf**

Description :Specifies the Active Directory groups to add a user, computer, or group to as

a member. You can identify a group by providing one of the following values. Note: The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	2
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Partition

Description :Specifies the distinguished name of an Active Directory partition. The distinguished name must be one of the naming contexts on the current directory server. The cmdlet searches this partition to find the object defined by the Identity parameter.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PassThru

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
----------	-------

Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A principal object that represents user, computer, or group is received by the Identity parameter. Derived types, such as the following are also received by this parameter.

Microsoft.ActiveDirectory.Management.ADUser

Microsoft.ActiveDirectory.Management.ADComputer

Microsoft.ActiveDirectory.Management.ADSERVICEACCOUNT

Microsoft.ActiveDirectory.Management.ADGroup

Type : None or Microsoft.ActiveDirectory.Management.ADPrincipal

Outputs

Returns a principal object that represents the modified user, computer or group object when the PassThru parameter is specified. By default, this cmdlet does not generate any output.

Type : None or Microsoft.ActiveDirectory.Management.ADPrincipal

Notes

Examples

----- EXAMPLE 1 -----

Description

Remove the user 'Wilson Pais' from the administrators group.

```
C:\PS>Remove-ADPrincipalGroupMembership -Identity "Wilson
Pais" -MemberOf "Administrators"

Remove members from group
Do you want to remove all the specified member(s) from the
specified group(s)?
[Y] Yes [A] Yes to All [N] No [L] No to All [S] Suspend
[?] Help (default is "Y"): Y
```

----- EXAMPLE 2 -----

Description

Retrieve the user with DistinguishedName 'CN=GlenJohns,DC=AppNC' and remove it from the group with the DistinguishedName 'CN=AccessControl,DC=AppNC' using the pipeline.

```
C:\PS>get-aduser -server localhost:60000 -Identity
"CN=GlenJohns,DC=AppNC" | remove-adprincipalgroupmembership -
memberof "CN=AccessControl,DC=AppNC"
```

Cmdlet: Remove-ADReplicationSite

Synops

Deletes the specified replication site object from Active Directory.

Syntax

```
Remove-ADReplicationSite [-Identity] <ADReplicationSite> [-AuthType  
    {Negotiate | Basic}] [-Credential <PSCredential>] [-Server  
<String>]  
    [-Confirm] [-WhatIf] [<CommonParameters>]
```

Description

The Remove-ADReplicationSite deletes a specified replication site object from Active Directory. If domain controllers are no longer needed in a network location, you can remove them from a site and then delete the site object. Before deleting the site, you must remove all domain controllers from the site either by removing them entirely or by moving them to a new location.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a

provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Confirm

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false

Accept wildcard characters?	false
-----------------------------	-------

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A site object is received by the Identity parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADReplicationSite

Notes

Examples

----- EXAMPLE 1 -----

Description

Remove the site with name 'Europe'.

```
C:\PS>Remove-ADReplicationSite Europe
```

----- EXAMPLE 2 -----

Description

Get the sites that are for testing only and remove them.

```
C:\PS>Get-ADReplicationSite -Filter {Description -eq "For  
testing only."} | Remove-ADReplicationSite
```

Cmdlet: Remove-ADReplicationSiteLink

Synops

Deletes an Active Directory site link used to manage replication.

Syntax

```
Remove-ADReplicationSiteLink [-Identity] <ADReplicationSiteLink>
    [-AuthType {Negotiate | Basic}] [-Credential <PSCredential>]
[-Server
    <String>] [-Confirm] [-WhatIf] [<CommonParameters>]
```

Description

The Remove-ADReplicationSiteLink cmdlet removes a site link object used to manage replication traffic between two sites in your Active Directory installation. For more information on site links, see the following topic "Creating a Site Link Design" in the TechNet Library: <http://go.microsoft.com/fwlink/?LinkId=221870>

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Manage ment.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Confirm

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A site link object is received by the Identity parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADReplicationSiteLink

Notes

Examples

----- EXAMPLE 1 -----

Description

Remove the site link with the name 'Europe-Asia'.

```
C:\PS>Remove-ADReplicationSiteLink "Europe-Asia"
```

----- EXAMPLE 2 -----

Description

Get the site links that include NorthAmerica and remove them.

```
C:\PS>Get-ADReplicationSiteLink -Filter {SitesIncluded -eq  
"NorthAmerica"} | Remove-ADReplicationSiteLink
```

Cmdlet: Remove-ADReplicationSiteLinkBridge

Synops

Deletes the specified replication site link bridge from Active Directory.

Syntax

```
Remove-ADReplicationSiteLinkBridge [-Identity]
    <ADReplicationSiteLinkBridge> [-AuthType {Negotiate | Basic}]
[-Credential
    <PSCredential>] [-Server <String>] [-Confirm] [-WhatIf]
    [<CommonParameters>]
```

Description

The Remove-ADReplicationSiteLinkBridge object deletes the specified replication site link bridge from Active Directory. A site link bridge connects two or more site links and enables transitivity between site links. Each site link in a bridge must have a site in common with another site link in the bridge.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Manage ment.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Confirm

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A site link bridge object is received by the Identity parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADReplicationSiteLinkBridge

Notes

Examples

----- EXAMPLE 1 -----

Description

Remove the site link bridge with name 'NorthAmerica-Asia'.

```
C:\PS>Remove-ADReplicationSiteLinkBridge "NorthAmerica-Asia"
```

----- EXAMPLE 2 -----

Description

Get the site link bridges that include 'Europe-Asia' and remove them.

```
C:\PS>Get-ADReplicationSiteLinkBridge -Filter  
{SiteLinksIncluded -eq "Europe-Asia"} | Remove-  
ADReplicationSiteLinkBridge
```

Cmdlet: Remove-ADReplicationSubnet

Synops

Deletes the specified Active Directory replication subnet object from the directory.

Syntax

```
Remove-ADReplicationSubnet [-Identity] <ADReplicationSubnet> [-AuthType  
    {Negotiate | Basic}] [-Credential <PSCredential>] [-Server  
<String>]  
    [-Confirm] [-WhatIf] [<CommonParameters>]
```

Description

The Remove-ADReplicationSubnet cmdlet deletes the specified Active Directory replication subnet object from the directory. Subnet objects (class subnet) define network subnets in Active Directory. A network subnet is a segment of a TCP/IP network to which a set of logical IP addresses is assigned. Subnets group computers in a way that identifies their physical proximity on the network. Subnet objects in Active Directory are used to map computers to sites.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is

run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Confirm

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false

Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A subnet object is received by the Identity parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADReplicationSubnet

Notes

Examples

----- EXAMPLE 1 -----

Description

Remove the site link with name '10.0.0.0/25'.

```
C:\PS>Remove-ADReplicationSubnet "10.0.0.0/25"
```

----- EXAMPLE 2 -----

Description

Get all the subnets in Japan and remove them.

```
C:\PS>Get-ADReplicationSubnet -Filter {Location -like
"*Japan"} | Remove-ADReplicationSubnet
```

Cmdlet: Remove-ADResourceProperty

Synops

Removes a resource property from Active Directory.

Syntax

```
Remove-ADResourceProperty [-Identity] <ADResourceProperty> [-AuthType  
    {Negotiate | Basic}] [-Credential <PSCredential>] [-Server  
<String>]  
    [-Confirm] [-WhatIf] [<CommonParameters>]
```

Description

The Remove-ADResourceProperty cmdlet removes a resource property from Active Directory.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
----------	-------

Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the resource property.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Confirm

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Outputs

This cmdlet does not work with an Active Directory Snapshot.

This cmdlet does not work with a read-only domain controller.

Type : None

Notes

Cmdlet: Remove-ADResourcePropertyList

Synops

Removes one or more resource property lists from Active Directory.

Syntax

```
Remove-ADResourcePropertyList [-Identity]
<ADResourcePropertyList>
    [-AuthType {Negotiate | Basic}] [-Credential <PSCredential>]
[-Server
    <String>] [-Confirm] [-WhatIf] [<CommonParameters>]
```

Description

The Remove-ADResourcePropertyList cmdlet removes one or more claim lists from Active Directory.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Manage ment.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
----------	-------

Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the resource property.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Confirm

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Notes

Examples

----- EXAMPLE 1 -----

Description

Remove the resource property list named 'Corporate Resource Property List'.

```
C:\PS>Remove-ADResourcePropertyList "Corporate Resource  
Property List"
```

----- EXAMPLE 2 -----

Description

Get all resource property lists whose name starts with 'Branch' and then remove them.

```
C:\PS>Get-ADResourcePropertyList -Filter 'Name -Like  
"Branch*"' | Remove-ADResourcePropertyList
```

Cmdlet: Remove-ADResourcePropertyListMember

Synops

Removes one or more resource properties from a resource property list in Active Directory.

Syntax

```
Remove-ADResourcePropertyListMember [-Identity]
<ADResourcePropertyList>
    [-Members] <ADResourceProperty[]> [-AuthType {Negotiate |
Basic}]
    [-Credential <PSCredential>] [-PassThru] [-Server <String>]
[-Confirm]
    [-WhatIf] [<CommonParameters>]
```

Description

The Remove-ADResourcePropertyListMember cmdlet can be used to remove one or more resource properties from a resource property list in Active Directory.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Manage ment.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a

provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Members

Description :Specifies a set of ADResourceProperty objects in a comma-separated list to add to a resource property list. To identify each object, use one of the following property values. Note: The identifier in parentheses is the LDAP display name.

Required	true
Position	2
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PassThru

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false

Accept wildcard characters?	false
-----------------------------	-------

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Confirm

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :WhatIf

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

An ADResourcePropertyList object is received by the Identity parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADResourcePropertyList

Outputs

Returns the modified ADResourcePropertyList object when the PassThru parameter is specified. By default, this cmdlet does not generate any output.

Type : None or Microsoft.ActiveDirectory.Management.ADResourcePropertyList

Notes

Examples

----- EXAMPLE 1 -----

Description

Removes the resource property specified as a list member ("Country") from the specified resource property list ("Global Resource Property List").

```
C:\PS>Remove-ADResourcePropertyListMember "Global Resource  
Property List" -Members Country
```

----- EXAMPLE 2 -----

Description

Removes the resource properties named 'Department' and 'Country' from the resource property list ("Corporate Resource Property List").

```
C:\PS>Remove-ADResourcePropertyListMember "Corporate Resource  
Property List" Department,Country
```

----- EXAMPLE 3 -----

Description

Gets the resource property lists that have a name that begins with "Corporate" and then pipes it to Remove-ADResourcePropertyListMember, which then removes the resource properties with the name 'Department' and 'Country' from it.

```
C:\PS>Get-ADResourcePropertyList -Filter { Name -like  
"Corporate*" } | Remove-ADResourcePropertyListMember  
Department,Country
```

Cmdlet: Remove-ADServiceAccount

Synops

Remove an Active Directory managed service account or group managed service account object.

Syntax

```
Remove-ADServiceAccount [-Identity] <ADServiceAccount> [-AuthType  
    {Negotiate | Basic}] [-Credential <PSCredential>] [-Partition  
<String>]  
    [-Server <String>] [-Confirm] [-WhatIf] [<CommonParameters>]
```

Description

The Remove-ADServiceAccount cmdlet removes an Active Directory managed service account (MSA). This cmdlet does not make changes to any computers that use the MSA. After this operation, the MSA no longer exists in the directory, but computers will still be configured to use the MSA.

The Identity parameter specifies the Active Directory MSA to remove. You can identify a MSA by its distinguished name (DN), GUID, security identifier (SID) or security accounts manager (SAM) account name. You can also set the Identity parameter to a MSA object variable, such as \$<localServiceAccountObject>, or you can pass a MSA object through the pipeline to the Identity parameter. For example, you can use the Get-ADServiceAccount cmdlet to retrieve a MSA object and then pass the object through the pipeline to the Remove-ADServiceAccount cmdlet.

Note: Removing the service account is a different operation than uninstalling the service account locally.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named

Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory account object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Partition

Description :Specifies the distinguished name of an Active Directory partition. The distinguished name must be one of the naming contexts on the current directory server. The cmdlet searches this partition to find the object defined by the Identity parameter.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A managed service account object is received by the Identity parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADSERVICEACCOUNT

Notes

Examples

----- EXAMPLE 1 -----

Description

Remove the managed service account named 'service1'.

```
C:\PS>Remove-ADServiceAccount -Identity SQL-SRV1
```

----- EXAMPLE 2 -----

Description

Remove all managed service accounts with names that start with 'SQL'.

```
C:\PS>Get-ADServiceAccount -Filter {Name -like 'SQL*'} |  
Remove-ADServiceAccount
```

Cmdlet: Remove-ADUser

Synops

Removes an Active Directory user.

Syntax

```
Remove-ADUser [-Identity] <ADUser> [-AuthType {Negotiate |  
Basic}]  
    [-Credential <PSCredential>] [-Partition <String>] [-Server  
<String>]  
    [-Confirm] [-WhatIf] [<CommonParameters>]
```

Description

The Remove-ADUser cmdlet removes an Active Directory user.

The Identity parameter specifies the Active Directory user to remove. You can identify a user by its distinguished name (DN), GUID, security identifier (SID) or security accounts manager (SAM) account name. You can also set the Identity parameter to a user object variable, such as `$<localUserObject>`, or you can pass a user object through the pipeline to the Identity parameter. For example, you can use the Get-ADUser cmdlet to retrieve a user object and then pass the object through the pipeline to the Remove-ADUser cmdlet.

If the ADUser is being identified by its DN, the Partition parameter will be automatically determined.

For AD LDS environments, the Partition parameter must be specified except in the following two conditions:

- The cmdlet is run from an Active Directory provider drive.
- A default naming context or partition is defined for the AD LDS environment. To specify a default naming context for an AD LDS environment, set the msDS-defaultNamingContext property of the Active Directory directory service agent (DSA) object (nTDSDSA) for the AD LDS instance.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory user object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Partition

Description :Specifies the distinguished name of an Active Directory partition. The distinguished name must be one of the naming contexts on the current directory server. The cmdlet searches this partition to find the object defined by the Identity parameter.

Required	false
Position	named
Default value	
Accept pipeline input?	false

Accept wildcard characters?	false
-----------------------------	-------

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Confirm

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :WhatIf

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A user object is received by the Identity parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADUser

Notes

Examples

----- EXAMPLE 1 -----

Description

Remove the user with samAccountName 'GlenJohn'.

```
C:\PS>Remove-ADUser -Identity GlenJohn
```

----- EXAMPLE 2 -----

Description

Search for any users that have disabled accounts and remove them.

```
C:\PS>Search-ADAccount -AccountDisabled | where  
{$_ObjectClass -eq 'user'} | Remove-ADUser
```

----- EXAMPLE 3 -----

Description

Remove the user with DistinguishedName 'CN=Glen
John,OU=Finance,OU=UserAccounts,DC=FABRIKAM,DC=COM'.

```
C:\PS>Remove-ADUser -Identity "CN=Glen  
John,OU=Finance,OU=UserAccounts,DC=FABRIKAM,DC=COM"
```

----- EXAMPLE 4 -----

Description

Get the user with DistinguishedName 'cn=glenjohn,dc=appnc' from the AD LDS instance and remove it.

```
C:\PS>Get-ADUser "cn=glenjohn,dc=appnc" -Server  
Lds.Fabrikam.com:50000 | Remove-ADUser
```

Cmdlet: Rename-ADObject

Synops

Changes the name of an Active Directory object.

Syntax

```
Rename-ADObject [-Identity] <ADObject> [-NewName] <String> [-AuthType  
    {Negotiate | Basic}] [-Credential <PSCredential>] [-Partition  
    <String>]  
    [-PassThru] [-Server <String>] [-Confirm] [-WhatIf]  
    [<CommonParameters>]
```

Description

The Rename-ADObject cmdlet renames an Active Directory object. This cmdlet sets the Name property of an Active Directory object that has an LDAP Display Name (ldapDisplayName) of "name". To modify the given name, surname and other name of a user, use the Set-ADUser cmdlet. To modify the Security Accounts Manager (SAM) account name of a user, computer, or group, use the Set-ADUser, Set-ADComputer or Set-ADGroup cmdlet.

The Identity parameter specifies the object to rename. You can identify an object or container by its distinguished name (DN) or GUID. You can also set the Identity parameter to an object variable such as \$<localObject>, or you can pass an object through the pipeline to the Identity parameter. For example, you can use the Get-ADObject cmdlet to retrieve an object and then pass the object through the pipeline to the Rename-ADObject cmdlet. You can also use the Get-ADGroup, Get-ADUser, Get-ADComputer, Get-ADServiceAccount, Get-ADOrganizationalUnit and Get-ADFineGrainedPasswordPolicy cmdlets to get an object that you can pass through the pipeline to this cmdlet.

The NewName parameter defines the new name for the object and must be specified.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :NewName

Description :Specifies the new name of the object. This parameter sets the Name property of the Active Directory object. The LDAP Display Name (ldapDisplayName) of this property is "name".

Required	true
Position	2
Default value	
Accept pipeline input?	false

Accept wildcard characters?	false
-----------------------------	-------

Parameter :Partition

Description :Specifies the distinguished name of an Active Directory partition. The distinguished name must be one of the naming contexts on the current directory server. The cmdlet searches this partition to find the object defined by the Identity parameter.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PassThru

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Confirm

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

An Active Directory object is received by the Identity parameter.

Derived types, such as the following are also accepted:

Microsoft.ActiveDirectory.Management.ADGroup

Microsoft.ActiveDirectory.Management.ADUser

Microsoft.ActiveDirectory.Management.ADComputer

Microsoft.ActiveDirectory.Management.ADSERVICEACCOUNT

Microsoft.ActiveDirectory.Management.ADOrganizationalUnit

Microsoft.ActiveDirectory.Management.ADFineGrainedPasswordPolicy

Type : None or Microsoft.ActiveDirectory.Management.ADOBJECT

Notes

Examples

----- EXAMPLE 1 -----

Description

Rename the name of an existing site 'HQ' to the new name 'UnitedKingdomHQ'. If the distinguished name is provided in the -Identity parameter, then the -Partition parameter is not required.

```
C:\PS>Rename-ADObject -Identity  
"CN=HQ,CN=Sites,CN=Configuration,DC=FABRIKAM,DC=COM" -NewName  
UnitedKingdomHQ
```

----- EXAMPLE 2 -----

Description

Rename the object with objectGUID '4777c8e8-cd29-4699-91e8-c507705a096'6 to 'SiteNewName'. Note -Partition parameter is required because the Naming Context of the site object is not known from the GUID provided to the -Identity parameter.

```
C:\PS>Rename-ADObject -Identity "4777c8e8-cd29-4699-91e8-  
c507705a0966" -NewName "AmsterdamHQ" -Partition  
"CN=Configuration,DC=FABRIKAM,DC=COM"
```

----- EXAMPLE 3 -----

Description

Rename the object with the DistinguishedName 'OU=ManagedGroups,OU=Managed,DC=Fabrikam,DC=Com' to 'Groups'.

```
C:\PS>Rename-ADObject  
"OU=ManagedGroups,OU=Managed,DC=Fabrikam,DC=Com" -NewName  
Groups
```

----- EXAMPLE 4 -----

Description

Rename the object with objectGUID '4777c8e8-cd29-4699-91e8-c507705a0966' to 'DavidAhs'. Note that the -Partition parameter is not specified because the object is in the Default Naming Context of the domain.

```
C:\PS>Rename-ADObject -Identity "4777c8e8-cd29-4699-91e8-  
c507705a0966" -NewName "DavidAhs"
```

----- EXAMPLE 5 -----

Description

Rename the container 'CN=Apps,DC=AppNC' to 'InternalApps' in an LDS instance.

```
C:\PS>Rename-ADObject "CN=Apps,DC=AppNC" -NewName  
"InternalApps" -server "FABRIKAM-SRV1:60000"
```

Cmdlet: Reset-ADServiceAccountPassword

Synops

Resets the password for a standalone managed service account. Reset is not supported for group managed service accounts.

Syntax

```
Reset-ADServiceAccountPassword [-Identity] <ADServiceAccount> [-AuthType {Negotiate | Basic}] [-Partition <String>] [-Confirm] [-WhatIf] [<CommonParameters>]
```

Description

The Reset-ADServiceAccountPassword cmdlet resets the password for the standalone managed service account (MSA) on the local computer. This cmdlet needs to be run on the computer where the standalone MSA is installed.

The Identity parameter specifies the Active Directory standalone MSA that receives the password reset. You can identify a MSA by its distinguished name (DN), GUID, security identifier (SID) or Security Accounts Manager (SAM) account name. You can also set the Identity parameter to a MSA object variable, such as \$<localServiceAccountObject>, or pass a MSA object through the pipeline to the Identity parameter. For example, you can use the Get-ADServiceAccount cmdlet to retrieve a standalone MSA object and then pass the object through the pipeline to the Reset-ADServiceAccountPassword cmdlet.

Note: When you reset the password for a computer, you also reset all of the standalone MSA passwords for that computer.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate

Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory account object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Partition

Description :Specifies the distinguished name of an Active Directory partition. The distinguished name must be one of the naming contexts on the current directory server. The cmdlet searches this partition to find the object defined by the Identity parameter.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Confirm

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :WhatIf

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A managed service account object is received by the Identity parameter.

Type : Microsoft.ActiveDirectory.Management.ADSERVICEACCOUNT

Notes

Cmdlet: Restore-ADObject

Synops

Restores an Active Directory object.

Syntax

```
Restore-ADObject [-Identity] <ADObject> [-AuthType {Negotiate |  
Basic}]  
    [-Credential <PSCredential>] [-NewName <String>] [-Partition  
<String>]  
    [-PassThru] [-Server <String>] [-TargetPath <String>] [-  
Confirm] [-WhatIf]  
    [<CommonParameters>]
```

Description

The Restore-ADObject cmdlet restores a deleted Active Directory object.

The NewName parameter specifies the new name for the restored object. If the NewName parameter is not specified, the value of the Active Directory attribute with an LDAP display name of "msDS-lastKnownRDN" is used. The TargetPath parameter specifies the new location for the restored object. If the TargetPath is not specified, the value of the Active Directory attribute with an LDAP display name of "lastKnownParent" is used.

The Identity parameter specifies the Active Directory object to restore. You can identify an object by its distinguished name (DN) or GUID. You can also set the Identity parameter to an object variable such as \$<localObject>, or you can pass an object through the pipeline to the Identity parameter. For example, you can use the Get-ADObject cmdlet to retrieve a deleted object by specifying the IncludeDeletedObjects parameter. You can then pass the object through the pipeline to the Restore-ADObject cmdlet.

Note: You can get the distinguished names of deleted objects by using the Get-ADObject cmdlet with the -IncludeDeletedObjects parameter specified.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :NewName

Description :Specifies the new name of the object. This parameter sets the Name property of the Active Directory object. The LDAP Display Name (ldapDisplayName) of this property is "name".

Required	false
Position	named
Default value	

Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Partition

Description :Specifies the distinguished name of an Active Directory partition. The distinguished name must be one of the naming contexts on the current directory server. The cmdlet searches this partition to find the object defined by the Identity parameter.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PassThru

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :TargetPath

Description :Specifies the new location for the object. This location must be the path to a container or organizational unit.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

An Active Directory object is received by the Identity parameter.

Derived types, such as the following are also accepted:

Microsoft.ActiveDirectory.Management.ADGroup

Microsoft.ActiveDirectory.Management.ADUser

Microsoft.ActiveDirectory.Management.ADComputer

Microsoft.ActiveDirectory.Management.ADSERVICEACCOUNT

Microsoft.ActiveDirectory.Management.ADOrganizationalUnit

Microsoft.ActiveDirectory.Management.ADFineGrainedPasswordPolicy

Microsoft.ActiveDirectory.Management.ADDomain

Type : None or Microsoft.ActiveDirectory.Management.ADOject

Outputs

Returns the restored object when the PassThru parameter is specified. By default, this cmdlet does not generate any output.

Type : None or Microsoft.ActiveDirectory.Management.ADOject

Notes

Examples

----- EXAMPLE 1 -----

Description

Restores the ADOject while setting the 'msDS-LastKnownRDN' attribute of the deleted object to -NewName parameter and setting the 'lastKnownRDN' to the -TargetPath parameter.

```
C:\PS>Restore-ADObject -Identity "613dc90a-2afd-49fb-8bd8-  
eac48c6ab59f" -NewName "Kim Abercrombie" -TargetPath  
"OU=Finance,OU=UserAccounts,DC=FABRIKAM,DC=COM"
```

----- EXAMPLE 2 -----

Description

Restores the ADOject while setting the 'msDS-LastKnownRDN' attribute of the deleted object to -NewName parameter and setting the 'lastKnownRDN' to the -TargetPath parameter.

```
C:\PS>Restore-ADObject -Identity "CN=Kim  
Abercrombie\0ADEL:613dc90a-2afd-49fb-8bd8-  
eac48c6ab59f,CN=Deleted Objects,DC=FABRIKAM,DC=COM" -NewName  
"Kim Abercrombie" -TargetPath  
"OU=Finance,OU=UserAccounts,DC=FABRIKAM,DC=COM"
```

----- EXAMPLE 3 -----

Description

Find a deleted user whose samaccountname is kimabercrombie, and restore it.

```
C:\PS>Get-ADObject -Filter 'samaccountname -eq  
"kimabercrombie"' -IncludeDeletedObjects | Restore-ADObject
```

----- EXAMPLE 4 -----

Description

Restore an AD-LDS object using ObjectGUID.

```
C:\PS>Restore-ADObject -Identity '6bb3bfe9-4355-48ee-b3b6-  
4fda6917d31d' -Server server1:50000
```

----- EXAMPLE 5 -----

Description

Restore an AD-LDS object using msds-LastKnownRDN.

```
C:\PS>Get-ADObject -Filter 'msds-lastknownrdn -eq "user1"' -  
Server server1:50000 -IncludeDeletedObjects -SearchBase  
"o=app1,c=us" | Restore-ADObject
```

Cmdlet: Revoke-ADAuthenticationPolicySiloAccess

Synops

Revokes membership in an authentication policy silo for the specified account.

Syntax

```
Revoke-ADAuthenticationPolicySiloAccess [-Identity]
    <ADAuthenticationPolicySilo> [-Account] <ADAccount> [-
AuthType {Negotiate
    | Basic}] [-Credential <PSCredential>] [-PassThru] [-Server
<String>]
    [-Confirm] [-WhatIf] [<CommonParameters>]
```

Description

The Revoke-ADAuthenticationPolicySiloAccess cmdlet revokes the membership in an authentication policy silo for one or more accounts in Active Directory® Domain Services.

The Identity parameter specifies the Active Directory Domain Services authentication policy silo that contains the user accounts to remove. You can identify an authentication policy silo by its distinguished name (DN), GUID or name. You can also use the Identity parameter to specify a variable that contains an authentication policy silo object, or you can use the pipeline operator to pass an authentication policy object to the Identity parameter.

The Account parameter specifies the users, computers and service accounts to remove from the authentication policy silo specified by the Identity parameter. You can identify a user, computer or service account by its DN, GUID, security identifier (SID), or Security Accounts Manager (SAM) account name. You can also use the Account parameter to specify a variable that contains user, computer, and service account objects.

Parameters

Parameter :**Account**

Description :Specifies the account to remove from the authentication policy silo. Specify the account in one of the following formats:

-- Distinguished Name

-- GUID

-- Security Identifier

-- SAM Account Name

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :**AuthType**

Description :Specifies the authentication method to use. The acceptable values for this parameter are:

--Negotiate or 0

--Basic or 1

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies a user account that has permission to perform the task. The default is the current user. Type a user name, such as "User01" or "Domain01\User01", or enter a PSCredential object, such as one generated by the Get-Credential cmdlet.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Identity**

Description :Specifies an ADAuthenticationPolicySilo object. Specify the authentication policy silo object in one of the following formats:

--Distinguished Name

--GUID

--Name

Required	true
Position	0
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**PassThru**

Description :Returns an object representing the item with which you are working. By default, this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to which to connect, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

This cmdlet accepts an authentication policy silo object.

Type : None or Microsoft.ActiveDirectory.Management.ADAuthenticationPolicySilo

Outputs

This cmdlet returns the modified authentication policy silo object when the PassThru parameter is specified. By default, this cmdlet does not generate any output.

Type : None or Microsoft.ActiveDirectory.Management.ADAuthenticationPolicySilo

Examples

Example 1: Revoke access to an authentication policy silo

This command revokes access to the authentication policy silo named AuthenticationPolicySilo01 for the user account named User01. Because the Confirm parameter is set to \$False, no confirmation message appears.

```
PS C:\>Revoke-ADAuthenticationPolicySiloAccess -Identity  
AuthenticationPolicySilo01 -Account User01 -Confirm:$False
```

Example 2: Revoke access to an authentication policy silo for filter matches

This example first uses the Get-ADComputer cmdlet to get a list of computers that match the filter specified by the Filter parameter. The output is then passed to the Revoke-ADAuthenticationPolicySiloAccess to remove access to the authentication policy silo named AuthenticationPolicySilo02. Because the Confirm parameter is not specified, a confirmation message appears.

```
PS C:\>Get-ADComputer -Filter 'Name -like "newComputer*"' |  
Revoke-ADAuthenticationPolicySiloAccess -Identity  
AuthenticationPolicySilo02  
  
Confirm  
  
Are you sure you want to perform this action?  
  
Performing the operation "Set" on target "CN=Silo,CN=AuthN  
Silos,CN=AuthN Policy  
Configuration,CN=Services,CN=Configuration,DC=DC01,DC=Contoso,  
DC=com".  
  
[Y] Yes [A] Yes to All [N] No [L] No to All [S] Suspend  
[?] Help (default is "Y"): A
```

Cmdlet: Search-ADAccount

Synops

Gets Active Directory user, computer, or service accounts.

Syntax

Search-ADAccount [`<CommonParameters>`]

Description

The Search-ADAccount cmdlet retrieves one or more user, computer, or service accounts that meet the criteria specified by the parameters. Search criteria include account and password status. For example, you can search for all accounts that have expired by specifying the AccountExpired parameter. Similarly, you can search for all accounts with an expired password by specifying the PasswordExpired parameter. You can limit the search to user accounts by specifying the UsersOnly parameter. Similarly, when you specify the ComputersOnly parameter, the cmdlet only retrieves computer accounts.

Some search parameters, such as AccountExpiring and AccountInactive use a default time that you can change by specifying the DateTime or TimeSpan parameter. The DateTime parameter specifies a distinct time. The TimeSpan parameter specifies a time range from the current time. For example, to search for all accounts that expire in 10 days, specify the AccountExpiring and TimeSpan parameter and set the value of TimeSpan to "10.00:00:00". To search for all accounts that expire before December 31, 2012, set the DateTime parameter to "12/31/2012".

Parameters

Outputs

Returns one or more account objects that meet the conditions set by the parameters.

Type : Microsoft.ActiveDirectory.Management.ADAccount

Examples

----- EXAMPLE 1 -----

Description

Returns all users, computers and service accounts that are disabled.

```
C:\PS>Search-ADAccount -AccountDisabled | FT Name, ObjectClass -A
```

Name	ObjectClass
Guest	user
krbtgt	user
krbtgt_51399	user
AmyAl-LPTOP	computer
DeepakAn-DSKTOP	computer

----- EXAMPLE 2 -----

Description

Returns all users that are disabled.

```
C:\PS>Search-ADAccount -AccountDisabled -UsersOnly | FT Name, ObjectClass -A
```

Name	ObjectClass
Guest	user
krbtgt	user
krbtgt_51399	user

----- EXAMPLE 3 -----

Description

Returns all users, computers and service accounts that are expired.

```
C:\PS>Search-ADAccount -AccountExpired | FT Name, ObjectClass -A
```

Name	ObjectClass
Greg Chapman	user
Claus Hansen	user
Tomasz Bochenek	user

----- EXAMPLE 4 -----

Description

Returns all users, computers and service accounts that will expire in the next 6 days.

```
C:\PS>Search-ADAccount -AccountExpiring -TimeSpan 6.00:00:00 |  
FT Name,ObjectClass -A
```

Name	ObjectClass
-----	-----
Iulian Calinov	user
John Campbell	user
Garth Fort	user

----- EXAMPLE 5 -----

Description

Returns all accounts that have been inactive for the last 90 days.

```
C:\PS>Search-ADAccount -AccountInactive -TimeSpan 90.00:00:00  
| FT Name,ObjectClass -A
```

Name	ObjectClass
-----	-----
FABRIKAM-RODC1	computer
Guest	user
krbtgt	user
krbtgt_51399	user
Almudena Benito	user
Aaron Con	user
Adina Hagege	user
Aaron Nicholls	user
Aaron M. Painter	user
Jeff Phillips	user
Flemming Pedersen	use

----- EXAMPLE 6 -----

Description

Returns all accounts where the password has expired.

```
C:\PS>Search-ADAccount -PasswordExpired | FT Name,ObjectClass  
-A
```

Name	ObjectClass
-----	-----
Stan Orme	user
Danni Ortman	user
Matej Potokar	user

----- EXAMPLE 7 -----

Description

Returns all accounts with a password that will never expire.

```
C:\PS>Search-ADAccount -PasswordNeverExpires | FT
Name, ObjectClass -A
```

Name	ObjectClass
Guest	user
Toni Poe	user
Anders Riis	user
Fabien Hernoux	user

----- EXAMPLE 8 -----

Description

Returns all accounts that have been locked out.

```
C:\PS>Search-ADAccount -LockedOut | FT Name, ObjectClass -A
```

Name	ObjectClass
Toni Poe	user

----- EXAMPLE 9 -----

Description

Returns all disabled computer accounts.

```
C:\PS>Search-ADAccount -AccountDisabled -ComputersOnly | FT
Name, ObjectClass -A
```

Name	ObjectClass
TP0E-PC1	computer

----- EXAMPLE 10 -----

Description

Returns all accounts which expire on the 18th of March, 2009.

```
C:\PS>Search-ADAccount -AccountExpiring -DateTime "3/18/2009"
| FT Name,ObjectClass -A

Name          ObjectClass
----          -
Anders Riis   user
```

----- EXAMPLE 11 -----

Description

Returns all users, computers and service accounts that are disabled in the LDS instance: "FABRIKAM-SRV1:60000".

```
C:\PS>Search-AdAccount -AccountDisabled -SearchBase "DC=AppNC"
-Server "FABRIKAM-SRV1:60000"

Enabled          : False
Name             : SanjayPatel
UserPrincipalName :
PasswordNeverExpires :
LockedOut        : False
ObjectGUID       : d671de28-6e40-42a7-b32c-63d336de296d
ObjectClass      : user
SID              : S-1-510474493-936115905-2231798853-
1260534229-4171027843-767619944
PasswordExpired  : False
LastLogonDate    :
DistinguishedName :
CN=SanjayPatel,OU=AccountDeptOU,DC=AppNC
AccountExpirationDate :
```

Cmdlet: Set-ADAccountAuthenticationPolicySilo

Synops

Modifies the authentication policy or authentication policy silo of an account.

Syntax

```
Set-ADAccountAuthenticationPolicySilo [-Identity] <ADAccount>  
    [-AuthenticationPolicy <ADAuthenticationPolicy>]  
    [-AuthenticationPolicySilo <ADAuthenticationPolicySilo>] [-  
AuthType  
    {Negotiate | Basic}] [-Credential <PSCredential>] [-PassThru]  
[-Server  
    <String>] [-Confirm] [-WhatIf] [<CommonParameters>]
```

Description

The Set-ADAccountAuthenticationPolicySilo cmdlet modifies the authentication policy or authentication policy silo of an account. This cmdlet assigns authentication policy silo objects and authentication policy object to an Active Directory Domain Services account. In order for the account to belong to an authentication policy silo, you must use the Grant-ADAuthenticationPolicySiloAccess cmdlet to grant access to the object.

The Identity parameter specifies the Active Directory Domain Services authentication policy to modify. You can identify an authentication policy by its distinguished name (DN), GUID or name. You can also use the Identity parameter to specify a variable that contains an authentication policy object, or you can use the pipeline operator to pass an authentication policy object to the Identity parameter.

Parameters

Parameter :**AuthenticationPolicy**

Description :Specifies an Active Directory Domain Services authentication policy object. Specify the authentication policy object in one of the following formats:

--Distinguished Name

--GUID

--Name

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**AuthenticationPolicySilo**

Description :Specifies an Active Directory Domain Services authentication policy silo object. Specify the authentication policy silo object in one of the following formats:

--Distinguished Name

--GUID

--Name

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**AuthType**

Description :Specifies the authentication method to use. The acceptable values for this parameter are:

--Negotiate or 0

--Basic or 1

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies a user account that has permission to perform the task. The default is the current user. Type a user name, such as "User01" or "Domain01\User01", or enter a PScredential object, such as one generated by the Get-Credential cmdlet.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Identity**

Description :Specifies an Active Directory Domain Services object. Specify the Active Directory Domain Services object in one of the following formats:

--Distinguished Name

--GUID

--Name

Required	true
Position	0
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :**PassThru**

Description :Returns an object representing the item with which you are working. By default, this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to which to connect,

by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Examples

Example 1: Assign an authentication policy silo and authentication policy

This example assigns the authentication policy silo named AuthenticationPolicySilo01 and the authentication policy named AuthenticationPolicy01 to the user account named User01.

```
PS C:\>Set-ADAccountAuthenticationPolicySilo -Identity User01
-AuthenticationPolicySilo AuthenticationPolicySilo01
-AuthenticationPolicy AuthenticationPolicy01
```

Example 2: Assign an authentication policy silo and authentication policy by using a filter

This example first uses the Get-ADComputer cmdlet to get all computer accounts that match the filter specified by the Filter parameter. The output of this command is passed to Set-ADAccountAuthenticatinPolicySilo to assign the authentication policy silo named AuthenticationPolicySilo02 and the authentication policy named AuthenticationPolicy02 to them.

```
PS C:\>Get-ADComputer -Filter 'Name -like "newComputer*"' |  
Set-ADAccountAuthenticationPolicySilo  
-AuthenticationPolicySilo AuthenticationPolicySilo02  
-AuthenticationPolicy AuthenticationPolicy02
```

Cmdlet: Set-ADAccountControl

Synops

Modifies user account control (UAC) values for an Active Directory account.

Syntax

```
Set-ADAccountControl [-Identity] <ADAccount> [-  
AccountNotDelegated  
    <Boolean>] [-AllowReversiblePasswordEncryption <Boolean>] [-  
AuthType  
    {Negotiate | Basic}] [-CannotChangePassword <Boolean>] [-  
Credential  
    <PSCredential>] [-DoesNotRequirePreAuth <Boolean>] [-Enabled  
<Boolean>]  
    [-HomedirRequired <Boolean>] [-MNSLogonAccount <Boolean>] [-  
Partition  
    <String>] [-PassThru] [-PasswordNeverExpires <Boolean>]  
    [-PasswordNotRequired <Boolean>] [-Server <String>] [-  
TrustedForDelegation  
    <Boolean>] [-TrustedToAuthForDelegation <Boolean>] [-  
UseDESKeyOnly  
    <Boolean>] [-Confirm] [-WhatIf] [<CommonParameters>]
```

Description

The Set-ADAccountControl cmdlet modifies the user account control (UAC) values for an Active Directory user or computer account. UAC values are represented by cmdlet parameters. For example, set the PasswordExpired parameter to change whether an account is expired and to modify the ADS_UF_PASSWORD_EXPIRED UAC value.

The Identity parameter specifies the Active Directory account to modify.

You can identify an account by its distinguished name (DN), GUID, security identifier (SID) or security accounts manager (SAM) account name. You can also set the Identity parameter to an object variable such as \$<localADAccountObject>, or you can pass an account object through the pipeline to the Identity parameter. For example, you can use the Search-ADAccount cmdlet to retrieve an account object and then pass the object through the pipeline to the Set-ADAccountControl cmdlet. Similarly, you can use Get-ADUser, Get-ADComputer or Get-ADServiceAccount cmdlets to retrieve account objects that you can pass through the pipeline to this cmdlet.

For AD LDS environments, the Partition parameter must be specified except in the following two conditions:

- The cmdlet is run from an Active Directory provider drive.
- A default naming context or partition is defined for the AD LDS environment. To specify a default naming context for an AD LDS environment, set the msDS-defaultNamingContext property of the Active Directory directory service agent (DSA) object (nTDSDSA) for the AD LDS instance.

Parameters

Parameter :**AccountNotDelegated**

Description :Specifies whether the security context of the user is delegated to a service. When this parameter is set to true, the security context of the account is not delegated to a service even when the service account is set as trusted for Kerberos delegation. This parameter sets the AccountNotDelegated property for an Active Directory account. This parameter also sets the ADS_UF_NOT_DELEGATED flag of the Active Directory User Account Control (UAC) attribute. Possible values for this parameter include

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**AllowReversiblePasswordEncryption**

Description :Specifies whether reversible password encryption is allowed for the account. This parameter sets the AllowReversiblePasswordEncryption property of the account. This parameter also sets the ADS_UF_ENCRYPTED_TEXT_PASSWORD_ALLOWED flag of the Active Directory User Account Control (UAC) attribute. Possible values for this parameter include:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this

parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**CannotChangePassword**

Description :Modifies the ability of an account to change its password. To disallow password change by the account set this to \$true.. This parameter changes the Boolean value of the CannotChangePassword property of an account.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**DoesNotRequirePreAuth**

Description :Specifies whether Kerberos pre-authentication is required to logon using the user or computer account. This parameter sets the ADS_UF_DONT_REQUIRE_PREAUTH flag of the Active Directory User Account Control (UAC) attribute. Possible values for this parameter include:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Enabled**

Description :Specifies if an account is enabled. An enabled account requires a password. This parameter sets the Enabled property for an account object. This parameter also sets the ADS_UF_ACCOUNTDISABLE flag of the Active Directory User Account Control (UAC) attribute. Possible values for this parameter include:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**HomedirRequired**

Description :Specifies whether a home directory is required for the account. This parameter sets the ADS_UF_HOMEDIR_REQUIRED flag of the Active Directory User Account Control (UAC) attribute. Possible values for this parameter include:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Identity**

Description :Distinguished Name

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :MNSLogonAccount

Description :Specifies whether the account is a Majority Node Set (MNS) logon account. This parameter also sets the ADS_UF_MNS_LOGON_ACCOUNT flag of the Active Directory User Account Control (UAC) attribute. Possible values for this parameter include:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Partition

Description :Specifies the distinguished name of an Active Directory partition. The distinguished name must be one of the naming contexts on the current directory server. The cmdlet searches this partition to find the object defined by the Identity parameter.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PassThru

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PasswordNeverExpires

Description :Specifies whether the password of an account can expire. This parameter sets the PasswordNeverExpires property of an account object. This parameter also sets the ADS_UF_DONT_EXPIRE_PASSWD flag of the Active Directory User Account

Control attribute. Possible values for this parameter include:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**PasswordNotRequired**

Description :Specifies whether the account requires a password. This parameter sets the PasswordNotRequired property of an account, such as a user or computer account. This parameter also sets the ADS_UF_PASSWD_NOTREQD flag of the Active Directory User Account Control attribute. Possible values for this parameter are:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**TrustedForDelegation**

Description :Specifies whether an account is trusted for Kerberos delegation. A service that runs under an account that is trusted for Kerberos delegation can assume the identity of a client requesting the service. This parameter sets the TrustedForDelegation property of an account object. This value also sets the ADS_UF_TRUSTED_FOR_DELEGATION flag of the Active Directory User Account

Control attribute. Possible values for this parameter are:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :TrustedToAuthForDelegation

Description :Specifies whether an account is enabled for delegation. When this parameter is set to true, a service running under such an account can impersonate a client on other remote servers on the network. This parameter sets the ADS_UF_TRUSTED_TO_AUTHENTICATE_FOR_DELEGATION flag of the Active Directory User Account Control attribute. Possible values for this parameter are:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :UseDESKeyOnly

Description :Specifies whether an account is restricted to use only Data Encryption Standard (DES) encryption types for keys. This parameter sets the

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Confirm

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false

Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

An account object is received by the Identity parameter.

Derived types, such as the following are also accepted:

Microsoft.ActiveDirectory.Management.ADUser

Microsoft.ActiveDirectory.Management.ADComputer

Microsoft.ActiveDirectory.Management.ADSERVICEACCOUNT

Type : Microsoft.ActiveDirectory.Management.ADAccount

Notes

Examples

----- EXAMPLE 1 -----

Description

Sets the flag on userAccountControl to make sure that a password is required for logon.

```
C:\PS>Set-ADAccountControl JimmyBi -PasswordNotRequired $false
```

----- EXAMPLE 2 -----

Description

Sets the security descriptor of the user to make sure they cannot change their own password.

```
C:\PS>Set-ADAccountControl 'CN=Jimmy  
Bischoff,OU=HumanResources,OU=UserAccounts,DC=FABRIKAM,DC=COM'  
-CannotChangePassword $true
```

----- EXAMPLE 3 -----

Description

Sets the flag on userAccountControl to make sure that the account cannot be delegated.

```
C:\PS>Set-ADAccountControl SQLAdmin1 -AccountNotDelegated  
$true
```

----- EXAMPLE 4 -----

Description

Sets the flag on userAccountControl to make sure that the account is now trusted to authenticate for delegation.

```
C:\PS>Set-ADAccountControl 'CN=IIS01  
SvcAccount,OU=ServiceAccounts,OU=Managed,DC=FABRIKAM,DC=COM' -  
TrustedToAuthForDelegation $true
```

----- EXAMPLE 5 -----

Description

The specified computer is now set to be trusted for delegation.

```
C:\PS>Set-ADAccountControl -Identity "FABRIKAM-SRV1" -  
TrustedForDelegation $true
```

----- EXAMPLE 6 -----

Description

Sets the password of the user to never expire.

```
C:\PS>Set-ADAccountControl DickBe -PasswordNeverExpires $true
```

----- EXAMPLE 7 -----

Description

Sets the user account to require a Home Directory.

```
C:\PS>Set-ADAccountControl 'CN=Dick  
Beekman,OU=HumanResources,OU=UserAccounts,DC=FABRIKAM,DC=COM'  
-HomedirRequired $true
```

Cmdlet: Set-ADAccountExpiration

Synops

Sets the expiration date for an Active Directory account.

Syntax

```
Set-ADAccountExpiration [-Identity] <ADAccount> [[-DateTime]
<DateTime>]
    [-AuthType {Negotiate | Basic}] [-Credential <PSCredential>]
[-Partition
    <String>] [-PassThru] [-Server <String>] [-TimeSpan
<TimeSpan>] [-Confirm]
    [-WhatIf] [<CommonParameters>]
```

Description

The Set-ADAccountExpiration cmdlet sets the expiration time for a user, computer or service account. To specify an exact time, use the DateTime parameter. To specify a time period from the current time, use the TimeSpan parameter.

The Identity parameter specifies the Active Directory account to modify.

You can identify an account by its distinguished name (DN), GUID, security identifier (SID), or Security Accounts Manager (SAM) account name. You can also set the Identity parameter to an object variable such as \$<localADAccountObject>, or you can pass an account object through the pipeline to the Identity parameter. For example, you can use the Search-ADAccount cmdlet to retrieve an account object and then pass the object through the pipeline to the Set-ADAccountExpiration cmdlet. Similarly, you can use Get-ADUser, Get-ADComputer or Get-ADServiceAccount cmdlets to retrieve account objects that you can pass through the pipeline to this cmdlet.

For AD LDS environments, the Partition parameter must be specified except in the following two conditions:

- The cmdlet is run from an Active Directory provider drive.
- A default naming context or partition is defined for the AD LDS environment. To specify a default naming context for an AD LDS environment, set the msDS-defaultNamingContext property of the Active Directory directory service agent (DSA) object (nTDSDSA) for the AD LDS instance.

Parameters

Parameter :AuthType

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :DateTime

Description :Species the expiration time for the account by using a DateTime value. The following examples show commonly-used syntax to specify a DateTime value. Time is assumed to be local time unless otherwise specified. When a time value is not specified, the time is assumed to 12:00:00 AM local time. When a date is not specified, the date is assumed to be the current date.

Required	false
Position	3
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory account object by providing one of the

following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Partition

Description :Specifies the distinguished name of an Active Directory partition. The distinguished name must be one of the naming contexts on the current directory server. The cmdlet searches this partition to find the object defined by the Identity parameter.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PassThru

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
----------	-------

Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :TimeSpan

Description :Specifies a time interval that begins at the current time. The account expires at the end of the time interval.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Confirm

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :WhatIf

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

An account object is received by the Identity parameter.

Derived types, such as the following are also accepted:

Microsoft.ActiveDirectory.Management.ADUser

Microsoft.ActiveDirectory.Management.ADComputer

Microsoft.ActiveDirectory.Management.ADServiceAccount

Type : None or Microsoft.ActiveDirectory.Management.ADAccount

Notes

Examples

----- EXAMPLE 1 -----

Description

Sets the account with SamAccountName: KarenBe to expire on the 18th of October, 2008.

```
C:\PS>Set-ADAccountExpiration KarenBe -DateTime "10/18/2008"
```

----- EXAMPLE 2 -----

Description

Sets the expiration date of all the user accounts who are a member of the group: BO1Accounts to 60 days from now.

```
C:\PS>Get-ADGroupMember BO1Accounts | where {$_.objectClass -eq "user"} | Set-ADAccountExpiration -timespan 60.0:0
```

Cmdlet: Set-ADAccountPassword

Synops

Modifies the password of an Active Directory account.

Syntax

```
Set-ADAccountPassword [-Identity] <ADAccount> [-AuthType  
{Negotiate |  
    Basic}] [-Credential <PSCredential>] [-NewPassword  
<SecureString>  
    [-OldPassword <SecureString>] [-Partition <String>] [-  
PassThru] [-Reset]  
    [-Server <String>] [-Confirm] [-WhatIf] [<CommonParameters>]
```

Description

The Set-ADAccountPassword cmdlet sets the password for a user, computer or service account.

The Identity parameter specifies the Active Directory account to modify.

You can identify an account by its distinguished name (DN), GUID, security identifier (SID) or security accounts manager (SAM) account name. You can also set the Identity parameter to an object variable such as \$<localADAccountObject>, or you can pass an object through the pipeline to the Identity parameter. For example, you can use the Search-ADAccount cmdlet to retrieve an account object and then pass the object through the pipeline to the Set-ADAccountPassword cmdlet. Similarly, you can use Get-ADUser, Get-ADComputer or Get-ADServiceAccount, for standalone MSAs, cmdlets to retrieve account objects that you can pass through the pipeline to this cmdlet.

Note: Group MSAs cannot set password since they are changed at predetermined intervals.

You must set the OldPassword and the NewPassword parameters to set the password unless you specify the Reset parameter. When you specify the Reset parameter, the password is set to the NewPassword value that you provide and the OldPassword parameter is not required.

For AD LDS environments, the Partition parameter must be specified except in the following two conditions:

- The cmdlet is run from an Active Directory provider drive.
- A default naming context or partition is defined for the AD LDS environment. To specify

a default naming context for an AD LDS environment, set the msDS-defaultNamingContext property of the Active Directory directory service agent (DSA) object (nTDSDSA) for the AD LDS instance.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Identity**

Description :Specifies an Active Directory user object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :**NewPassword**

Description :Specifies a new password value. This value is stored as an encrypted string.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**OldPassword**

Description :Specifies the most recent password value. This value is processed as a encrypted string.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Partition**

Description :Specifies the distinguished name of an Active Directory partition. The distinguished name must be one of the naming contexts on the current directory server. The cmdlet searches this partition to find the object defined by the Identity parameter.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**PassThru**

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	

Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Reset**

Description :Specifies to reset the password on an account. When you use this parameter, you must set the NewPassword parameter. You do not need to specify the OldPassword parameter.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

An account object is received by the Identity parameter.

Derived types, such as the following are also accepted:

Microsoft.ActiveDirectory.Management.ADUser

Microsoft.ActiveDirectory.Management.ADComputer

Microsoft.ActiveDirectory.Management.ADSERVICEACCOUNT

Type : Microsoft.ActiveDirectory.Management.ADAccount

Notes

Examples

----- EXAMPLE 1 -----

Description

Sets the password of the user account with DistinguishedName: 'CN=Jeremy Los,OU=Accounts,DC=Fabrikam,DC=com' to 'p@ssw0rd'.

```
C:\PS>Set-ADAccountPassword 'CN=Jeremy
Los,OU=Accounts,DC=Fabrikam,DC=com' -Reset -NewPassword
(ConvertTo-SecureString -AsPlainText "p@ssw0rd" -Force)
```

----- EXAMPLE 2 -----

Description

Sets the password of the user account with SamAccountName: tmakovec to 'qwerty@12345'.

```
C:\PS>Set-ADAccountPassword -Identity tmakovec -OldPassword
(ConvertTo-SecureString -AsPlainText "p@ssw0rd" -Force) -
NewPassword (ConvertTo-SecureString -AsPlainText "qwerty@12345"
-Force)
```

----- EXAMPLE 3 -----

Description

Sets the password of the user account with DistinguishedName: 'CN=Sara Davis,CN=Users,DC=Fabrikam,DC=com' (user is prompted for old and new password).

```
C:\PS>Set-ADAccountPassword -Identity saradavi

Please enter the current password for 'CN=Sara
Davis,CN=Users,DC=Fabrikam,DC=com'
Password:*****
Please enter the desired password for 'CN=Sara
Davis,CN=Users,DC=Fabrikam,DC=com'
Password:*****
Repeat Password:*****
```

----- EXAMPLE 4 -----

Description

Prompts the user for a new password that is stored in a temporary variable named \$newPassword, then uses it to reset the password for the user account with SamAccountName: mollyd.

```
C:\PS>$newPassword = (Read-Host -Prompt "Provide New Password"
-AsSecureString); Set-ADAccountPassword -Identity mollyd -
NewPassword $newPassword -Reset

Provide New Password: *****
```

----- EXAMPLE 5 -----

Description

Sets the password of the user account with DistinguishedName: 'CN=mollyd,OU=AccountDeptOU,DC=AppNC' in the AD LDS instance: "dsp13a24:60000" (user is prompted for old and new password).

```
PS C:\Users\administrator.FABRIKAM> set-adaccountpassword  
"CN=Molly Dempsey,OU=AccountDeptOU,DC=AppNC" -server  
"dsp13a24:60000"
```

```
Please enter the current password for  
'CN=mollyd,OU=AccountDeptOU,DC=AppNC'  
Password:*****  
Please enter the desired password for  
'CN=mollyd,OU=AccountDeptOU,DC=AppNC'  
Password:*****  
Repeat Password:*****
```

Cmdlet: Set-ADAuthenticationPolicy

Synops

Modifies an Active Directory Domain Services authentication policy object.

Syntax

```
Set-ADAuthenticationPolicy [-Identity] <ADAuthenticationPolicy>
[-Add
    <Hashtable>] [-AuthType {Negotiate | Basic}] [-Clear
<String[]>]
    [-ComputerAllowedToAuthenticateTo <String>] [-
ComputerTGTLifetimeMins
    <Int32>] [-Credential <PSCredential>] [-Description <String>]
[-Enforce
    <Boolean>] [-PassThru] [-ProtectedFromAccidentalDeletion
<Boolean>]
    [-Remove <Hashtable>] [-Replace <Hashtable>] [-Server
<String>]
    [-ServiceAllowedToAuthenticateFrom <String>]
    [-ServiceAllowedToAuthenticateTo <String>] [-
ServiceTGTLifetimeMins
    <Int32>] [-UserAllowedToAuthenticateFrom <String>]
    [-UserAllowedToAuthenticateTo <String>] [-UserTGTLifetimeMins
<Int32>]
    [-Confirm] [-WhatIf] [<CommonParameters>]
```

```
Set-ADAuthenticationPolicy [-AuthType {Negotiate | Basic}] [-
Credential
    <PSCredential>] [-PassThru] [-Server <String>] -Instance
    <ADAuthenticationPolicy> [-Confirm] [-WhatIf]
[<CommonParameters>]
```

Description

The Set-ADAuthenticationPolicy cmdlet modifies the properties of an Active Directory® Domain Services authentication policy. Commonly used attributes of the object can be specified by the parameters of this cmdlet. Property values that are not associated with

cmdlet parameters can be modified by using the Add, Replace, Clear and Remove parameters.

The Identity parameter specifies the Active Directory Domain Services authentication policy to modify. You can specify an authentication policy object by using a distinguished name (DN), a GUID, or a name. You can also use the Identity parameter to specify a variable that contains an authentication policy object, or you can use the pipeline operator to pass an authentication policy object to the Identity parameter. To get an authentication policy object, use the Get-ADAuthenticationPolicy cmdlet.

Use the Instance parameter to specify an authentication policy object to use as a template for the object being modified. Do not specify both the Instance parameter and the Identity parameter.

For more information about how the Instance concept is used in Active Directory Domain Services cmdlets, see about_ActiveDirectory_Instance.

Parameters

Parameter :**Add**

Description :Specifies a list of values to add to an object property. Use this parameter to add one or more values to a property that cannot be modified using a parameter. To identify an attribute, specify the LDAP Display Name defined for it in the Active Directory Domain Services schema.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**AuthType**

Description :Specifies the authentication method to use. The acceptable values for this parameter are:

--Negotiate or 0

--Basic or 1

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Manage ment.AuthType.Negotiate

Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Clear

Description :Specifies an array of object properties that are cleared in the directory. Use this parameter to clear one or more values of a property that cannot be modified using a parameter. To modify an object property, you must specify the LDAP display name. You can modify more than one property by specifying a comma-separated list.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ComputerAllowedToAuthenticateTo

Description :Specifies the security descriptor definition language (SDDL) string of the security descriptor used to determine if the computer can authenticate to this account.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ComputerTGTLifetimeMins

Description :Specifies the lifetime in minutes for non-renewable ticket granting tickets (TGTs) for computer accounts.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies a user account that has permission to perform the task. The

default is the current user. Type a user name, such as "User01" or "Domain01\User01", or enter a PSCredential object, such as one generated by the Get-Credential cmdlet.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Description**

Description :Specifies a description for the object. This parameter sets the value of the description property for the object. The LDAP Display Name (ldapDisplayName) for this property is "description".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Enforce**

Description :Indicates whether the authentication policy is enforced. Specify \$True to set the authentication policy to enforced. Specify \$False to set the authentication policy to not enforced.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Identity**

Description :Specifies an Active Directory Domain Services authentication policy object. Specify the authentication policy object in one of the following formats:

--Distinguished Name

--GUID

--Name

Required	true
Position	0
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Instance

Description :Specifies a modified copy of an ADAuthenticationPolicy object to use to update the actual ADAuthenticationPolicy object. When you specify this parameter, any modifications made to the modified copy of the object are also made to the corresponding ADAuthenticationPolicy object. The cmdlet only updates the object properties that have changed. When you specify the Instance parameter, you cannot specify other parameters that set properties on the object.

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PassThru

Description :Returns an object representing the item with which you are working. By default, this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ProtectedFromAccidentalDeletion

Description :Indicates whether to prevent the object from being deleted. When this property is set to true, you cannot delete the corresponding object without changing the value of the property. The acceptable values for this parameter are:

--\$False or 0

--\$True or 1

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Remove**

Description :Specifies that the cmdlet remove the values of an object property. Use this parameter to remove one or more values of a property that cannot be modified using a cmdlet parameter. To remove an object property, you must specify the LDAP display name.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Replace**

Description :Specifies a list of values for an object property that replaces the current values. Use this parameter to replace one or more values of a property that cannot be modified using a cmdlet parameter. To modify an object property, you must specify the LDAP display name.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to which to connect, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain

Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**ServiceAllowedToAuthenticateFrom**

Description :Specifies an access control expression used to determine from which devices the service can authenticate.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**ServiceAllowedToAuthenticateTo**

Description :Specifies the SDDL string of the security descriptor used to determine if the service can authenticate to this account.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**ServiceTGTLifetimeMins**

Description :Specifies the lifetime in minutes for non-renewable TGTs for service accounts.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**UserAllowedToAuthenticateFrom**

Description :Specifies an access control expression used to determine from which devices the users can authenticate.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**UserAllowedToAuthenticateTo**

Description :Specifies the SDDL string of the security descriptor used to determine if the users can authenticate to this account.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**UserTGTLifetimeMins**

Description :Specifies the lifetime in minutes for non-renewable TGTs for user accounts.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false

Accept wildcard characters?	false
-----------------------------	-------

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

This cmdlet accepts an authentication policy object.

Type : None or Microsoft.ActiveDirectory.Management.ADAuthenticationPolicy

Outputs

Returns one or more objects.

Type : System.Object

Examples

Example 1: Modify properties of a specified authentication policy

This command modifies the description and the UserTGTLifetimeMins properties of the specified authentication policy.

```
PS C:\> Set-ADAuthenticationPolicy -Identity
AuthenticationPolicy01 -Description "testDescription" -
UserTGTLifetimeMins 45
```

Example 2: Modify properties of an authentication policy by using an Instance.

This example first gets the authentication policy named AuthenticationPolicy02 by using the Get-ADAuthenticationPolicy cmdlet. The authentication policy object is stored in the variable named \$authPolicy.

The next commands modify the properties of the object in the variable, and the final command specifies the Instance parameter to commit the changes to the authentication policy stored in the \$authPolicy variable.

```
PS C:\> $authPolicy = Get-ADAuthenticationPolicy -Identity  
AuthenticationPolicy02  
PS C:\> $authPolicy.Description = 'testDescription'  
PS C:\> $authPolicy.UserTGTLifetimeMins = 60  
PS C:\> Set-ADAuthenticationPolicy -Instance $authPolicy
```

Example 3: Modify multiple authentication policies

This command uses the Get-ADAuthenticationPolicy cmdlet with the Filter parameter to get all authentication policies that have the UserTGTLifetimeMins value set below 50 minutes. The pipeline operator then passes the result of the filter to Set-ADAuthenticationPolicy, which sets the new UserTGTLifetimeMins value to 60 minutes.

```
PS C:\> Get-ADAuthenticationPolicy -Filter  
'UserTGTLifetimeMins -le 50' | Set-ADAuthenticationPolicy -  
UserTGTLifetimeMins 60
```

Example 4: Replace an existing property value

This command replaces the existing description property for AuthenticationPolicy03 with the new description specified by the Replace parameter.

```
PS C:\> Set-ADAuthenticationPolicy AuthenticationPolicy03 -  
Replace @{description="New Description"}
```

Cmdlet: Set-ADAuthenticationPolicySilo

Synops

Modifies an Active Directory Domain Services authentication policy silo object.

Syntax

```
Set-ADAuthenticationPolicySilo [-Identity]
<ADAuthenticationPolicySilo>
    [-Add <Hashtable>] [-AuthType {Negotiate | Basic}] [-Clear
<String[]>]
    [-ComputerAuthenticationPolicy <ADAuthenticationPolicy>] [-
Credential
    <PSCredential>] [-Description <String>] [-Enforce <Boolean>]
[-PassThru]
    [-ProtectedFromAccidentalDeletion <Boolean>] [-Remove
<Hashtable>]
    [-Replace <Hashtable>] [-Server <String>] [-
ServiceAuthenticationPolicy
    <ADAuthenticationPolicy>] [-UserAuthenticationPolicy
    <ADAuthenticationPolicy>] [-Confirm] [-WhatIf]
[<CommonParameters>]
```

```
Set-ADAuthenticationPolicySilo [-AuthType {Negotiate | Basic}]
    [-Credential <PSCredential>] [-PassThru] [-Server <String>] -
Instance
    <ADAuthenticationPolicySilo> [-Confirm] [-WhatIf]
[<CommonParameters>]
```

Description

The Set-ADAuthenticationPolicySilo cmdlet modifies the properties of an Active Directory® Domain Services authentication policy silo. You can modify commonly used property values by using the cmdlet parameters. Property values that are not associated with cmdlet parameters can be modified by using the Add, Replace, Clear and Remove parameters.

The Identity parameter specifies the Active Directory Domain Services authentication policy to modify. You can specify an authentication policy object by using a distinguished

name (DN), a GUID, or a name. You can also use the Identity parameter to specify a variable that contains an authentication policy object, or you can use the pipeline operator to pass an authentication policy object to the Identity parameter. To get an authentication policy object, use the Get-ADAuthenticationPolicycmdlet.

Use the Instance parameter to specify an authentication policy object to use as a template for the object being modified. Do not specify both the Instance parameter and the Identity parameter.

For more information about how the Instance concept is used in Active Directory Domain Services cmdlets, see about_ActiveDirectory_Instance.

Parameters

Parameter :Add

Description :Specifies a list of values to add to an object property. Use this parameter to add one or more values to a property that cannot be modified using a parameter. To identify an attribute, specify the LDAP Display Name defined for it in the Active Directory Domain Services schema.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :AuthType

Description :Specifies the authentication method to use. The acceptable values for this parameter are:

--Negotiate or 0

--Basic or 1

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Manage ment.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Clear

Description :Specifies an array of object properties that are cleared in the directory. Use this parameter to clear one or more values of a property that cannot be modified using a parameter. To modify an object property, you must specify the LDAP display name. You can modify more than one property by specifying a comma-separated list.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**ComputerAuthenticationPolicy**

Description :Specifies the authentication policy that applies to computer accounts.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies a user account that has permission to perform the task. The default is the current user. Type a user name, such as "User01" or "Domain01\User01", or enter a PScredential object, such as one generated by the Get-Credential cmdlet.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Description**

Description :Specifies a description for the object. This parameter sets the value of the description property for the object. The LDAP Display Name (ldapDisplayName) for this property is "description".

Required	false
----------	-------

Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Enforce**

Description :Indicates whether the authentication policy is enforced. Specify \$True to set the authentication policy to enforced. Specify \$False to set the authentication policy to not enforced.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Identity**

Description :Specifies an Active Directory Domain Services authentication policy silo object. Specify the authentication policy silo object in one of the following formats:

--Distinguished Name

--GUID

--Name

Required	true
Position	0
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :**Instance**

Description :Specifies a modified copy of an ADAuthenticationPolicySilo object to use to update the actual ADAuthenticationPolicySilo object. When you specify this parameter, any modifications made to the modified copy of the object are also made to the corresponding ADAuthenticationPolicySilo object. The cmdlet only updates the object properties that have changed. When you specify the Instance parameter, you cannot specify other parameters that set properties on the object.

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**PassThru**

Description :Returns an object representing the item with which you are working. By default, this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**ProtectedFromAccidentalDeletion**

Description :Indicates whether to prevent the object from being deleted. When this property is set to true, you cannot delete the corresponding object without changing the value of the property. The acceptable values for this parameter are:

--\$False or 0

--\$True or 1

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Remove**

Description :Specifies that the cmdlet remove the values of an object property. Use this parameter to remove one or more values of a property that cannot be modified using a cmdlet parameter. To remove an object property, you must specify the LDAP display name.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Replace**

Description :Specifies a list of values for an object property that replaces the current values. Use this parameter to replace one or more values of a property that cannot be modified using a cmdlet parameter. To modify an object property, you must specify the LDAP display name.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to which to connect, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**ServiceAuthenticationPolicy**

Description :Specifies the authentication policy that applies to managed service accounts.

Required	false
Position	named
Default value	
Accept pipeline input?	false

Accept wildcard characters?	false
-----------------------------	-------

Parameter :**UserAuthenticationPolicy**

Description :Specifies the authentication policy that applies to user accounts.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

This cmdlet accepts an account object.

Type : Microsoft.ActiveDirectory.Management.ADAccount

Outputs

Returns one or more objects.

Type : System.Object

Examples

Example 1: Modify an authentication policy silo

This command modifies the user authentication policy for the authentication policy silo named AuthenticationPolicySilo01.

```
PS C:\>Set-ADAuthenticationPolicySilo -Name  
AuthenticationPolicySilo01 -UserAuthenticationPolicy  
'AuthenticationPolicy1'
```

Example 2: Modify multiple properties of an authentication policy silo

This example first gets an authentication policy silo object and stores it in the variable named \$authPolicySilo. Properties of the authentication policy silo are then modified, and finally the contents of the variable are written to the authentication policy silo by using the Instance parameter.

```
PS C:\> $authPolicySilo = Get-ADAuthenticationPolicySilo -  
Identity AuthenticationPolicySilo02  
PS C:\> $authPolicySilo.Description = 'testDescription'  
PS C:\> $authPolicySilo.Enforce = $False  
PS C:\> Set-ADAuthenticationPolicySilo -Instance  
$authPolicySilo
```

Example 3: Modify multiple authentication policy silo objects by filtering

This example first gets all authentication policy silos that match the filter specified by the Filter parameter for Get-ADAuthenticationPolicySilo. The results of the filter are then passed to Set-ADAuthenticationPolicySilo by using the pipeline operator.

```
PS C:\>Get-ADAuthenticationPolicySilo -Filter  
'UserAuthenticationPolicy -eq "AuthenticationPolicy01"' | Set-  
ADAuthenticationPolicySilo -UserAuthenticationPolicy  
AuthenticationPolicy02
```

Example 4: Replace a value in an authentication policy silo object

This command replaces the description for the authentication policy silo object named AuthenticationPolicySilo03.

```
PS C:\>Set-ADAuthenticationPolicySilo -Name  
AuthenticationPolicySilo03 -Replace @{description="New  
Description"}
```


Cmdlet: Set-ADCentralAccessPolicy

Synops

Modifies a central access policy in Active Directory.

Syntax

```
Set-ADCentralAccessPolicy [-Identity] <ADCentralAccessPolicy> [-Add  
    <Hashtable>] [-AuthType {Negotiate | Basic}] [-Clear  
<String[]>]  
    [-Credential <PSCredential>] [-Description <String>] [-PassThru]  
    [-ProtectedFromAccidentalDeletion <Boolean>] [-Remove  
<Hashtable>]  
    [-Replace <Hashtable>] [-Server <String>] [-Confirm] [-WhatIf]  
    [<CommonParameters>]
```

```
Set-ADCentralAccessPolicy [-AuthType {Negotiate | Basic}] [-Credential  
    <PSCredential>] [-PassThru] [-Server <String>] -Instance  
    <ADCentralAccessPolicy> [-Confirm] [-WhatIf]  
    [<CommonParameters>]
```

Description

The Set-ADCentralAccessPolicy cmdlet can be used to modify a central access policy in Active Directory.

Parameters

Parameter **:Add**

Description :Specifies values to add to an object property. Use this parameter to add one or more values to a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can specify multiple values to a property by specifying a comma-separated list of values and more than one property by separating them using a semicolon.. The format for this parameter

is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :AuthType

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Clear

Description :Specifies an array of object properties that will be cleared in the directory. Use this parameter to clear one or more values of a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can modify more than one property by specifying a comma-separated list. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Description

Description :Specifies a description of the object. This parameter sets the value of the Description property for the object. The LDAP Display Name (ldapDisplayName) for this property is "description".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Instance

Description :Specifies a modified copy of a central access policy object to use to update the actual central access policy object. When this parameter is used, any modifications made to the modified copy of the object are also made to the corresponding central access policy object. The cmdlet only updates the object properties that have changed.

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**PassThru**

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**ProtectedFromAccidentalDeletion**

Description :Specifies whether to prevent the object from being deleted. When this property is set to true, you cannot delete the corresponding object without changing the value of the property. Possible values for this parameter include:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Remove**

Description :Specifies that the cmdlet remove values of an object property. Use this parameter to remove one or more values of a property that cannot be modified using a cmdlet parameter. To remove an object property, you must use the LDAP display name. You can remove more than one property by specifying a semicolon-separated list. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Replace**

Description :Specifies values for an object property that will replace the current values. Use this parameter to replace one or more values of a property that cannot be modified

using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can modify more than one property by specifying a comma-separated list. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false

Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A ADCentralAccessPolicy object is received by the Identity parameter.

A ADCentralAccessPolicy object that was retrieved by using the Get-ADCentralAccessPolicy cmdlet and then modified is received by the Instance parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADCentralAccessPolicy

Outputs

Returns the modified ADCentralAccessPolicy object when the PassThru parameter is specified. By default, this cmdlet does not generate any output.

Type : None or Microsoft.ActiveDirectory.Management.ADCentralAccessPolicy

Notes

Examples

----- EXAMPLE 1 -----

Description

Updates the central access policy named "Finance Policy" to include the description "For the Finance Department."

```
C:\PS>Set-ADCentralAccessPolicy "Finance Policy" -Description
"For the Finance Department."
```

----- EXAMPLE 2 -----

Description

Gets the central access policy named "Finance Policy", and then sets its description to "For the Finance Department."

```
C:\PS>Get-ADCentralAccessPolicy "Finance Policy" | Set-
ADCentralAccessPolicy -Description "For the Finance
Department."
```

Cmdlet: Set-ADCentralAccessRule

Synops

Modifies a central access rule in Active Directory.

Syntax

```
Set-ADCentralAccessRule [-Identity] <ADCentralAccessRule> [-Add  
    <Hashtable>] [-AuthType {Negotiate | Basic}] [-Clear  
<String[]>]  
    [-Credential <PSCredential>] [-CurrentAcl <String>] [-  
Description  
    <String>] [-PassThru] [-ProposedAcl <String>]  
    [-ProtectedFromAccidentalDeletion <Boolean>] [-Remove  
<Hashtable>]  
    [-Replace <Hashtable>] [-ResourceCondition <String>] [-Server  
<String>]  
    [-Confirm] [-WhatIf] [<CommonParameters>]
```

```
Set-ADCentralAccessRule [-AuthType {Negotiate | Basic}] [-  
Credential  
    <PSCredential>] [-PassThru] [-Server <String>] -Instance  
    <ADCentralAccessRule> [-Confirm] [-WhatIf]  
[<CommonParameters>]
```

Description

The Set-ADCentralAccessRule cmdlet can be used to modify a central access rule in a central access policy that is stored in Active Directory.

Parameters

Parameter **:Add**

Description :Specifies values to add to an object property. Use this parameter to add one or more values to a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can specify multiple values to a property by specifying a comma-separated list of values and more than one property by separating them using a semicolon.. The format for this parameter

is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :AuthType

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Clear

Description :Specifies an array of object properties that will be cleared in the directory. Use this parameter to clear one or more values of a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can modify more than one property by specifying a comma-separated list. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :CurrentAcl

Description :This parameter specifies the currently effective ACL of the central access rule. The current ACL grants access to target resources once the central access policy containing this rule is published.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Description

Description :Specifies a description of the object. This parameter sets the value of the Description property for the object. The LDAP Display Name (ldapDisplayName) for this property is "description".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Instance

Description :Specifies a modified copy of an central access rule object to use to update the actual central access rule object. When this parameter is used, any modifications made to the modified copy of the object are also made to the corresponding central access rule object. The cmdlet only updates the object properties that have changed.

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PassThru

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ProposedAcl

Description :Specifies the proposed ACL of the central access rule. The proposed ACL allows an administrator to audit the results of access requests to target resources specified in the resource condition without affecting the current system. To view the logs, go to Event Viewer or other audit tools to view the logs.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ProtectedFromAccidentalDeletion

Description :Specifies whether to prevent the object from being deleted. When this property is set to true, you cannot delete the corresponding object without changing the

value of the property. Possible values for this parameter include:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Remove

Description :Specifies that the cmdlet remove values of an object property. Use this parameter to remove one or more values of a property that cannot be modified using a cmdlet parameter. To remove an object property, you must use the LDAP display name. You can remove more than one property by specifying a semicolon-separated list. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Replace

Description :Specifies values for an object property that will replace the current values. Use this parameter to replace one or more values of a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can modify more than one property by specifying a comma-separated list. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ResourceCondition

Description :Specifies the resource condition of the central access rule. The resource condition specifies a list of criteria to scope the resources.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Confirm

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :WhatIf

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A ADCentralAccessPolicyEntry object is received by the Identity parameter.

A ADCentralAccessPolicyEntry object that was retrieved by using the Get-ADCentralAccessPolicyEntry cmdlet and then modified is received by the Instance parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADCentralAccessPolicyEntry

Outputs

Returns the modified ADCentralAccessPolicyEntry object when the PassThru parameter is specified. By default, this cmdlet does not generate any output.

Type : None or Microsoft.ActiveDirectory.Management.ADCentralAccessPolicyEntry

Notes

Examples

----- EXAMPLE 1 -----

Description

Set the central access rule named "Finance Documents Rule" with a new resource condition. The resource condition scopes the resources to ones containing the value 'Finance' in their 'Department' resource property.

```
C:\PS>$departmentResourceProperty = Get-ADResourceProperty
Department
$resourceCondition = "(@RESOURCE." +
$departmentResourceProperty.Name + " Contains {`"Finance`"})"
Set-ADCentralAccessRule "Finance Documents Rule" -
ResourceCondition $resourceCondition
```

----- EXAMPLE 2 -----

Description

Set the central access rule named "Finance Documents Rule" with a new resource condition and new permissions.

The new rule specifies that documents should only be read by members of the Finance department. Members of the Finance department should only be able to access documents in their own country. Only Finance Administrators should have write access. The rule allows an exception for members of the FinanceException group. This group will have read access.

Targeting:

Resource.Department Contains Finance

Access rules:

Allow Read User.Country=Resource.Country AND User.department =
Resource.Department

Allow Full control User.MemberOf(FinanceAdmin)

Allow Read User.Country=Resource.Country AND User.department =
Resource.Department

Allow Read User.MemberOf(FinanceException)

```
C:\PS>$countryClaimType = Get-ADClaimType Country;  
$departmentClaimType = Get-ADClaimType Department;  
$countryResourceProperty = Get-ADResourceProperty Country;  
$departmentResourceProperty = Get-ADResourceProperty  
Department;  
$financeException = Get-ADGroup FinanceException;  
$financeAdmin = Get-ADGroup FinanceAdmin;  
  
$resourceCondition = "(@RESOURCE." +  
$departmentResourceProperty.Name + " Contains {`"Finance`"})"  
  
$currentAcl =  
"O:SYG:SYD:AR(A;;FA;;;OW)(A;;FA;;;BA)(A;;0x1200a9;;; " +  
$financeException.SID.Value + ")(A;;0x1301bf;;; " +  
$financeAdmin.SID.Value +  
")(A;;FA;;;SY)(XA;;0x1200a9;;;AU;(@USER." +  
$countryClaimType.Name + " Any_of @RESOURCE." +  
$countryResourceProperty.Name + ") && (@USER." +  
$departmentClaimType.Name + " Any_of @RESOURCE." +  
$departmentResourceProperty.Name + ")))";  
  
Set-ADCentralAccessRule "Finance Documents Rule" -  
ResourceCondition $resourceCondition -CurrentAcl $currentAcl
```

----- EXAMPLE 3 -----

Description

Get the central access rule named "Finance Documents Rule", and set the description to
"For finance documents."

```
C:\PS>Get-ADCentralAccessRule "Finance Documents Rule" | Set-  
ADCentralAccessRule -Description "For finance documents."
```

Cmdlet: Set-ADClaimTransformLink

Synops

Applies a claims transformation to one or more cross-forest trust relationships in Active Directory.

Syntax

```
Set-ADClaimTransformLink [-Identity] <ADTrust> [-Policy]
    <ADClaimTransformPolicy> [-AuthType {Negotiate | Basic}] [-
Credential
    <PSCredential>] [-PassThru] [-Server <String>] -TrustRole
{Trusted |
    Trusting} [-Confirm] [-WhatIf] [<CommonParameters>]
```

Description

The Set-ADClaimTransformLink cmdlet can be used to apply a claims transformation to one or more cross-forest trust relationships in Active Directory.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Manage- ment.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory group object by providing one of the following values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :PassThru

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Policy

Description :Specifies the claims transformation policy to apply to the cross-forest trust relationship. This parameter does not receive pipeline input.

Required	true
Position	2
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**TrustRole**

Description :An enumeration of the link types. Used to specify which links on the trust relationships should the claims transformation apply to. Allowable values are: Trusted and Trusting.

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named

Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A trust object is received by the Identity parameter.

Type : Microsoft.ActiveDirectory.Management.ADTrust

Examples

----- EXAMPLE 1 -----

Description

Apply the claims transformation policy 'DenyAllPolicy' to the trust "corp.contoso.com". The rule is applied to where this domain acts as both the trusted and trusting domain in the trust. Effectively, the rule is applied to both claims coming in to this domain from its trust partner, and claims flowing out of this domain towards its trust partner.

Since the specified transformation rule denies all claims to be sent or received, this domain will now deny all claims from being sent to or received from the other domain (the trust partner).

```
C:\PS>New-ADClaimTransformPolicy DenyAllPolicy -DenyAll;
Set-ADClaimTransformLink "corp.contoso.com" -Policy
DenyAllPolicy -TrustRole Trusted
Set-ADClaimTransformLink "corp.contoso.com" -Policy
DenyAllPolicy -TrustRole Trusting
```

----- EXAMPLE 2 -----

Description

Apply th the claims transformation policy 'AllowAllExceptCompanyAndDepartmentPolicy' to the trust "corp.contoso.com". The rule is applied to where this domain acts as the trusted domain in the trust. Effectively, the rule is applied to claims flowing out of this domain towards its trust partner.

Since the specified transformation rule allows all claims to be sent or received except 'Company' and 'Department', this domain will now allow all claims except the two from being sent to the other domain (the trust partner).

```
C:\PS>New-ADClaimTransformPolicy
AllowAllExceptCompanyAndDepartmentPolicy -AllowAllExcept
Company,Department;
Get-ADTrust "corp.contoso.com" | Set-ADClaimTransformLink -
Policy AllowAllExceptCompanyAndDepartmentPolicy -TrustRole
Trusted
```

----- EXAMPLE 3 -----

Description

Apply the claims transformation policy 'HumanResourcesToHrPolicy' to the trust "corp.contoso.com". The rule is applied to where this domain acts as the trusting domain in the trust. Effectively, the rule is applied to claims coming in to this domain from its trust partner.

Since the specified transformation rule transforms the value 'Human Resources' into 'HR' in the claim ad://ext/Department:88ce6e1cc00e9524', this domain will now transform the claim value received from the other domain (the trust partner) from 'Human Resources' to 'HR'.

```
C:\PS>New-ADClaimTransformPolicy HumanResourcesToHrPolicy -
Rule 'C1:[Type=="ad://ext/Department:88ce6e1cc00e9524",
Value=="Human Resources", ValueType=="string"] =>
issue(Type=C1.Type, Value="HR", ValueType=C1.ValueType);';
Set-ADClaimTransformLink "corp.contoso.com" -Policy
HumanResourcesToHrPolicy -TrustRole Trusting
```

Cmdlet: Set-ADClaimTransformPolicy

Synops

Sets the properties of a claims transformation policy in Active Directory.

Syntax

```
Set-ADClaimTransformPolicy [-Identity] <ADClaimTransformPolicy>
[-Add
    <Hashtable>] [-AuthType {Negotiate | Basic}] [-Clear
<String[]>]
    [-Credential <PSCredential>] [-Description <String>] [-
PassThru]
    [-ProtectedFromAccidentalDeletion <Boolean>] [-Remove
<Hashtable>]
    [-Replace <Hashtable>] [-Server <String>] -DenyAll [-Confirm]
[-WhatIf]
    [<CommonParameters>]
```

```
Set-ADClaimTransformPolicy [-Identity] <ADClaimTransformPolicy>
[-Add
    <Hashtable>] [-AuthType {Negotiate | Basic}] [-Clear
<String[]>]
    [-Credential <PSCredential>] [-Description <String>] [-
PassThru]
    [-ProtectedFromAccidentalDeletion <Boolean>] [-Remove
<Hashtable>]
    [-Replace <Hashtable>] [-Server <String>] -AllowAll [-
Confirm] [-WhatIf]
    [<CommonParameters>]
```

```
Set-ADClaimTransformPolicy [-Identity] <ADClaimTransformPolicy>
[-Add
    <Hashtable>] [-AuthType {Negotiate | Basic}] [-Clear
<String[]>]
    [-Credential <PSCredential>] [-Description <String>] [-
PassThru]
    [-ProtectedFromAccidentalDeletion <Boolean>] [-Remove
<Hashtable>]
```

```

        [-Replace <Hashtable>] [-Server <String>] -AllowAllExcept
<ADClaimType[]>
        [-Confirm] [-WhatIf] [<CommonParameters>]

```

```

Set-ADClaimTransformPolicy [-Identity] <ADClaimTransformPolicy>
[-Add
    <Hashtable>] [-AuthType {Negotiate | Basic}] [-Clear
<String[]>]
    [-Credential <PSCredential>] [-Description <String>] [-
PassThru]
    [-ProtectedFromAccidentalDeletion <Boolean>] [-Remove
<Hashtable>]
    [-Replace <Hashtable>] [-Server <String>] -DenyAllExcept
<ADClaimType[]>
    [-Confirm] [-WhatIf] [<CommonParameters>]

```

```

Set-ADClaimTransformPolicy [-Identity] <ADClaimTransformPolicy>
[-Add
    <Hashtable>] [-AuthType {Negotiate | Basic}] [-Clear
<String[]>]
    [-Credential <PSCredential>] [-Description <String>] [-
PassThru]
    [-ProtectedFromAccidentalDeletion <Boolean>] [-Remove
<Hashtable>]
    [-Replace <Hashtable>] [-Rule <String>] [-Server <String>] [-
Confirm]
    [-WhatIf] [<CommonParameters>]

```

```

Set-ADClaimTransformPolicy [-AuthType {Negotiate | Basic}] [-
Credential
    <PSCredential>] [-PassThru] [-Server <String>] -Instance
    <ADClaimTransformPolicy> [-Confirm] [-WhatIf]
[<CommonParameters>]

```

Description

The Set-ADClaimTransformPolicy cmdlet can be used to set the properties of a claims transformation policy in Active Directory. A claims transformation policy object contains a

set of rules authored in the transformation rule language.

Parameters

Parameter :**Add**

Description :Specifies values to add to an object property. Use this parameter to add one or more values to a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can specify multiple values to a property by specifying a comma-separated list of values and more than one property by separating them using a semicolon.. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**AllowAll**

Description :When this parameter is specified, the policy sets a claims transformation rule that allows all claims to be sent or received.

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**AllowAllExcept**

Description :When this parameter is specified, the policy sets a claims transformation rule that allows all claims to be sent or received except for the specified claim types.

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Clear**

Description :Specifies an array of object properties that will be cleared in the directory. Use this parameter to clear one or more values of a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can modify more than one property by specifying a comma-separated list. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies a user account that has permission to perform this action. The default is the current user.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**DenyAll**

Description :When this parameter is specified, the policy sets a claims transformation rule that denies all claims to be sent or received.

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :DenyAllExcept

Description :When this parameter is specified, the claims transformation policy sets a claims transformation rule that denies all claims to be sent or received except for the specified claim types.

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Description

Description :Specifies a description of the object. This parameter sets the value of the Description property for the object. The LDAP Display Name (ldapDisplayName) for this property is "description".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies one of the following as valid identities for the ADClaimTransformPolicy object:

Required	true
Position	1
Default value	None
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :**Instance**

Description :Specifies an instance of an Active Directory object to use as a template for a new claims transformation policy object.

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**PassThru**

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**ProtectedFromAccidentalDeletion**

Description :Specifies whether to prevent the object from being deleted. When this property is set to true, you cannot delete the corresponding object without changing the value of the property. Possible values for this parameter include:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Remove**

Description :Specifies that the cmdlet remove values of an object property. Use this parameter to remove one or more values of a property that cannot be modified using a cmdlet parameter. To remove an object property, you must use the LDAP display name. You can remove more than one property by specifying a semicolon-separated list. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Replace**

Description :Specifies values for an object property that will replace the current values. Use this parameter to replace one or more values of a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can modify more than one property by specifying a comma-separated list. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Rule**

Description :Represents the claims transformation rule. To specify the rule, you can either (1) type the rule in a text file, and then pass the file to the cmdlet (recommended), or (2) type the rule inline.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
----------	-------

Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A claim transform policy object is received by the Identity parameter.

A claim transform policy object that was retrieved by using the Get-ADClaimTransformPolicycmdlet and then modified is received by the Instance parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADClaimTransformPolicy

Outputs

Returns the modified claim transform policy object when the PassThru parameter is specified. By default, this cmdlet does not generate any output.

Type : None or Microsoft.ActiveDirectory.Management.ADClaimTransformPolicy

Notes

Examples

----- EXAMPLE 1 -----

Description

Sets the transformation rule on the claims transformation policy named 'DenyAllPolicy' to deny all claims, both those that are sent as well as those that are received.

```
C:\PS>Set-ADClaimTransformPolicy DenyAllPolicy -DenyAll
```

----- EXAMPLE 2 -----

Description

Set the transformation rule on the claims transformation policy named 'AllowAllExceptCompanyAndDepartmentPolicy' to allow all claims to be sent or received except for the claims Company and Department.

```
C:\PS>Set-ADClaimTransformPolicy  
AllowAllExceptCompanyAndDepartmentPolicy -AllowAllExcept  
Company, Department
```

----- EXAMPLE 3 -----

Description

Sets the transformation rule on the claims transformation policy named 'HumanResourcesToHrPolicy' to transform the value 'Human Resources' to 'HR' in the claim 'ad://ext/Department:88ce6e1cc00e9524'.

```
C:\PS>Set-ADClaimTransformPolicy HumanResourcesToHrPolicy -  
Rule 'C1:[Type=="ad://ext/Department:88ce6e1cc00e9524",  
Value=="Human Resources", ValueType=="string"] =>  
issue(Type=C1.Type, Value="HR", ValueType=C1.ValueType);'
```

----- EXAMPLE 4 -----

Description

Set the transformation rule on the claims transformation policy named 'MyRule' with the rule specified in C:\rule.txt.

```
C:\PS>$rule = Get-Content C:\rule.txt
Set-ADClaimTransformPolicy MyRule -Rule $rule
```

Cmdlet: Set-ADClaimType

Synops

Modify a claim type in Active Directory.

Syntax

```
Set-ADClaimType [-Identity] <ADClaimType> [-Add <Hashtable>]
    [-AppliesToClasses <String[]>] [-AuthType {Negotiate |
Basic}] [-Clear
    <String[]>] [-Credential <PSCredential>] [-Description
<String>]
    [-DisplayName <String>] [-Enabled <Boolean>] [-PassThru]
    [-ProtectedFromAccidentalDeletion <Boolean>] [-Remove
<Hashtable>]
    [-Replace <Hashtable>] [-RestrictValues <Boolean>] [-Server
<String>]
    [-SuggestedValues <ADSuggestedValueEntry[]>] [-SourceAttribute
<String>]
    [-Confirm] [-WhatIf] [<CommonParameters>]
```

```
Set-ADClaimType [-Identity] <ADClaimType> [-Add <Hashtable>]
    [-AppliesToClasses <String[]>] [-AuthType {Negotiate |
Basic}] [-Clear
    <String[]>] [-Credential <PSCredential>] [-Description
<String>]
    [-DisplayName <String>] [-Enabled <Boolean>] [-PassThru]
    [-ProtectedFromAccidentalDeletion <Boolean>] [-Remove
<Hashtable>]
    [-Replace <Hashtable>] [-RestrictValues <Boolean>] [-Server
<String>]
    [-SuggestedValues <ADSuggestedValueEntry[]>] [-Confirm] [-
WhatIf]
    [<CommonParameters>]
```

```
Set-ADClaimType [-Identity] <ADClaimType> [-Add <Hashtable>]
    [-AppliesToClasses <String[]>] [-AuthType {Negotiate |
Basic}] [-Clear
    <String[]>] [-Credential <PSCredential>] [-Description
```

```

<String>]
    [-DisplayName <String>] [-Enabled <Boolean>] [-PassThru]
    [-ProtectedFromAccidentalDeletion <Boolean>] [-Remove
<Hashtable>]
    [-Replace <Hashtable>] [-RestrictValues <Boolean>] [-Server
<String>]
    -SourceOID <String> [-Confirm] [-WhatIf] [<CommonParameters>]

```

```

Set-ADClaimType [-Identity] <ADClaimType> [-Add <Hashtable>]
    [-AppliesToClasses <String[]>] [-AuthType {Negotiate |
Basic}] [-Clear
    <String[]>] [-Credential <PSCredential>] [-Description
<String>]
    [-DisplayName <String>] [-Enabled <Boolean>] [-PassThru]
    [-ProtectedFromAccidentalDeletion <Boolean>] [-Remove
<Hashtable>]
    [-Replace <Hashtable>] [-RestrictValues <Boolean>] [-Server
<String>]
    [-SuggestedValues <ADSuggestedValueEntry[]>] -
SourceTransformPolicy
    [-Confirm] [-WhatIf] [<CommonParameters>]

```

```

Set-ADClaimType [-AuthType {Negotiate | Basic}] [-Credential
    <PSCredential>] [-PassThru] [-Server <String>] -Instance
<ADClaimType>
    [-Confirm] [-WhatIf] [<CommonParameters>]

```

Description

The Set-ADClaimType cmdlet can be used to modify a claim type in Active Directory.

Parameters

Parameter :**Add**

Description :Specifies values to add to an object property. Use this parameter to add one or more values to a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can specify multiple values to a property by specifying a comma-separated list of values and more than one property by separating them using a semicolon.. The format for this parameter

is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**AppliesToClasses**

Description :Specifies the names, GUIDs or DNs of the schema classes to which this claim type is applied.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Clear**

Description :Specifies an array of object properties that will be cleared in the directory. Use this parameter to clear one or more values of a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can modify more than one property by specifying a comma-separated list. The format for this parameter is

Required	false
Position	named

Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Description

Description :Specifies a description of the object. This parameter sets the value of the Description property for the object. The LDAP Display Name (ldapDisplayName) for this property is "description".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :DisplayName

Description :Specifies the display name of the claim type. The display name of the claim type must be unique. The display name of a claim type can be used as an identity in other Active Directory cmdlets. For example, if the display name of a claim type is "Employee Type", then you can use 'Get-ADClaimType -Identity "Employee Type"' to retrieve the claim type.

Required	false
Position	named
Default value	
Accept pipeline input?	false

Accept wildcard characters?	false
-----------------------------	-------

Parameter :**Enabled**

Description :Specifies if the claim type is enabled.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Identity**

Description :Specifies an Active Directory object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :**Instance**

Description :Specifies an instance of an claim type object to use as a template for a new claim type object.

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**PassThru**

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named

Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ProtectedFromAccidentalDeletion

Description :Specifies whether to prevent the object from being deleted. When this property is set to true, you cannot delete the corresponding object without changing the value of the property. Possible values for this parameter include:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Remove

Description :Specifies that the cmdlet remove values of an object property. Use this parameter to remove one or more values of a property that cannot be modified using a cmdlet parameter. To remove an object property, you must use the LDAP display name. You can remove more than one property by specifying a semicolon-separated list. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Replace

Description :Specifies values for an object property that will replace the current values. Use this parameter to replace one or more values of a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can modify more than one property by specifying a comma-separated list. The format for this parameter is

Required	false
Position	named
Default value	

Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :RestrictValues

Description :This parameter is used to specify whether the claim type may have values outside of the SuggestedValues. If this is set to true, then the claim should only have values specified in the SuggestedValues. Note that Active Directory does not enforce this restriction. It is up to the applications that use these claims to enforce the restriction.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :SourceAttribute

Description :Specifies an Active Directory attribute from which this claim type is based, and from which the claim value is obtained. The input must be the distinguished name (DN), Name, or GUID of the attribute definition in the schema.

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :SourceOID

Description :Use to configure a certificate-based claim type source. For example, use this parameter to create certificate-based claim types when you want to use smartcard logon claims for authorization decisions. This parameter uses the string representation of an object identifier (OID) from the issuance policy found in the certificate and on the certificate template when using Active Directory Certificate Services. An example of an OID is "1.3.6.1.4.1.311.47.2.5".

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :SourceTransformPolicy

Description :Indicates that the claim type is sourced from the claims transformation policy engine.

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :SuggestedValues

Description :Specifies one or more suggested values for the claim type. An application may choose to present this list of suggested values for the user to choose from. When RestrictValues is set to true, the application should restrict the user to pick values from this list only.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Confirm

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Notes

Examples

----- EXAMPLE 1 -----

Description

Sets the user claim type with display name 'Title' to source from the Active Directory attribute 'title'.

```
C:\PS>Set-ADClaimType Title -SourceAttribute title
```

----- EXAMPLE 2 -----

Description

Sets the suggested values of the user claim type with display name 'Employee Type' to 'FTE', 'Intern', and 'Contractor'. Applications using this claim type would allow their users to specify one of the suggested values as this claim type's value.

```
C:\PS>$fullTime = New-Object
Microsoft.ActiveDirectory.Management.ADSuggestedValueEntry("FT
E", "Full-Time", "Full-time employee");
$intern = New-Object
Microsoft.ActiveDirectory.Management.ADSuggestedValueEntry("In
tern", "Intern", "Student employee");
$contractor = New-Object
Microsoft.ActiveDirectory.Management.ADSuggestedValueEntry("Co
ntractor", "Contractor", "Contract employee");
Set-ADClaimType "Employee Type" -SuggestedValues
$fullTime,$intern,$contractor
```

----- EXAMPLE 3 -----

Description

Set the source OID of the claim type with display name 'Bitlocker Enabled' to '1.3.6.1.4.1.311.67.1.1'. Disable the claim type.

```
C:\PS>Set-ADclaimType "Bitlocker Enabled" -SourceOID
"1.3.6.1.4.1.311.67.1.1" -Enabled $FALSE
```

----- EXAMPLE 4 -----

Description

Sets the claim type named 'SourceForest' to source from the claims transformation policy engine.

```
PS C:\>Set-ADClaimType SourceForest -SourceTransformPolicy
```

Cmdlet: Set-ADComputer

Synops

Modifies an Active Directory computer object.

Syntax

```
Set-ADComputer [-Identity] <ADComputer> [-AccountExpirationDate
    <DateTime>] [-AccountNotDelegated <Boolean>] [-Add
<Hashtable>]
    [-AllowReversiblePasswordEncryption <Boolean>] [-
AuthenticationPolicy
    <ADAuthenticationPolicy>] [-AuthenticationPolicySilo
    <ADAuthenticationPolicySilo>] [-AuthType {Negotiate | Basic}]

    [-CannotChangePassword <Boolean>] [-Certificates <Hashtable>]

    [-ChangePasswordAtLogon <Boolean>] [-Clear <String[]>]
    [-CompoundIdentitySupported <Boolean>] [-Credential
<PSCredential>]
    [-Description <String>] [-DisplayName <String>] [-DNSHostName
<String>]
    [-Enabled <Boolean>] [-HomePage <String>] [-
KerberosEncryptionType {None |
    DES | RC4 | AES128 | AES256}] [-Location <String>] [-
ManagedBy
    <ADPrincipal>] [-OperatingSystem <String>] [-
OperatingSystemHotfix
    <String>] [-OperatingSystemServicePack <String>] [-
OperatingSystemVersion
    <String>] [-Partition <String>] [-PassThru] [-
PasswordNeverExpires
    <Boolean>] [-PasswordNotRequired <Boolean>]
    [-PrincipalsAllowedToDelegateToAccount <ADPrincipal[]>] [-
Remove
    <Hashtable>] [-Replace <Hashtable>] [-SAMAccountName
<String>] [-Server
    <String>] [-ServicePrincipalNames <Hashtable>] [-
TrustedForDelegation
    <Boolean>] [-UserPrincipalName <String>] [-Confirm] [-WhatIf]
```

[<CommonParameters>]

```
Set-ADComputer [-AuthType {Negotiate | Basic}] [-Credential  
    <PSCredential>] [-PassThru] [-Server <String>] -Instance  
<ADComputer>  
    [-Confirm] [-WhatIf] [<CommonParameters>]
```

Description

The Set-ADComputer cmdlet modifies the properties of an Active Directory computer object. You can modify commonly used property values by using the cmdlet parameters. Property values that are not associated with cmdlet parameters can be modified by using the Add, Replace, Clear and Remove parameters.

The Identity parameter specifies the Active Directory computer to modify. You can identify a computer by its distinguished name Members (DN), GUID, security identifier (SID) or Security Accounts Manager (SAM) account name. You can also set the Identity parameter to an object variable such as \$<localComputerObject>, or you can pass an object through the pipeline to the Identity parameter. For example, you can use the Get-ADComputer cmdlet to retrieve a computer object and then pass the object through the pipeline to Set-ADComputer.

The Instance parameter provides a way to update a computer by applying the changes made to a copy of the computer object. When you set the Instance parameter to a copy of an Active Directory computer object that has been modified, the Set-ADComputer cmdlet makes the same changes to the original computer object. To get a copy of the object to modify, use the Get-ADComputer object. When you specify the Instance parameter you should not pass the identity parameter. For more information about the Instance parameter, see the Instance parameter description. For more information about how the instance concept is used in Active Directory cmdlets, see [about_ActiveDirectory_Instance](#).

The following examples show how to modify the Location property of a computer object by using three methods:

- By specifying the Identity and the Location parameters
- By passing a computer object through the pipeline and specifying the Location parameter
- By specifying the Instance parameter.

Method 1: Modify the Location property for the saraDavisLaptop computer by using the Identity and Location parameters.

```
Set-ADComputer -Identity SaraDavisLaptop -Location "W4013"
```

Method 2: Modify the Location property for the saraDavisLaptop computer by passing the computer object through the pipeline and specifying the Location parameter.

```
Get-ADComputer SaraDavisLaptop | Set-ADcomputer -Location "W4013"
```

Method 3: Modify the Location property for the saraDavisLaptop computer by using the Windows PowerShell command line to modify a local instance of the computer object. Then set the Instance parameter to the local instance.

```
$computer = Get-ADcomputer saraDavisLaptop
```

```
$computer.Location= "W4013"
```

```
Set-ADComputer -Instance $computer
```

Parameters

Parameter :**AccountExpirationDate**

Description :Specifies the expiration date for an account. When you set this parameter to 0, the account never expires. This parameter sets the AccountExpirationDate property of an account object. The LDAP Display name (ldapDisplayName) for this property is accountExpires.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**AccountNotDelegated**

Description :Specifies whether the security context of the user is delegated to a service. When this parameter is set to true, the security context of the account is not delegated to a service even when the service account is set as trusted for Kerberos delegation. This parameter sets the AccountNotDelegated property for an Active Directory account. This parameter also sets the ADS_UF_NOT_DELEGATED flag of the Active Directory User Account Control (UAC) attribute. Possible values for this parameter include

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Add**

Description :Specifies values to add to an object property. Use this parameter to add one or more values to a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can specify multiple values to a property by specifying a comma-separated list of values and more than one property by separating them using a semicolon.. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**AllowReversiblePasswordEncryption**

Description :Specifies whether reversible password encryption is allowed for the account. This parameter sets the AllowReversiblePasswordEncryption property of the account. This parameter also sets the ADS_UF_ENCRYPTED_TEXT_PASSWORD_ALLOWED flag of the Active Directory User Account Control (UAC) attribute. Possible values for this parameter include:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**AuthenticationPolicy**

Description :

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**AuthenticationPolicySilo**

Description :

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :AuthType

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :CannotChangePassword

Description :Specifies whether the account password can be changed. This parameter sets the CannotChangePassword property of an account. Possible values for this parameter include:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Certificates

Description :Modifies the DER-encoded X.509v3 certificates of the account. These certificates include the public key certificates issued to this account by the Microsoft Certificate Service. This parameter sets the Certificates property of the account object. The LDAP Display Name (ldapDisplayName) for this property is "userCertificate".

Required	false
Position	named
Default value	
Accept pipeline input?	false

Accept wildcard characters?	false
-----------------------------	-------

Parameter :ChangePasswordAtLogon

Description :Specifies whether a password must be changed during the next logon attempt. Possible values for this parameter include:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Clear

Description :Specifies an array of object properties that will be cleared in the directory. Use this parameter to clear one or more values of a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can modify more than one property by specifying a comma-separated list. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :CompoundIdentitySupported

Description :Specifies whether an account supports Kerberos service tickets which includes the authorization data for the user's device. This value sets the compound identity supported flag of the Active Directory msDS-SupportedEncryptionTypes attribute. Possible values for this parameter are:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :DNSHostName

Description :Specifies the fully qualified domain name (FQDN) of the computer. This parameter sets the DNSHostName property for a computer object. The LDAP Display Name for this property is "DNSHostName".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Description

Description :Specifies a description of the object. This parameter sets the value of the Description property for the object. The LDAP Display Name (ldapDisplayName) for this property is "description".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :DisplayName

Description :Specifies the display name of the object. This parameter sets the DisplayName property of the object. The LDAP Display Name (ldapDisplayName) for this property is "displayName".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Enabled

Description :Specifies if an account is enabled. An enabled account requires a password. This parameter sets the Enabled property for an account object. This parameter also sets the ADS_UF_ACCOUNTDISABLE flag of the Active Directory User Account Control (UAC) attribute. Possible values for this parameter include:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :HomePage

Description :Specifies the URL of the home page of the object. This parameter sets the homePage property of an Active Directory object. The LDAP Display Name (ldapDisplayName) for this property is "wwwHomePage".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory computer object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	

Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Instance

Description :Specifies a modified copy of a computer object to use to update the actual Active Directory computer object. When this parameter is used, any modifications made to the modified copy of the object are also made to the corresponding Active Directory object. The cmdlet only updates the object properties that have changed.

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :KerberosEncryptionType

Description :Specifies whether an account supports Kerberos encryption types which are used during creation of service tickets. This value sets the encryption types supported flags of the Active Directory msDS-SupportedEncryptionTypes attribute. Possible values for this parameter are:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Location

Description :Specifies the location of the computer, such as an office number. This parameter sets the Location property of a computer. The LDAP display name (ldapDisplayName) of this property is "location".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**ManagedBy**

Description :Specifies the user or group that manages the object by providing one of the following property values. Note: The identifier in parentheses is the LDAP display name for the property.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**OperatingSystem**

Description :Specifies an operating system name. This parameter sets the OperatingSystem property of the computer object. The LDAP Display Name (ldapDisplayName) for this property is "operatingSystem".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**OperatingSystemHotfix**

Description :Specifies an operating system hotfix name. This parameter sets the operatingSystemHotfix property of the computer object. The LDAP display name for this property is "operatingSystemHotfix".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**OperatingSystemServicePack**

Description :Specifies the name of an operating system service pack. This parameter sets the OperatingSystemServicePack property of the computer object. The LDAP display name (ldapDisplayName) for this property is "operatingSystemServicePack".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :OperatingSystemVersion

Description :Specifies an operating system version. This parameter sets the OperatingSystemVersion property of the computer object. The LDAP display name (ldapDisplayName) for this property is "operatingSystemVersion".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Partition

Description :Specifies the distinguished name of an Active Directory partition. The distinguished name must be one of the naming contexts on the current directory server. The cmdlet searches this partition to find the object defined by the Identity parameter.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PassThru

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PasswordNeverExpires

Description :Specifies whether the password of an account can expire. This parameter sets the PasswordNeverExpires property of an account object. This parameter also sets the ADS_UF_DONT_EXPIRE_PASSWD flag of the Active Directory User Account Control attribute. Possible values for this parameter include:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PasswordNotRequired

Description :Specifies whether the account requires a password. This parameter sets the PasswordNotRequired property of an account, such as a user or computer account. This parameter also sets the ADS_UF_PASSWD_NOTREQD flag of the Active Directory User Account Control attribute. Possible values for this parameter are:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PrincipalsAllowedToDelegateToAccount

Description :Specifies the accounts which can act on the behalf of users to services running as this computer account. This parameter sets the msDS-AllowedToActOnBehalfOfOtherIdentity attribute of a computer account object.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Remove

Description :Specifies that the cmdlet remove values of an object property. Use this

parameter to remove one or more values of a property that cannot be modified using a cmdlet parameter. To remove an object property, you must use the LDAP display name. You can remove more than one property by specifying a semicolon-separated list. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Replace**

Description :Specifies values for an object property that will replace the current values. Use this parameter to replace one or more values of a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can modify more than one property by specifying a comma-separated list. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**SAMAccountName**

Description :Specifies the Security Account Manager (SAM) account name of the user, group, computer, or service account. The maximum length of the description is 256 characters. To be compatible with older operating systems, create a SAM account name that is 20 characters or less. This parameter sets the SAMAccountName for an account object. The LDAP display name (ldapDisplayName) for this property is "sAMAccountName".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**ServicePrincipalNames**

Description :Specifies the service principal names for the account. This parameter sets the ServicePrincipalNames property of the account. The LDAP display name (ldapDisplayName) for this property is servicePrincipalName. This parameter uses the following syntax to add remove, replace or clear service principal name values.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**TrustedForDelegation**

Description :Specifies whether an account is trusted for Kerberos delegation. A service that runs under an account that is trusted for Kerberos delegation can assume the identity of a client requesting the service. This parameter sets the TrustedForDelegation property of an account object. This value also sets the ADS_UF_TRUSTED_FOR_DELEGATION flag of the Active Directory User Account Control attribute. Possible values for this parameter are:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :UserPrincipalName

Description :Each user account has a user principal name (UPN) in the format <user>@<DNS-domain-name>. A UPN is a friendly name assigned by an administrator that is shorter than the LDAP distinguished name used by the system and easier to remember. The UPN is independent of the user object's DN, so a user object can be moved or renamed without affecting the user logon name. When logging on using a UPN, users no longer have to choose a domain from a list on the logon dialog box.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Confirm

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :WhatIf

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A computer object is received by the Identity parameter.

A computer object that was retrieved by using the Get-ADComputer cmdlet and then modified is received by the Instance parameter.

Type : Microsoft.ActiveDirectory.Management.ADComputer

Outputs

Returns the modified computer object when the PassThru parameter is specified. By default, this cmdlet does not generate any output.

Type : None or Microsoft.ActiveDirectory.Management.ADComputer

Notes

Examples

----- EXAMPLE 1 -----

Description

Modify the SPN value for a given computer.

```
C:\PS>Set-ADComputer "FABRIKAM-SRV1" -ServicePrincipalName  
@{Replace="MSSQLSVC/FABRIKAM-  
SRV1.FABRIKAM.COM:1456", "MSOLAPSVC.3/FABRIKAM-  
SRV1.FABRIKAM.COM:analyze"}
```

----- EXAMPLE 2 -----

Description

Modify the location for a given computer.

```
C:\PS>Set-ADComputer "FABRIKAM-SRV1" -Location "NA/HQ/Building  
A"
```

----- EXAMPLE 3 -----

Description

Set the managed by attribute value for a given computer using the SAM account name of the user.

```
C:\PS>Set-ADComputer "FABRIKAM-SRV1" -ManagedBy "CN=SQL  
Administrator  
01,OU=UserAccounts,OU=Managed,DC=FABRIKAM,DC=COM"
```

----- EXAMPLE 4 -----

Description

Set the location and managed-by attributes of a given computer using the instance parameter set.

```
C:\PS>$comp = Get-ADComputer "FABRIKAM-SRV1"; $comp.Location =  
"NA/HQ/Building A"; $comp.ManagedBy = "CN=SQL Administrator  
01,OU=UserAccounts,OU=Managed,DC=FABRIKAM,DC=COM"; Set-  
ADComputer -Instance $comp
```

Cmdlet: Set-ADDefaultDomainPasswordPolicy

Synops

Modifies the default password policy for an Active Directory domain.

Syntax

```
Set-ADDefaultDomainPasswordPolicy [-Identity]
    <ADDefaultDomainPasswordPolicy> [-AuthType {Negotiate |
Basic}]
    [-ComplexityEnabled <Boolean>] [-Credential <PSCredential>]
    [-LockoutDuration <TimeSpan>] [-LockoutObservationWindow
<TimeSpan>]
    [-LockoutThreshold <Int32>] [-MaxPasswordAge <TimeSpan>] [-
MinPasswordAge
    <TimeSpan>] [-MinPasswordLength <Int32>] [-PassThru]
    [-PasswordHistoryCount <Int32>] [-ReversibleEncryptionEnabled
<Boolean>]
    [-Server <String>] [-Confirm] [-WhatIf] [<CommonParameters>]
```

Description

The Set-ADDefaultDomainPasswordPolicy cmdlet modifies the properties of the default password policy for a domain. You can modify property values by using the cmdlet parameters.

The Identity parameter specifies the domain whose default password policy you want modify. You can identify a domain by its Distinguished Name (DN), GUID, Security Identifier (SID), DNS domain name, or NETBIOS name. You can also set the parameter to an ADDomain object variable, or pass an ADDomain object through the pipeline to the Identity parameter. For example, you can use the Get-ADDomain cmdlet to retrieve a domain object and then pass the object through the pipeline to the Set-ADDomainDefaultPasswordPolicy cmdlet.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**ComplexityEnabled**

Description :Specifies whether password complexity is enabled for the password policy. If enabled, the password must contain two of the following three character types:

Required	false
Position	named
Default value	\$true
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Identity**

Description :Specifies an Active Directory domain object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute. All values are for the domainDNS object that represents the domain.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)

Accept wildcard characters?	false
-----------------------------	-------

Parameter :LockoutDuration

Description :Specifies the length of time that an account is locked after the number of failed login attempts exceeds the lockout threshold. You cannot login to an account that is locked until the lockout duration time period has expired. This parameter sets the lockoutDuration property of a password policy object. The LDAP display name (ldapDisplayName) of this property is "msDS-LockoutDuration".

Required	false
Position	named
Default value	0.00:30:00 (30 Minutes)
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :LockoutObservationWindow

Description :Specifies the maximum time interval between two unsuccessful login attempts before the number of unsuccessful login attempts is reset to 0. An account is locked when the number of unsuccessful login attempts exceeds the password policy lockout threshold. This parameter sets the lockoutObservationWindow property of a password policy object. The LDAP Display Name (ldapDisplayName) of this property is "msDS-lockoutObservationWindow".

Required	false
Position	named
Default value	0.00.30.00 (30 Minutes)
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :LockoutThreshold

Description :Specifies the number of unsuccessful login attempts that are permitted before an account is locked out. This number increases when the time between unsuccessful login attempts is less than the time specified for the lockout observation time window. This parameter sets the LockoutThreshold property of a password policy.

Required	false
Position	named
Default value	0

Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**MaxPasswordAge**

Description :Specifies the maximum length of time that you can have the same password. After this time period, the password expires and you must create a new one.

Required	false
Position	named
Default value	42.00:00:00 (42 days)
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**MinPasswordAge**

Description :Specifies the minimum length of time before you can change a password.

Required	false
Position	named
Default value	1.00:00:00 (1day)
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**MinPasswordLength**

Description :Specifies the minimum number of characters that a password must contain. This parameter sets the MinPasswordLength property of the password policy.

Required	false
Position	named
Default value	7
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**PassThru**

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
----------	-------

Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PasswordHistoryCount

Description :Specifies the number of previous passwords to save. A user cannot reuse a password in the list of saved passwords. This parameter sets the PasswordHistoryCount property for a password policy.

Required	false
Position	named
Default value	24
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ReversibleEncryptionEnabled

Description :Specifies whether the directory must store passwords using reversible encryption. This parameter sets the ReversibleEncryption property for a password policy. Possible values for this parameter include the following:

Required	false
Position	named
Default value	\$true
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A domain object is received by the Identity parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADDomain

Notes

Examples

----- EXAMPLE 1 -----

Description

Set the default domain password policy for a given domain. Note: setting MaxPwdAge to 0 will convert it to 'never' (Int64.MinValue or -9223372036854775808 in the directory).

```
C:\PS>Set-ADDefaultDomainPasswordPolicy -Identity fabrikam.com
-LockoutDuration 00:40:00 -LockoutObservationWindow 00:20:00 -
ComplexityEnabled $true -ReversibleEncryptionEnabled $false -
MaxPasswordAge 10.00:00:00
```

----- EXAMPLE 2 -----

Description

Set the default domain password policy for the current logged on user domain.

```
C:\PS>Get-ADDefaultDomainPasswordPolicy -Current LoggedOnUser  
| Set-ADDefaultDomainPasswordPolicy -LockoutDuration 00:40:00  
-LockoutObservationWindow 00:20:00 -ComplexityEnabled $true -  
ReversibleEncryptionEnabled $false -MinPasswordLength 12
```

Cmdlet: Set-ADDomain

Synops

Modifies an Active Directory domain.

Syntax

```
Set-ADDomain [-Identity] <ADDomain> [-Add <Hashtable>]
    [-AllowedDNSSuffixes <Hashtable>] [-AuthType {Negotiate |
Basic}] [-Clear
    <String[]>] [-Credential <PSCredential>] [-
LastLogonReplicationInterval
    <TimeSpan>] [-ManagedBy <ADPrincipal>] [-PassThru] [-Remove
<Hashtable>]
    [-Replace <Hashtable>] [-Server <String>] [-Confirm] [-
WhatIf]
    [<CommonParameters>]
```

```
Set-ADDomain [-AllowedDNSSuffixes <Hashtable>] [-AuthType
{Negotiate |
    Basic}] [-Credential <PSCredential>] [-
LastLogonReplicationInterval
    <TimeSpan>] [-ManagedBy <ADPrincipal>] [-PassThru] [-Server
<String>]
    [-Instance <ADDomain>] [-Confirm] [-WhatIf]
    [<CommonParameters>]
```

Description

The Set-ADDomain cmdlet modifies the properties of an Active Directory domain. You can modify commonly used property values by using the cmdlet parameters. Property values that are not associated with cmdlet parameters can be modified by using the Add, Replace, Clear and Remove parameters.

The Identity parameter specifies the domain to modify. You can identify a domain by its distinguished name (DN), GUID, security identifier (SID), DNS domain name, or NetBIOS name. You can also set the Identity parameter to an object variable such as \$<localDomainObject>, or you can pass an object through the pipeline to the Identity parameter. For example, you can use the Get-ADDomain cmdlet to retrieve a domain

object and then pass the object through the pipeline to the Set-ADDomain cmdlet.

The Instance parameter provides a way to update a domain object by applying the changes made to a copy of the domain object. When you set the Instance parameter to a copy of an Active Directory domain object that has been modified, the Set-ADDomain cmdlet makes the same changes to the original domain object. To get a copy of the object to modify, use the Get-ADDomain object. When you specify the Instance parameter you should not pass the identity parameter. For more information about the Instance parameter, see the Instance parameter description.

The following examples show how to modify the ManagedBy property of a domain object by using three methods:

- By specifying the Identity and the ManagedBy parameters

- By passing a domain object through the pipeline and specifying the ManagedBy parameter

- By specifying the Instance parameter.

Method 1: Modify the ManagedBy property for the London domain by using the Identity and ManagedBy parameters.

```
Set-ADDomain -Identity London -ManagedBy SaraDavis
```

Method 2: Modify the ManagedBy property for the London domain by passing the London domain through the pipeline and specifying the ManagedBy parameter.

```
Get-ADDomain London | Set-ADDomain -ManagedBy SaraDavis
```

Method 3: Modify the ManagedBy property for the London domain by using the Windows PowerShell command line to modify a local instance of the London domain. Then set the Instance parameter to the local instance.

```
$domain = Get-ADDomain London
```

```
$domain.ManagedBy = SaraDavis
```

```
Set-ADDomain -Instance $domain.
```

Parameters

Parameter :**Add**

Description :Specifies values to add to an object property. Use this parameter to add one or more values to a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can specify multiple values to a property by specifying a comma-separated list of values and more than one property by separating them using a semicolon.. The format for this parameter is

Required	false
----------	-------

Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :AllowedDNSSuffixes

Description :Modifies the list of domain name server (DNS) suffixes that are allowed in a domain. This parameter sets the value of the msDS-AllowedDNSSuffixes attribute of the domainDNS object. This parameter uses the following syntax to add, remove, replace, or clear DNS suffix values.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :AuthType

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Clear

Description :Specifies an array of object properties that will be cleared in the directory. Use this parameter to clear one or more values of a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can modify more than one property by specifying a comma-separated list. The format for this parameter is

Required	false
Position	named
Default value	

Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory domain object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute. All values are for the domainDNS object that represents the domain.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Instance

Description :Specifies a modified copy of a domain object to use to update the actual Active Directory domain object. When this parameter is used, any modifications made to the modified copy of the object are also made to the corresponding Active Directory object. The cmdlet only updates the object properties that have changed.

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :LastLogonReplicationInterval

Description :Specifies the time, in days, within which the last logon time of an account must be replicated across all domain controllers in the domain. This parameter sets the LastLogonReplicationInterval property for a domain. The LDAP display name (ldapDisplayName) for this property is msDS-LogonTimeSyncInterval. The last logon replication interval must be at least one day. Setting the last logon replication interval to a low value can significantly increase domain-wide replication.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ManagedBy

Description :Specifies the user or group that manages the object by providing one of the following property values. Note: The identifier in parentheses is the LDAP display name for the property.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PassThru

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Remove

Description :Specifies that the cmdlet remove values of an object property. Use this parameter to remove one or more values of a property that cannot be modified using a

cmdlet parameter. To remove an object property, you must use the LDAP display name. You can remove more than one property by specifying a semicolon-separated list. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Replace**

Description :Specifies values for an object property that will replace the current values. Use this parameter to replace one or more values of a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can modify more than one property by specifying a comma-separated list. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A domain object is received by the Identity parameter.

A domain object that was retrieved by using the Get-ADDomain cmdlet and then modified is received by the Instance parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADDomain

Outputs

Returns the modified domain object when the PassThru parameter is specified. By default, this cmdlet does not generate any output.

Type : None or Microsoft.ActiveDirectory.Management.ADDomain

Notes

Examples

----- EXAMPLE 1 -----

Description

Sets the value of AllowedDNSSuffixes to {"fabrikam.com","corp.fabrikam.com"} in domain "FABRIKAM".

```
C:\PS>Set-ADDomain -Identity FABRIKAM -AllowedDNSSuffixes
@{Replace="fabrikam.com", "corp.fabrikam.com"}
```

----- EXAMPLE 2 -----

Description

```
C:\PS>Set-ADDomain -Identity FABRIKAM -AllowedDNSSuffixes  
@{Add="corp.fabrikam.com"}
```

Adds the value "corp.fabrikam.com" to the AllowedDNSSuffixes in domain "FABRIKAM".

----- EXAMPLE 3 -----

Description

Sets the ManagedBy property in domain "FABRIKAM" to 'CN=Domain Admins,CN=Users,DC=FABRIKAM,DC=COM'.

```
C:\PS>Set-ADDomain -Identity FABRIKAM -ManagedBy 'CN=Domain  
Admins,CN=Users,DC=FABRIKAM,DC=COM'
```

----- EXAMPLE 4 -----

Description

Sets the LastLogonReplicationInterval of the current logged on user domain to "10".

```
C:\PS>Get-ADDomain | Set-ADDomain -  
LastLogonReplicationInterval "10"
```

Cmdlet: Set-ADDomainMode

Synops

Sets the domain mode for an Active Directory domain.

Syntax

```
Set-ADDomainMode [-Identity] <ADDomain> [-DomainMode]
{UnknownDomain |
    Windows2000Domain | Windows2003InterimDomain |
Windows2003Domain |
    Windows2008Domain | Windows2008R2Domain | Windows2012Domain |
    Windows2012R2Domain} [-AuthType {Negotiate | Basic}] [-
Credential
    <PSCredential>] [-PassThru] [-Server <String>] [-Confirm] [-
WhatIf]
    [<CommonParameters>]
```

Description

The Set-ADDomainMode cmdlet sets the domain mode for a domain. You specify the domain mode by setting the DomainMode parameter.

The domain mode can be set to the following values that are listed in order of functionality from lowest to highest.

Windows2000Domain

Windows2003InterimDomain

Windows2003Domain

Windows2008Domain

Windows2008R2Domain

You can change the domain mode to a mode with higher functionality only. For example, if the domain mode for a domain is set to Windows 2003, you can use this cmdlet to change the mode to Windows 2008. However, in the same situation, you cannot use this cmdlet to change the domain mode from Windows 2003 to Windows 2000.

The Identity parameter specifies the Active Directory domain to modify. You can identify a domain by its distinguished name (DN), GUID, security identifier (SID), DNS domain name, or NetBIOS name. You can also set the Identity parameter to a domain object

variable such as \$<localADDomainObject>, or you can pass a domain object through the pipeline to the Identity parameter. For example, you can use the Get-ADDomain cmdlet to retrieve a domain object and then pass the object through the pipeline to the Set-ADDomainMode cmdlet.

The Set-ADDomainMode always prompts for permission unless you specify -confirm:\$false.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**DomainMode**

Description :Specifies the domain mode for an Active Directory domain. You can set the domain mode to one of the following values that are listed in order of functionality from least to most.

Required	true
Position	3

Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory domain object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute. All values are for the domainDNS object that represents the domain.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :PassThru

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A domain object is received by the Identity parameter.

Type : Microsoft.ActiveDirectory.Management.ADDomain

Outputs

Returns the modified domain object when the PassThru parameter is specified. By default, this cmdlet does not generate any output.

Type : None or Microsoft.ActiveDirectory.Management.ADDomain

Notes

Examples

----- EXAMPLE 1 -----

Description

Set the DomainMode property of the fabrikam.com domain to Windows2003Domain.

```
C:\PS>Set-ADDomainMode -Identity fabrikam.com -DomainMode
Windows2003Domain
```

----- EXAMPLE 2 -----

Description

Set the DomainMode of the current logged on user's domain to Windows2003Domain.
The Set operation targets the PrimaryDC FSMO to apply the update.

```
C:\PS>$pdc = Get-ADDomainController -Discover -Service
PrimaryDC
Set-ADDomainMode -Identity $pdc.Domain -Server
$pdc.HostName[0] -DomainMode Windows2003Domain
```

Cmdlet: Set-ADFineGrainedPasswordPolicy

Synops

Modifies an Active Directory fine grained password policy.

Syntax

```
Set-ADFineGrainedPasswordPolicy [-Identity]
<ADFineGrainedPasswordPolicy>
    [-Add <Hashtable>] [-AuthType {Negotiate | Basic}] [-Clear
<String[]>]
    [-ComplexityEnabled <Boolean>] [-Credential <PSCredential>]
[-Description
    <String>] [-DisplayName <String>] [-LockoutDuration
<TimeSpan>]
    [-LockoutObservationWindow <TimeSpan>] [-LockoutThreshold
<Int32>]
    [-MaxPasswordAge <TimeSpan>] [-MinPasswordAge <TimeSpan>]
    [-MinPasswordLength <Int32>] [-PassThru] [-
PasswordHistoryCount <Int32>]
    [-Precedence <Int32>] [-ProtectedFromAccidentalDeletion
<Boolean>]
    [-Remove <Hashtable>] [-Replace <Hashtable>] [-
ReversibleEncryptionEnabled
    <Boolean>] [-Server <String>] [-Confirm] [-WhatIf]
[<CommonParameters>]

Set-ADFineGrainedPasswordPolicy [-AuthType {Negotiate | Basic}]
    [-Credential <PSCredential>] [-PassThru] [-Server <String>] -
Instance
    <ADFineGrainedPasswordPolicy> [-Confirm] [-WhatIf]
[<CommonParameters>]
```

Description

The Set-ADFineGrainedPasswordPolicy cmdlet modifies the properties of an Active Directory fine grained password policy. You can modify commonly used property values by using the cmdlet parameters. Property values that are not associated with cmdlet

parameters can be modified by using the Add, Replace, Clear and Remove parameters.

The Identity parameter specifies the Active Directory fine grained password policy to modify. You can identify a fine grained password policy by its distinguished name (DN), GUID or name. You can also set the Identity parameter to an object variable such as `$<localFineGrainedPasswordPolicyObject>`, or you can pass an object through the pipeline to the Identity parameter. For example, you can use the `Get-ADFineGrainedPasswordPolicy` cmdlet to retrieve a fine grained password policy object and then pass the object through the pipeline to the `Set-ADFineGrainedPasswordPolicy` cmdlet.

The Instance parameter provides a way to update a fine grained password policy object by applying the changes made to a copy of the object. When you set the Instance parameter to a copy of an Active Directory fine grained password policy object that has been modified, the `Set-ADFineGrainedPasswordPolicy` cmdlet makes the same changes to the original fine grained password policy object. To get a copy of the object to modify, use the `Get-ADFineGrainedPasswordPolicy` object. The Identity parameter is not allowed when you use the Instance parameter. For more information about the Instance parameter, see the Instance parameter description. For more information about how the Instance concept is used in Active Directory cmdlets, see `about_ActiveDirectory_Instance`

The following examples show how to modify the Precedence property of a fine grained password policy object by using three methods:

- By specifying the Identity and the Precedence parameters

- By passing a fine grained password policy object through the pipeline and specifying the Precedence parameter

- By specifying the Instance parameter.

Method 1: Modify the Precedence property for the Level3Policy fine grained password policy by using the Identity and Precedence parameters.

```
Set-ADFineGrainedPasswordPolicy -Identity "Level3Policy" -Precedence 150
```

Method 2: Modify the Precedence property for the Level3Policy fine grained password policy by passing the Level3Policy fine grained password policy through the pipeline and specifying the Precedence parameter.

```
Get-ADFineGrainedPasswordPolicy -Identity "Level3Policy" | Set-ADFineGrainedPasswordPolicy -Precedence 150
```

Method 3: Modify the Precedence property for the Level3Policy fine grained password policy by using the Windows PowerShell command line to modify a local instance of the Level3Policy fine grained password policy. Then set the Instance parameter to the local instance.

```
$fineGrainedPasswordPolicy = Get-ADFineGrainedPasswordPolicy Level3Policy
```

```
$fineGrainedPasswordPolicy.Precedence = 150
```

Set-ADFineGrainedPasswordPolicy -Instance \$fineGrainedPasswordPolicy

Parameters

Parameter :**Add**

Description :Specifies values to add to an object property. Use this parameter to add one or more values to a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can specify multiple values to a property by specifying a comma-separated list of values and more than one property by separating them using a semicolon.. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Clear**

Description :Specifies an array of object properties that will be cleared in the directory. Use this parameter to clear one or more values of a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can modify more than one property by specifying a comma-separated list. The format for this parameter is

Required	false
Position	named
Default value	

Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**ComplexityEnabled**

Description :Specifies whether password complexity is enabled for the password policy. If enabled, the password must contain two of the following three character types:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Description**

Description :Specifies a description of the object. This parameter sets the value of the Description property for the object. The LDAP Display Name (ldapDisplayName) for this property is "description".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**DisplayName**

Description :Specifies the display name of the object. This parameter sets the DisplayName property of the object. The LDAP Display Name (ldapDisplayName) for this property is "displayName".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Identity**

Description :Specifies an Active Directory fine-grained password policy object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :**Instance**

Description :Specifies a modified copy of a fine-grained password policy object to use to update the actual Active Directory fine-grained password policy object. When this parameter is used, any modifications made to the modified copy of the object are also made to the corresponding Active Directory object. The cmdlet only updates the object properties that have changed.

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**LockoutDuration**

Description :Specifies the length of time that an account is locked after the number of failed login attempts exceeds the lockout threshold. You cannot login to an account that is locked until the lockout duration time period has expired. This parameter sets the

lockoutDuration property of a password policy object. The LDAP display name (ldapDisplayName) of this property is "msDS-LockoutDuration".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :LockoutObservationWindow

Description :Specifies the maximum time interval between two unsuccessful login attempts before the number of unsuccessful login attempts is reset to 0. An account is locked when the number of unsuccessful login attempts exceeds the password policy lockout threshold. This parameter sets the lockoutObservationWindow property of a password policy object. The LDAP Display Name (ldapDisplayName) of this property is "msDS-lockoutObservationWindow".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :LockoutThreshold

Description :Specifies the number of unsuccessful login attempts that are permitted before an account is locked out. This number increases when the time between unsuccessful login attempts is less than the time specified for the lockout observation time window. This parameter sets the LockoutThreshold property of a password policy.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :MaxPasswordAge

Description :Specifies the maximum length of time that you can have the same password. After this time period, the password expires and you must create a new one.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**MinPasswordAge**

Description :Specifies the minimum length of time before you can change a password.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**MinPasswordLength**

Description :Specifies the minimum number of characters that a password must contain.
This parameter sets the MinPasswordLength property of the password policy.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**PassThru**

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**PasswordHistoryCount**

Description :Specifies the number of previous passwords to save. A user cannot reuse a password in the list of saved passwords. This parameter sets the PasswordHistoryCount property for a password policy.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Precedence**

Description :Specifies a value that defines the precedence of a fine-grained password policy among all fine-grained password policies. This parameter sets the Precedence property for a fine-grained password policy. The LDAP display name (IdapDisplayName) for this property is "msDS-PasswordSettingsPrecedence".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**ProtectedFromAccidentalDeletion**

Description :Specifies whether to prevent the object from being deleted. When this property is set to true, you cannot delete the corresponding object without changing the value of the property. Possible values for this parameter include:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Remove**

Description :Specifies that the cmdlet remove values of an object property. Use this parameter to remove one or more values of a property that cannot be modified using a cmdlet parameter. To remove an object property, you must use the LDAP display name. You can remove more than one property by specifying a semicolon-separated list. The

format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Replace

Description :Specifies values for an object property that will replace the current values. Use this parameter to replace one or more values of a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can modify more than one property by specifying a comma-separated list. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ReversibleEncryptionEnabled

Description :Specifies whether the directory must store passwords using reversible encryption. This parameter sets the ReversibleEncryption property for a password policy. Possible values for this parameter include the following:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A fine grained password policy object is received by the Identity parameter.

A fine grained password policy object that was retrieved by using the Get-ADFineGrainedPasswordPolicy cmdlet and then modified is received by the Instance parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADFineGrainedPasswordPolicy

Outputs

Returns the modified fine grained password policy object when the PassThru parameter is specified. By default, this cmdlet does not generate any output.

Type : None or Microsoft.ActiveDirectory.Management.ADFineGrainedPasswordPolicy

Notes

Examples

----- EXAMPLE 1 -----

Description

Update the Precedence, LockoutDuration, LockoutObservationWindow, ComplexityEnabled, ReversibleEncryptionEnabled, and MinPasswordLength properties on the FineGrainedPasswordPolicy object with name MyPolicy.

```
C:\PS>Set-ADFineGrainedPasswordPolicy MyPolicy -Precedence 100  
-LockoutDuration 00:40:00 -LockoutObservationWindow 00:20:00 -  
ComplexityEnabled $true -ReversibleEncryptionEnabled $false -  
MinPasswordLength 12
```

----- EXAMPLE 2 -----

Description

Set the MinPasswordLength property on the FineGrainedPasswordPolicy object with DistinguishedName CN=MyPolicy,CN=Password Settings Container,CN=System,DC=FABRIKAM,DC=COM.

```
C:\PS>Set-ADFineGrainedPasswordPolicy 'CN=MyPolicy,CN=Password  
Settings Container,CN=System,DC=FABRIKAM,DC=COM' -  
MinPasswordLength 12
```

----- EXAMPLE 3 -----

Description

Get the FineGrainedPasswordPolicy object with name MyPolicy, Update a set of properties on the object and then write the modifications back to the directory using the instance parameter.

```
C:\PS>$fgpp = Get-ADFineGrainedPasswordPolicy MyPolicy  
$fgpp.LockoutObservationWindow =  
[TimeSpan]::Parse("0.00:15:00")  
$fgpp.LockoutThreshold = 10  
$fgpp.MinPasswordLength = 8  
$fgpp.PasswordHistoryCount = 24  
Set-ADFineGrainedPasswordPolicy -Instance $fgpp
```

Cmdlet: Set-ADForest

Synops

Modifies an Active Directory forest.

Syntax

```
Set-ADForest [-Identity] <ADForest> [-AuthType {Negotiate |  
Basic}]  
    [-Credential <PSCredential>] [-PassThru] [-Server <String>]  
[-SPNSuffixes  
    <Hashtable>] [-UPNSuffixes <Hashtable>] [-Confirm] [-WhatIf]  
[<CommonParameters>]
```

Description

The Set-ADForest cmdlet modifies the properties of an Active Directory forest. You can modify commonly used property values by using the cmdlet parameters. Property values that are not associated with cmdlet parameters can be modified by using the Add, Replace, Clear and Remove parameters.

The Identity parameter specifies the Active Directory forest to modify. You can identify a forest by its fully qualified domain name (FQDN), GUID, DNS host name, or NetBIOS name. You can also set the Identity parameter to an object variable such as \$<localADForestObject>, or you can pass an object through the pipeline to the Identity parameter. For example, you can use the Get-ADForest cmdlet to retrieve a forest object and then pass the object through the pipeline to the Set-ADForest cmdlet.

The Instance parameter provides a way to update a forest object by applying the changes made to a copy of the object. When you set the Instance parameter to a copy of an Active Directory forest object that has been modified, the Set-ADForest cmdlet makes the same changes to the original forest object. To get a copy of the object to modify, use the Get-ADForest object. The Identity parameter is not allowed when you use the Instance parameter. For more information about the Instance parameter, see the Instance parameter description.

The following examples show how to modify the UPNSuffixes property of a forest object by using three methods:

- By specifying the Identity and the UPNSuffixes parameters

- By passing a forest object through the pipeline and specifying the UPNSuffixes parameter

-By specifying the Instance parameter.

Method 1: Modify the UPNSuffixes property for the fabrikam.com forest by using the Identity and UPNSuffixes parameters.

```
Set-ADForest -Identity fabrikam.com -UPNSuffixes  
@{replace="fabrikam.com","fabrikam","corp.fabrikam.com"}
```

Method 2: Modify the UPNSuffixes property for the fabrikam.com forest by passing the fabrikam.com forest through the pipeline and specifying the UPNSuffixes parameter.

```
Get-ADForest -Identity fabrikam.com | Set-ADForest -UPNSuffixes  
@{replace="fabrikam.com","fabrikam","corp.fabrikam.com"}
```

Method 3: Modify the UPNSuffixes property for the fabrikam.com forest by using the Windows PowerShell command line to modify a local instance of the fabrikam.com forest. Then set the Instance parameter to the local instance.

```
$forest = Get-ADForest -Identity fabrikam.com  
$forest.UPNSuffixes = "fabrikam.com","fabrikam","corp.fabrikam.com"  
Set-ADForest -Instance $forest.
```

Parameters

Parameter :AuthType

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false

Accept wildcard characters?	false
-----------------------------	-------

Parameter :Identity

Description :Specifies an Active Directory forest object by providing one of the following attribute values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :PassThru

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :SPNSuffixes

Description :Modifies the list of service principal name (SPN) suffixes of the forest. This parameter sets the multi-valued msDS-SPNSuffixes property of the cross-reference container. This parameter uses the following syntax to add remove, replace, or clear SPN suffix values.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory

server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :UPNSuffixes

Description :Modifies the list of user principal name (UPN) suffixes of the forest. This parameter sets the multi-valued msDS-UPNSuffixes property of the cross-reference container. This parameter uses the following syntax to add remove, replace, or clear UPN suffix values.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Confirm

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :WhatIf

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false

Accept wildcard characters?	false
-----------------------------	-------

Inputs

A forest object is received by the Identity parameter.

A forest object that was retrieved by using the Get-ADForest cmdlet and then modified is received by the Instance parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADForest

Outputs

Returns the modified forest object when the PassThru parameter is specified. By default, this cmdlet does not generate any output.

Type : None or Microsoft.ActiveDirectory.Management.ADForest

Notes

Examples

----- EXAMPLE 1 -----

Description

Set the UPNSuffixes property on the fabrikam.com forest.

```
C:\PS>Set-ADForest -Identity fabrikam.com -UPNSuffixes
@{replace="fabrikam.com","fabrikam","corp.fabrikam.com"}
```

----- EXAMPLE 2 -----

Description

Add corp.fabrikam.com to the SPNSuffixes property on the forest fabrikam.com

```
C:\PS>Set-ADForest -Identity fabrikam.com -SPNSuffixes
@{add="corp.fabrikam.com"}
```

----- EXAMPLE 3 -----

Description

Get the forest of the current logged on user and update the SPNSuffixes property.

```
C:\PS>Get-ADForest | Set-ADForest -SPNSuffixes  
@{Add="corp.fabrikam.com";Remove="fabrikam"}
```

----- EXAMPLE 4 -----

Description

Get the forest of the current logged on user and clear the UPNSuffixes property.

```
C:\PS>Get-ADForest | Set-ADForest -UPNSuffixes $null
```

Cmdlet: Set-ADForestMode

Synops

Sets the forest mode for an Active Directory forest.

Syntax

```
Set-ADForestMode [-Identity] <ADForest> [-ForestMode]
{UnknownForest |
    Windows2000Forest | Windows2003InterimForest |
Windows2003Forest |
    Windows2008Forest | Windows2008R2Forest | Windows2012Forest |
    Windows2012R2Forest} [-AuthType {Negotiate | Basic}] [-
Credential
    <PSCredential>] [-PassThru] [-Server <String>] [-Confirm] [-
WhatIf]
    [<CommonParameters>]
```

Description

The Set-ADForestMode cmdlet sets the Forest mode for an Active Directory forest. You specify the forest mode by setting the ForestMode parameter. The forest mode can be set to the following values that are listed in order of functionality from lowest to highest.

Windows2000Forest

Windows2003InterimForest

Windows2003Forest

Windows2008Forest

Windows2008R2Forest

The Identity parameter specifies the Active Directory forest to modify. You can identify a forest by its fully qualified domain name (FQDN), GUID, DNS host name, or NetBIOS name. You can also specify the forest by passing a forest object through the pipeline. For example, you can use the Get-ADForest cmdlet to retrieve a forest object and then pass the object through the pipeline to the Set-ADForestMode.

Set-ADForestMode will prompt for confirmation by default.

Parameters

Parameter :AuthType

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ForestMode

Description :Specifies the forest mode for an Active Directory forest. The possible values for this parameter are: Windows2000Forest or 0

Required	true
Position	3
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory forest object by providing one of the following attribute values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :**PassThru**

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A forest object is received by the Identity parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADForest

Outputs

Returns the modified forest object when the PassThru parameter is specified. By default, this cmdlet does not generate any output.

Type : None or Microsoft.ActiveDirectory.Management.ADForest

Notes

Examples

----- EXAMPLE 1 -----

Description

Set the ForestMode to Windows2003Forest in the forest fabrikam.com.

```
C:\PS>Set-ADForestMode -Identity fabrikam.com -ForestMode
Windows2003Forest
```

----- EXAMPLE 2 -----

Description

Set the forest mode of the current logged on user's forest. The Set operation targets the Schema Master FSMO to apply the update.

```
C:\PS>$currentForest = Get-ADForest
Set-ADForestMode -Identity $currentForest -Server
$currentForest.SchemaMaster -ForestMode Windows2008R2Forest
```


Cmdlet: Set-ADGroup

Synops

Modifies an Active Directory group.

Syntax

```
Set-ADGroup [-Identity] <ADGroup> [-Add <Hashtable>] [-AuthType  
{Negotiate  
  | Basic}] [-Clear <String[]>] [-Credential <PSCredential>] [-  
Description  
  <String>] [-DisplayName <String>] [-GroupCategory  
{Distribution |  
  Security}] [-GroupScope {DomainLocal | Global | Universal}]  
[-HomePage  
  <String>] [-ManagedBy <ADPrincipal>] [-Partition <String>] [-  
PassThru]  
  [-Remove <Hashtable>] [-Replace <Hashtable>] [-SamAccountName  
<String>]  
  [-Server <String>] [-Confirm] [-WhatIf] [<CommonParameters>]
```

```
Set-ADGroup [-AuthType {Negotiate | Basic}] [-Credential  
<PSCredential>]  
  [-PassThru] [-Server <String>] -Instance <ADGroup> [-Confirm]  
[-WhatIf]  
  [<CommonParameters>]
```

Description

The Set-ADGroup cmdlet modifies the properties of an Active Directory group. You can modify commonly used property values by using the cmdlet parameters. Property values that are not associated with cmdlet parameters can be modified by using the Add, Replace, Clear and Remove parameters.

The Identity parameter specifies the Active Directory group to modify. You can identify a group by its distinguished name (DN), GUID, security identifier (SID) or Security Accounts Manager (SAM) account name. You can also set the Identity parameter to an object variable such as \$<localGroupObject>, or you can pass a group object through the pipeline to the Identity parameter. For example, you can use the Get-ADGroup cmdlet to

retrieve a group object and then pass the object through the pipeline to the Set-ADGroup cmdlet.

The Instance parameter provides a way to update a group object by applying the changes made to a copy of the object. When you set the Instance parameter to a copy of an Active Directory group object that has been modified, the Set-ADGroup cmdlet makes the same changes to the original group object. To get a copy of the object to modify, use the Get-ADGroup object. The Identity parameter is not allowed when you use the Instance parameter. For more information about the Instance parameter, see the Instance parameter description. For more information about how the Instance concept is used in Active Directory cmdlets, see [about_ActiveDirectory_Instance](#)

The following examples show how to modify the Description property of a group object by using three methods:

- By specifying the Identity and the Description parameters
- By passing a group object through the pipeline and specifying the Description parameter
- By specifying the Instance parameter.

Method 1: Modify the Description property for the SecurityLevel2Access group by using the Identity and Description parameters.

```
Set-ADGroup -Identity SecurityLevel2Access -Description "Used to authorize Security Level 2 access."
```

Method 2: Modify the Description property for the SecurityLevel2Access group by passing the SecurityLevel2Access group through the pipeline and specifying the Description parameter.

```
Get-ADGroup -Identity "SecurityLevel2Access" | Set-ADGroup -Description "Used to authorize Security Level 2 access."
```

Method 3: Modify the <property> property for the SecurityLevel2Access group by using the Windows PowerShell command line to modify a local instance of the SecurityLevel2Access group. Then set the Instance parameter to the local instance.

```
$group = Get-ADGroup -Identity "SecurityLevel2Access"
$group.Description = "Used to authorize Security Level 2 access."
Set-ADGroup -Instance $group.
```

Parameters

Parameter **:Add**

Description :Specifies values to add to an object property. Use this parameter to add one or more values to a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can specify multiple values to a property by specifying a comma-separated list of values and more than one property by separating them using a semicolon.. The format for this parameter

is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :AuthType

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Clear

Description :Specifies an array of object properties that will be cleared in the directory. Use this parameter to clear one or more values of a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can modify more than one property by specifying a comma-separated list. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Description**

Description :Specifies a description of the object. This parameter sets the value of the Description property for the object. The LDAP Display Name (ldapDisplayName) for this property is "description".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**DisplayName**

Description :Specifies the display name of the object. This parameter sets the DisplayName property of the object. The LDAP Display Name (ldapDisplayName) for this property is "displayName".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**GroupCategory**

Description :Specifies the category of the group. Possible values of this parameter are:

Required	false
Position	named
Default value	Security
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**GroupScope**

Description :Specifies the group scope of the group. Possible values of this parameter are:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**HomePage**

Description :Specifies the URL of the home page of the object. This parameter sets the homePage property of an Active Directory object. The LDAP Display Name (ldapDisplayName) for this property is "wWWHomePage".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Identity**

Description :Specifies an Active Directory group object by providing one of the following values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :**Instance**

Description :Specifies a modified copy of a group object to use to update the actual Active Directory group object. When this parameter is used, any modifications made to the modified copy of the object are also made to the corresponding Active Directory object. The cmdlet only updates the object properties that have changed.

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**ManagedBy**

Description :Specifies the user or group that manages the object by providing one of the following property values. Note: The identifier in parentheses is the LDAP display name for the property.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Partition**

Description :Specifies the distinguished name of an Active Directory partition. The distinguished name must be one of the naming contexts on the current directory server. The cmdlet searches this partition to find the object defined by the Identity parameter.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**PassThru**

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Remove**

Description :Specifies that the cmdlet remove values of an object property. Use this parameter to remove one or more values of a property that cannot be modified using a cmdlet parameter. To remove an object property, you must use the LDAP display name. You can remove more than one property by specifying a semicolon-separated list. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Replace**

Description :Specifies values for an object property that will replace the current values. Use this parameter to replace one or more values of a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can modify more than one property by specifying a comma-separated list. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**SamAccountName**

Description :Specifies the Security Account Manager (SAM) account name of the user, group, computer, or service account. The maximum length of the description is 256 characters. To be compatible with older operating systems, create a SAM account name that is 20 characters or less. This parameter sets the SAMAccountName for an account object. The LDAP display name (ldapDisplayName) for this property is "sAMAccountName".

Required	false
Position	named
Default value	

Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A group object is received by the Identity parameter.

A group object that was retrieved by using the Get-ADGroup cmdlet and then modified is received by the Instance parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADGroup

Outputs

Returns the modified group object when the PassThru parameter is specified. By default, this cmdlet does not generate any output.

Type : None or Microsoft.ActiveDirectory.Management.ADGroup

Notes

Examples

----- EXAMPLE 1 -----

Description

Set the description property of the group AccessControl to "Access Group" on an ADAM instance.

```
C:\PS>set-adgroup -server localhost:60000 -Identity
"CN=AccessControl,DC=AppNC" -description "Access Group" -
passthru
```

```
DistinguishedName : CN=AccessControl,DC=AppNC
GroupCategory      : Security
GroupScope         : DomainLocal
Name               : AccessControl
ObjectClass        : group
ObjectGUID         : d65f5e8f-36da-4390-9840-8b9fde6282fc
SID                : S-1-510474493-936115905-2782881406-
1264922549-3814061485-1557022459
```

----- EXAMPLE 2 -----

Description

Modify the description on all groups that have a name that starts with access via the pipeline.

```
C:\PS>get-adgroup -filter 'name -like "Access*"' | set-adgroup
-description "Access Group"
```

----- EXAMPLE 3 -----

Description

Set the description property on the AccessControl group via the instance parameter.

```
C:\PS>PS adam:\DC=AppNC> get-adgroup -filter 'name -like
"Access*"' | set-adgroup -description "Access Group"
PS adam:\DC=AppNC> $group = get-adgroup -server
localhost:60000 -Identity "CN=AccessControl,DC=AppNC"
PS adam:\DC=AppNC> $group.description = "Access Group"
PS adam:\DC=AppNC> set-adgroup -Instance $group -passthru
```

```
DistinguishedName : CN=AccessControl,DC=AppNC
GroupCategory      : Security
GroupScope         : DomainLocal
Name               : AccessControl
ObjectClass        : group
ObjectGUID         : d65f5e8f-36da-4390-9840-8b9fde6282fc
SID                : S-1-510474493-936115905-2782881406-
1264922549-3814061485-1557022459
```

Cmdlet: Set-ADObject

Synops

Modifies an Active Directory object.

Syntax

```
Set-ADObject [-Identity] <ADObject> [-Add <Hashtable>] [-AuthType  
    {Negotiate | Basic}] [-Clear <String[]>] [-Credential  
<PSCredential>]  
    [-Description <String>] [-DisplayName <String>] [-Partition  
<String>]  
    [-PassThru] [-ProtectedFromAccidentalDeletion <Boolean>] [-  
Remove  
    <Hashtable>] [-Replace <Hashtable>] [-Server <String>] [-  
Confirm]  
    [-WhatIf] [<CommonParameters>]
```

```
Set-ADObject [-AuthType {Negotiate | Basic}] [-Credential  
<PSCredential>]  
    [-PassThru] [-Server <String>] -Instance <ADObject> [-  
Confirm] [-WhatIf]  
    [<CommonParameters>]
```

Description

The Set-ADObject cmdlet modifies the properties of an Active Directory object. You can modify commonly used property values by using the cmdlet parameters. Property values that are not associated with cmdlet parameters can be modified by using the Add, Replace, Clear and Remove parameters.

The Identity parameter specifies the Active Directory object to modify. You can identify an object by its distinguished name (DN) or GUID. You can also set the Identity parameter to an object variable such as \$<localObject>, or you can pass an object through the pipeline to the Identity parameter. For example, you can use the Get-ADObject cmdlet to retrieve an object and then pass the object through the pipeline to the Set-ADObject cmdlet.

The Instance parameter provides a way to update an object by applying the changes

made to a copy of the object. When you set the Instance parameter to a copy of an Active Directory object that has been modified, the Set-ADObject cmdlet makes the same changes to the original object. To get a copy of the object to modify, use the Get-ADObject object. The Identity parameter is not allowed when you use the Instance parameter. For more information about the Instance parameter, see the Instance parameter description. For more information about how the Instance concept is used in Active Directory cmdlets, see about_ActiveDirectory_Instance.

The following examples show how to modify the DisplayName property of an object by using three methods:

- By specifying the Identity and the DisplayName parameters
- By passing an object through the pipeline and specifying the DisplayName parameter
- By specifying the Instance parameter.

Method 1: Modify the DisplayName property for the SecurityLevel2AccessGroup object by using the Identity and DisplayName parameters.

```
Set-ADObject -Identity "SecurityLevel2AccessGroup" -DisplayName "Security Level 2"
```

Method 2: Modify the DisplayName property for the SecurityLevel2AccessGroup object by passing the SecurityLevel2AccessGroup object through the pipeline and specifying the DisplayName parameter.

```
Get-ADObject -Identity "SecurityLevel2AccessGroup" | Set-ADObject -DisplayName "Security Level 2"
```

Method 3: Modify the DisplayName property for the SecurityLevel2AccessGroup object by using the Windows PowerShell command line to modify a local instance of the SecurityLevel2AccessGroup object. Then set the Instance parameter to the local instance.

```
$adobject = Get-ADObject -Identity "SecurityLevel2AccessGroup"
```

```
$adobject.DisplayName = "Security Level 2"
```

```
Set-ADObject -Instance $adobject.
```

For AD LDS environments, the Partition parameter must be specified except in the following two conditions:

- The cmdlet is run from an Active Directory provider drive.
- A default naming context or partition is defined for the AD LDS environment. To specify a default naming context for an AD LDS environment, set the msDS-defaultNamingContext property of the Active Directory directory service agent (DSA) object (nTDSDSA) for the AD LDS instance.

Parameters

Parameter :**Add**

Description :Specifies values to add to an object property. Use this parameter to add one

or more values to a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can specify multiple values to a property by specifying a comma-separated list of values and more than one property by separating them using a semicolon.. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Clear**

Description :Specifies an array of object properties that will be cleared in the directory. Use this parameter to clear one or more values of a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can modify more than one property by specifying a comma-separated list. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The

default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Description

Description :Specifies a description of the object. This parameter sets the value of the Description property for the object. The LDAP Display Name (ldapDisplayName) for this property is "description".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :DisplayName

Description :Specifies the display name of the object. This parameter sets the DisplayName property of the object. The LDAP Display Name (ldapDisplayName) for this property is "displayName".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
----------	------

Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Instance

Description :Specifies a modified copy of an Active Directory object to use to update the actual Active Directory object. When this parameter is used, any modifications made to the modified copy of the object are also made to the corresponding Active Directory object. The cmdlet only updates the object properties that have changed.

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Partition

Description :Specifies the distinguished name of an Active Directory partition. The distinguished name must be one of the naming contexts on the current directory server. The cmdlet searches this partition to find the object defined by the Identity parameter.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PassThru

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ProtectedFromAccidentalDeletion

Description :Specifies whether to prevent the object from being deleted. When this property is set to true, you cannot delete the corresponding object without changing the value of the property. Possible values for this parameter include:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Remove

Description :Specifies that the cmdlet remove values of an object property. Use this parameter to remove one or more values of a property that cannot be modified using a cmdlet parameter. To remove an object property, you must use the LDAP display name. You can remove more than one property by specifying a semicolon-separated list. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Replace

Description :Specifies values for an object property that will replace the current values. Use this parameter to replace one or more values of a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can modify more than one property by specifying a comma-separated list. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

An Active Directory object is received by the Identity parameter. Derived types, such as the following are also accepted:

Microsoft.ActiveDirectory.Management.ADGroup

Microsoft.ActiveDirectory.Management.ADUser

Microsoft.ActiveDirectory.Management.ADComputer

Microsoft.ActiveDirectory.Management.ADSERVICEACCOUNT

Microsoft.ActiveDirectory.Management.ADOrganizationalUnit

Microsoft.ActiveDirectory.Management.ADFineGrainedPasswordPolicy

Microsoft.ActiveDirectory.Management.ADDomain

An object that was retrieved by using the Get-ADObject cmdlet and then modified is received by the Instance parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADObjct

Outputs

Returns the modified object when the PassThru parameter is specified. By default, this cmdlet does not generate any output.

Type : None or Microsoft.ActiveDirectory.Management.ADObjct

Notes

Examples

----- EXAMPLE 1 -----

Description

Set the Description property on the object with DistinguishedName 'CN=AntonioAl Direct Reports,OU=Finance,OU=UserAccounts,DC=FABRIKAM,DC=COM'.

```
C:\PS>Set-ADObject 'CN=AntonioAl Direct Reports,OU=Finance,OU=UserAccounts,DC=FABRIKAM,DC=COM' -
Description 'Distribution List of Antonio Alwan Direct Reports'
```

----- EXAMPLE 2 -----

Description

Add the site 'CN=BO3,CN=Sites,CN=Configuration,DC=FABRIKAM,DC=COM' to the property siteList on the object with DistinguishedName 'CN=DEFAULTIPSITELINK,CN=IP,CN=Inter-Site Transports,CN=Sites,CN=Configuration,DC=FABRIKAM,DC=COM'.

```
C:\PS>Set-ADObject 'CN=DEFAULTIPSITELINK,CN=IP,CN=Inter-Site Transports,CN=Sites,CN=Configuration,DC=FABRIKAM,DC=COM' -Add
@{siteList='CN=BO3,CN=Sites,CN=Configuration,DC=FABRIKAM,DC=COM'} -Partition 'CN=Configuration,DC=FABRIKAM,DC=COM'
```

----- EXAMPLE 3 -----

Description

Add two new urls to the property urlValues in the object with objectGuid 'cdadd380-d3a8-4fd1-9d30-5cf72d94a056'.

```
C:\PS>$urlValues = @()
$urlValues += "www.contoso.com"
$urlValues += "www.fabrikam.com"

Set-ADObject "cdadd380-d3a8-4fd1-9d30-5cf72d94a056" -Add
@{url=$urlValues}
```

----- EXAMPLE 4 -----

Description

Replaces the old values of the multi-valued attribute 'url' with the new values and sets the value of the attribute 'description'.

```
C:\PS>$urlValues = @()
$urlValues += "www.contoso.com"
$urlValues += "www.fabrikam.com"

Set-ADObject "cdadd380-d3a8-4fd1-9d30-5cf72d94a056" -Replace
@{url=$urlValues;description="Antonio Alwan"}
```

----- EXAMPLE 5 -----

Description

Removes the specified value from the attribute 'url' and sets the value of the attribute 'description'.

```
C:\PS>Set-ADObject "cdadd380-d3a8-4fd1-9d30-5cf72d94a056" -
Remove @{url="www.contoso.com"} -Replace
@{description="Antonio Alwan (European Manager)"}
```

----- EXAMPLE 6 -----

Description

Sets a new UAC bit on an object by updating the attribute 'userAccountControl' and setting the value of the attribute 'description'.

```

C:\PS>$myComp = Get-ADObject -identity "cdadd380-d3a8-4fd1-
9d30-5cf72d94a056" -Properties
"userAccountControl","description"

#Now set the new account control using powershell bitwise OR
operation (-bor) and set description
$myComp.userAccountControl = $myComp.userAccountControl -bor
50
$myComp.description = "Setting a new UAC on the object"

#Save the changes
Set-ADObject -Instance $myComp

```

----- EXAMPLE 7 -----

Description

Sets container "CN=InternalApps,DC=AppNC" in an LDS instance to be protected from accidental deletion

```

C:\PS>set-adobject "CN=InternalApps,DC=AppNC" -
protectedFromAccidentalDeletion $true -server "FABRIKAM-
SRV1:60000"

```

Cmdlet: Set-ADOrganizationalUnit

Synops

Modifies an Active Directory organizational unit.

Syntax

```
Set-ADOrganizationalUnit [-Identity] <ADOrganizationalUnit> [-Add  
    <Hashtable>] [-AuthType {Negotiate | Basic}] [-City <String>]  
[-Clear  
    <String[]>] [-Country <String>] [-Credential <PSCredential>]  
[-Description  
    <String>] [-DisplayName <String>] [-ManagedBy <ADPrincipal>]  
[-Partition  
    <String>] [-PassThru] [-PostalCode <String>]  
[-ProtectedFromAccidentalDeletion <Boolean>] [-Remove  
    <Hashtable>]  
[-Replace <Hashtable>] [-Server <String>] [-State <String>]  
[-StreetAddress <String>] [-Confirm] [-WhatIf]  
[<CommonParameters>]
```

```
Set-ADOrganizationalUnit [-AuthType {Negotiate | Basic}] [-  
Credential  
    <PSCredential>] [-PassThru] [-Server <String>] -Instance  
    <ADOrganizationalUnit> [-Confirm] [-WhatIf]  
[<CommonParameters>]
```

Description

The Set-ADOrganizationalUnit cmdlet modifies the properties of an Active Directory organizational unit. You can modify commonly used property values by using the cmdlet parameters. Property values that are not associated with cmdlet parameters can be modified by using the Add, Replace, Clear and Remove parameters.

The Identity parameter specifies the Active Directory organizational unit to modify. You can identify an organizational unit by its distinguished name (DN) or GUID.

You can also set the Identity parameter to an object variable such as \$<localADOrganizationalUnitObject>, or you can pass an object through the pipeline to

the Identity parameter. For example, you can use the Get-ADOrganizationalUnit cmdlet to retrieve an organizational unit object and then pass the object through the pipeline to the Set-ADOrganizationalUnit cmdlet.

The Instance parameter provides a way to update an organizational unit object by applying the changes made to a copy of the object. When you set the Instance parameter to a copy of an Active Directory organizational unit object that has been modified, the Set-ADOrganizationalUnit cmdlet makes the same changes to the original organizational unit object. To get a copy of the object to modify, use the Get-ADOrganizationalUnit object. When you specify the Instance parameter you should not pass the Identity parameter. For more information about the Instance parameter, see the Instance parameter description.

For more information about how the Instance concept is used in Active Directory cmdlets, see [about_ActiveDirectory_Instance](#).

The following examples show how to modify the ManagedBy property of an organizational unit object by using three methods:

- By specifying the Identity and the ManagedBy parameters
- By passing an organizational unit object through the pipeline and specifying the ManagedBy parameter
- By specifying the Instance parameter.

Method 1: Modify the ManagedBy property for the "AccountingDepartment" organizational unit by using the Identity and ManagedBy parameters.

```
Set-ADOrganizationalUnit -Identity "AccountingDepartment" -ManagedBy  
"SaraDavisGroup"
```

Method 2: Modify the ManagedBy property for the "AccountingDepartment" organizational unit by passing the "AccountingDepartment" organizational unit through the pipeline and specifying the ManagedBy parameter.

```
Get-ADOrganizationalUnit -Identity ""AccountingDepartment"" | Set-ADOrganizationalUnit  
-ManagedBy "SaraDavisGroup"
```

Method 3: Modify the ManagedBy property for the "AccountingDepartment" organizational unit by using the Windows PowerShell command line to modify a local instance of the "AccountingDepartment" organizational unit. Then set the Instance parameter to the local instance.

```
$organizational unit = Get-ADOrganizationalUnit -Identity "AccountingDepartment"  
$organizational unit.ManagedBy = "SaraDavisGroup"  
Set-ADOrganizationalUnit -Instance $organizational unit.
```

For AD LDS environments, the Partition parameter must be specified except in the following two conditions:

- The cmdlet is run from an Active Directory provider drive.

-A default naming context or partition is defined for the AD LDS environment. To specify a default naming context for an AD LDS environment, set the msDS-defaultNamingContext property of the Active Directory directory service agent (DSA) object (nTDSDSA) for the AD LDS instance.

Parameters

Parameter :**Add**

Description :Specifies values to add to an object property. Use this parameter to add one or more values to a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can specify multiple values to a property by specifying a comma-separated list of values and more than one property by separating them using a semicolon.. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**City**

Description :Specifies the user's town or city. This parameter sets the City property of a user. The LDAP display name (ldapDisplayName) of this property is "l".

Required	false
Position	named
Default value	

Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Clear

Description :Specifies an array of object properties that will be cleared in the directory. Use this parameter to clear one or more values of a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can modify more than one property by specifying a comma-separated list. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Country

Description :Specifies the country or region code for the user's language of choice. This parameter sets the Country property of a user object. The LDAP Display Name (ldapDisplayName) of this property is "c". This value is not used by Windows 2000.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Description

Description :Specifies a description of the object. This parameter sets the value of the Description property for the object. The LDAP Display Name (ldapDisplayName) for this property is "description".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :DisplayName

Description :Specifies the display name of the object. This parameter sets the DisplayName property of the object. The LDAP Display Name (ldapDisplayName) for this property is "displayName".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Instance

Description :Specifies a modified copy of an organizational unit object to use to update the actual Active Directory organizational unit object. When this parameter is used, any modifications made to the modified copy of the object are also made to the corresponding Active Directory object. The cmdlet only updates the object properties that

have changed.

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**ManagedBy**

Description :Specifies the user or group that manages the object by providing one of the following property values. Note: The identifier in parentheses is the LDAP display name for the property.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Partition**

Description :Specifies the distinguished name of an Active Directory partition. The distinguished name must be one of the naming contexts on the current directory server. The cmdlet searches this partition to find the object defined by the Identity parameter.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**PassThru**

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	

Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PostalCode

Description :Specifies the user's postal code or zip code. This parameter sets the PostalCode property of a user. The LDAP Display Name (ldapDisplayName) of this property is "postalCode".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ProtectedFromAccidentalDeletion

Description :Specifies whether to prevent the object from being deleted. When this property is set to true, you cannot delete the corresponding object without changing the value of the property. Possible values for this parameter include:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Remove

Description :Specifies that the cmdlet remove values of an object property. Use this parameter to remove one or more values of a property that cannot be modified using a cmdlet parameter. To remove an object property, you must use the LDAP display name. You can remove more than one property by specifying a semicolon-separated list. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Replace

Description :Specifies values for an object property that will replace the current values. Use this parameter to replace one or more values of a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can modify more than one property by specifying a comma-separated list. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :State

Description :Specifies the user's or Organizational Unit's state or province. This parameter sets the State property of a User or Organizational Unit object. The LDAP display name (ldapDisplayName) of this property is "st".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :StreetAddress

Description :Specifies the organizational unit's street address. This parameter sets the

StreetAddress property of a organizational unit object. The LDAP display name (ldapDisplayName) of this property is "street".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

An organizational unit object is received by the Identity parameter.

An organizational unit object that was retrieved by using the Get-ADOrganizationalUnit cmdlet and then modified is received by the Instance parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADOrganizationalUnit

Outputs

Returns the modified organizational unit object when the PassThru parameter is specified. By default, this cmdlet does not generate any output.

Type : None or Microsoft.ActiveDirectory.Management.ADOrganizationalUnit

Notes

Examples

----- EXAMPLE 1 -----

Description

Sets the description of the OrganizationalUnit with distinguishedName
OU=UserAccounts,DC=FABRIKAM,DC=COM.

```
C:\PS>Set-ADOrganizationalUnit -Identity  
"OU=UserAccounts,DC=FABRIKAM,DC=COM" -Description "This  
Organizational Unit holds all of the users accounts of  
FABRIKAM.COM"
```

----- EXAMPLE 2 -----

Description

Sets the ProtectedFromAccidentalDeletion property to \$false on the OrganizationalUnit
with distinguishedName OU=UserAccounts,DC=FABRIKAM,DC=COM.

```
C:\PS>Set-ADOrganizationalUnit -Identity  
"OU=UserAccounts,DC=FABRIKAM,DC=COM" -  
ProtectedFromAccidentalDeletion $false
```

----- EXAMPLE 3 -----

Description

Sets the Country, City and State, PostalCode and co properties on the
OrganizationalUnit
'OU=AsiaPacific,OU=Sales,OU=UserAccounts,DC=FABRIKAM,DC=COM'.

```
C:\PS>Set-ADOrganizationalUnit -Identity  
"OU=AsiaPacific,OU=Sales,OU=UserAccounts,DC=FABRIKAM,DC=COM" -  
Country "AU" -StreetAddress "45 Martens Place" -City Balmoral  
-State QLD -PostalCode 4171 -Replace @{co="Australia"}
```

----- EXAMPLE 4 -----

Description

Creates a new OrganizationalUnit using the OrganizationalUnit

'OU=Europe,OU=Sales,OU=UserAccounts,DC=FABRIKAM,DC=COM' as a template.

```
C:\PS>$EuropeSalesOU = Get-ADOrganizationalUnit
"OU=Europe,OU=Sales,OU=UserAccounts,DC=FABRIKAM,DC=COM"
$EuropeSalesOU.Country = "UK"
$EuropeSalesOU.StreetAddress = "22 Station Rd"
$EuropeSalesOU.City = "QUARRINGTON"
$EuropeSalesOU.PostalCode = "NG34 0NI"
$EuropeSalesOU.co = "United Kingdom"
Set-ADOrganizationalUnit -Instance $EuropeSalesOU
```

----- EXAMPLE 5 -----

Description

Set the Country property of the OrganizationalUnit 'OU=Managed,DC=AppNC' in an AD LDS instance.

```
C:\PS>Set-ADOrganizationalUnit -Identity "OU=Managed,DC=AppNC"
-Server "FABRIKAM-SRV1:60000" -Country "UK"
```

Cmdlet: Set-ADReplicationConnection

Synops

Sets properties on Active Directory replication connections.

Syntax

```
Set-ADReplicationConnection [-Identity] <ADReplicationConnection>
[-Add
    <Hashtable>] [-AuthType {Negotiate | Basic}] [-Clear
<String[]>]
    [-Credential <PSCredential>] [-PassThru] [-Remove
<Hashtable>] [-Replace
    <Hashtable>] [-ReplicateFromDirectoryServer
<ADDirectoryServer>]
    [-ReplicationSchedule <ActiveDirectorySchedule>] [-Server
<String>]
    [-Confirm] [-WhatIf] [<CommonParameters>]
```

```
Set-ADReplicationConnection [-AuthType {Negotiate | Basic}] [-
Clear
    <String[]>] [-Credential <PSCredential>] [-PassThru] [-Server
<String>]
    -Instance <ADReplicationConnection> [-Confirm] [-WhatIf]
    [<CommonParameters>]
```

Description

The Set-ADReplicationConnection cmdlet sets properties on Active Directory replication connections. Connections are used to enable domain controllers to replicate with each other. A connection defines a one-way, inbound route from one domain controller, the source, to another domain controller, the destination. The Kerberos consistency checker (KCC) reuses existing connections where it can, deletes unused connections, and creates new connections if none exist that meet the current need.

Parameters

Parameter :**Add**

Description :Specifies values to add to an object property. Use this parameter to add one or more values to a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can specify multiple values to a property by specifying a comma-separated list of values and more than one property by separating them using a semicolon.. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Clear**

Description :Specifies an array of object properties that will be cleared in the directory. Use this parameter to clear one or more values of a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can modify more than one property by specifying a comma-separated list. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies a user account that has permission to perform this action. The default is the current user.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Identity**

Description :Specifies an Active Directory object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :**Instance**

Description :Specifies an instance of an Active Directory object to use as a template for a new Active Directory object.

Required	true
Position	named
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :**PassThru**

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false

Accept wildcard characters?	false
-----------------------------	-------

Parameter :Remove

Description :Specifies that the cmdlet remove values of an object property. Use this parameter to remove one or more values of a property that cannot be modified using a cmdlet parameter. To remove an object property, you must use the LDAP display name. You can remove more than one property by specifying a semicolon-separated list. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Replace

Description :Specifies values for an object property that will replace the current values. Use this parameter to replace one or more values of a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can modify more than one property by specifying a comma-separated list. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ReplicateFromDirectoryServer

Description :Specifies the domain controller to use as a source for this replication connection.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**ReplicationSchedule**

Description :Specifies the schedule on which the source server is available for replication.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false

Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A connection object is received by the Identity parameter.

A connection object that was retrieved by using the Get-ADReplicationConnection cmdlet and then modified is received by the Instance parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADReplicationConnection

Examples

----- EXAMPLE 1 -----

Description

Set the replication connection with name '5f98e288-19e0-47a0-9677-57f05ed54f6b' to replicate from corp-DC01.

```
C:\PS>Set-ADReplicationConnection "5f98e288-19e0-47a0-9677-57f05ed54f6b" -ReplicateFromDirectoryServer corp-DC01
```

----- EXAMPLE 2 -----

Description

Get all the replication connections in the directory that replicate from corp-DC01. Set the daily replication schedule on these connection objects.

```
C:\PS>$schedule = New-Object -TypeName
System.DirectoryServices.ActiveDirectory.ActiveDirectorySchedule;
$schedule.ResetSchedule();
$schedule.SetDailySchedule("Twenty", "Zero", "TwentyTwo", "Thirty
");
Get-ADReplicationConnection -Filter
{ReplicateFromDirectoryServer -eq "corp-DC01"} -Properties
ReplicationSchedule | % {Set-ADReplicationConnection $_ -
ReplicationSchedule $schedule}
```

Cmdlet: Set-ADReplicationSite

Synops

Sets the replication properties for an Active Directory site.

Syntax

```
Set-ADReplicationSite [-Identity] <ADReplicationSite> [-Add
<Hashtable>]
    [-AuthType {Negotiate | Basic}]
    [-AutomaticInterSiteTopologyGenerationEnabled <Boolean>]
    [-AutomaticTopologyGenerationEnabled <Boolean>] [-Clear
<String[]>]
    [-Credential <PSCredential>] [-Description <String>]
    [-InterSiteTopologyGenerator <ADDirectoryServer>] [-ManagedBy
    <ADPrincipal>] [-PassThru] [-ProtectedFromAccidentalDeletion
<Boolean>]
    [-RedundantServerTopologyEnabled <Boolean>] [-Remove
<Hashtable>]
    [-Replace <Hashtable>] [-ReplicationSchedule
<ActiveDirectorySchedule>]
    [-ScheduleHashingEnabled <Boolean>] [-Server <String>]
    [-TopologyCleanupEnabled <Boolean>] [-
TopologyDetectStaleEnabled
    <Boolean>] [-TopologyMinimumHopsEnabled <Boolean>]
    [-UniversalGroupCachingEnabled <Boolean>]
    [-UniversalGroupCachingRefreshSite <ADReplicationSite>]
    [-WindowsServer2000BridgeheadSelectionMethodEnabled
<Boolean>]
    [-WindowsServer2000KCCISTGSelectionBehaviorEnabled <Boolean>]
    [-WindowsServer2003KCCBehaviorEnabled <Boolean>]
    [-WindowsServer2003KCCIgnoreScheduleEnabled <Boolean>]
    [-WindowsServer2003KCCSiteLinkBridgingEnabled <Boolean>] [-
Confirm]
    [-WhatIf] [<CommonParameters>]
```

```
Set-ADReplicationSite [-AuthType {Negotiate | Basic}] [-
Credential
```

```
<PSCredential>] [-PassThru] [-Server <String>] -Instance  
<ADReplicationSite> [-Confirm] [-WhatIf] [<CommonParameters>]
```

Description

The Set-ADReplicationSite cmdlet is used to set the properties for an Active Directory site that is being used for replication. Sites are used in Active Directory to either enable clients to discover network resources (published shares, domain controllers) close to the physical location of a client computer or to reduce network traffic over wide area network (WAN) links. Sites can also be used to optimize replication between domain controllers.

Parameters

Parameter :Add

Description :Specifies values to add to an object property. Use this parameter to add one or more values to a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can specify multiple values to a property by specifying a comma-separated list of values and more than one property by separating them using a semicolon.. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :AuthType

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**AutomaticInterSiteTopologyGenerationEnabled**

Description :Prevents the KCC that functions as the intersite topology generator (ISTG) from generating connections for intersite replication. Use this option when you want to create manual intersite connections (disable the ISTG) but retain the KCC to generate intrasite connections.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**AutomaticTopologyGenerationEnabled**

Description :When enabled, prevents the KCC from generating intrasite connections on all servers in the site. Disable this option if you use manual connections and do not want the KCC to build connections automatically.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Clear**

Description :Specifies an array of object properties that will be cleared in the directory. Use this parameter to clear one or more values of a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can modify more than one property by specifying a comma-separated list. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies a user account that has permission to perform this action. The

default is the current user.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Description

Description :Specifies a description of the object. This parameter sets the value of the Description property for the object. The LDAP Display Name (ldapDisplayName) for this property is "description".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	None
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Instance

Description :Specifies an instance of a site object to use as a template for a new site object.

Required	true
Position	named
Default value	
Accept pipeline input?	false

Accept wildcard characters?	false
-----------------------------	-------

Parameter :**InterSiteTopologyGenerator**

Description :The server acting as the inter-site topology generator for this site.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**ManagedBy**

Description :Specifies the user or group that manages the object by providing one of the following property values. Note: The identifier in parentheses is the LDAP display name for the property.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**PassThru**

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**ProtectedFromAccidentalDeletion**

Description :Specifies whether to prevent the object from being deleted. When this property is set to true, you cannot delete the corresponding object without changing the value of the property. Possible values for this parameter include:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :RedundantServerTopologyEnabled

Description :Creates redundant connections between sites before a failure takes place. When enabled, disables KCC failover. Requires that automatic detection of failed connections also be disabled (+IS_TOPL_DETECT_STALE_DISABLED).

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Remove

Description :Specifies that the cmdlet remove values of an object property. Use this parameter to remove one or more values of a property that cannot be modified using a cmdlet parameter. To remove an object property, you must use the LDAP display name. You can remove more than one property by specifying a semicolon-separated list. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Replace

Description :Specifies values for an object property that will replace the current values. Use this parameter to replace one or more values of a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can modify more than one property by specifying a comma-separated list. The format for this parameter is

Required	false
----------	-------

Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ReplicationSchedule

Description :Default replication schedule for connections within this site (intra-site replication).

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ScheduleHashingEnabled

Description :Spreads replication start times randomly across the entire schedule interval rather than just the first quarter of the interval.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :TopologyCleanupEnabled

Description :When enabled, this optional parameter prevents the Kerberos consistency checker (KCC) from removing connection objects that it does not need. Disable this option if you want to take responsibility for removing old redundant connections. Alternatively, to control or augment the topology, you can use manual connections, which the KCC does not delete.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :TopologyDetectStaleEnabled

Description :This parameter option prevents the Kerberos consistency checker (KCC) from excluding servers that are unreachable from the topology; that is, the KCC does use an alternate server to reroute replication. Use this option only if network communication is very unstable and brief outages are expected.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :TopologyMinimumHopsEnabled

Description :When enabled, this parameter prevents the Kerberos consistency checker (KCC) from generating optimizing connections in the ring topology of intrasite replication. Optimizing connections reduce the replication latency in the site and disabling them is not recommended.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :UniversalGroupCachingEnabled

Description :If this parameter is true, it indicates this site caches universal groups, which are those groups cached on global catalog (GC) servers. It can be useful in sites with no GC servers available locally.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**UniversalGroupCachingRefreshSite**

Description :If universal group caching is enabled, this parameter sets the name of the site from which the cache is pulled.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WindowsServer2000BridgeheadSelectionMethodEnabled**

Description :Implements the Windows 2000 Server method of selecting a single bridgehead server per directory partition and transport.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WindowsServer2000KCCISTGSelectionBehaviorEnabled**

Description :When enabled, this parameter implements the Windows 2000 Server method of Intersite Topology Generator (ISTG) selection. By default, it is disabled.

Required	false
Position	named
Default value	

Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WindowsServer2003KCCBehaviorEnabled**

Description :Implements Kerberos consistency checker (KCC) operation that is consistent with Windows Server 2003 forest functional level. This option can be set if all domain controllers in the site are running Windows Server 2003.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WindowsServer2003KCCIgnoreScheduleEnabled**

Description :When the forest functional level Windows Server 2003 or Windows Server 2003 interim is in effect, provides KCC control of the ability to ignore schedules (replication occurs at the designated intervals and is always available).

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WindowsServer2003KCCSiteLinkBridgingEnabled**

Description :When the forest functional level Windows Server 2003 or Windows Server 2003 interim is in effect, provides Kerberos consistency checker (KCC) control of the ability to enable or disable site link bridging.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A site object is received by the Identity parameter.

A site object that was retrieved by using the Get-ADReplicationSite cmdlet and then modified is received by the Instance parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADReplicationSite

Examples

----- EXAMPLE 1 -----

Description

Set the properties of the site with name 'NorthAmerica' to prevent its intersite topology generator (ISTG) at 'corp-DC02' from generating connections for intersite replication.

```
C:\PS>Set-ADReplicationSite NorthAmerica -  
InterSiteTopologyGenerator corp-DC02 -  
AutomaticInterSiteTopologyGenerationEnabled $false
```

----- EXAMPLE 2 -----

Description

Returns all the sites in the directory and sets the ScheduleHashingEnabled property to spread replication start times randomly across the entire schedule interval rather than just the first quarter of the interval..

```
C:\PS>Get-ADReplicationSite -Filter * | % {Set-ADReplicationSite $_ -ScheduleHashingEnabled $true}
```

----- EXAMPLE 3 -----

Description

Set the daily replication schedule of the site with name 'Asia'.

```
C:\PS>$schedule = New-Object -TypeName  
System.DirectoryServices.ActiveDirectory.ActiveDirectorySchedule;  
$schedule.ResetSchedule();  
$schedule.SetDailySchedule("Twenty", "Zero", "TwentyTwo", "Thirty  
");  
Set-ADReplicationSite "Asia" -ReplicationSchedule $schedule
```

Cmdlet: Set-ADReplicationSiteLink

Synops

Sets the properties for an Active Directory site link.

Syntax

```
Set-ADReplicationSiteLink [-Identity] <ADReplicationSiteLink> [-Add  
    <Hashtable>] [-AuthType {Negotiate | Basic}] [-Clear  
<String[]>] [-Cost  
    <Int32>] [-Credential <PSCredential>] [-Description <String>]  
[-PassThru]  
    [-Remove <Hashtable>] [-Replace <Hashtable>]  
    [-ReplicationFrequencyInMinutes <Int32>] [-  
ReplicationSchedule  
    <ActiveDirectorySchedule>] [-Server <String>] [-SitesIncluded  
<Hashtable>]  
    [-Confirm] [-WhatIf] [<CommonParameters>]
```

```
Set-ADReplicationSiteLink [-AuthType {Negotiate | Basic}] [-  
Credential  
    <PSCredential>] [-Instance <ADReplicationSiteLink>] [-  
PassThru] [-Server  
    <String>] [-Confirm] [-WhatIf] [<CommonParameters>]
```

Description

The Set-ADReplicationSiteLink cmdlet can be used to set properties on an Active Directory site link. A site link connects two or more sites. Site links reflect the administrative policy for how sites are to be interconnected and the methods used to transfer replication traffic. You must connect sites with site links so that domain controllers at each site can replicate Active Directory changes.

Parameters

Parameter **:Add**

Description :Specifies values to add to an object property. Use this parameter to add one

or more values to a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can specify multiple values to a property by specifying a comma-separated list of values and more than one property by separating them using a semicolon.. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Clear**

Description :Specifies an array of object properties that will be cleared in the directory. Use this parameter to clear one or more values of a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can modify more than one property by specifying a comma-separated list. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Cost**

Description :Specifies the cost to be placed on the site link. For more information on

determining the cost, see the following topic called "Determining the Cost" in the TechNet Library: <http://go.microsoft.com/fwlink/?LinkId=221871>

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Description

Description :Specifies a description of the object. This parameter sets the value of the Description property for the object. The LDAP Display Name (ldapDisplayName) for this property is "description".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
----------	------

Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Instance

Description :Specifies an instance of a site link object to use as a template for a new site link object.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PassThru

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Remove

Description :Specifies that the cmdlet remove values of an object property. Use this parameter to remove one or more values of a property that cannot be modified using a cmdlet parameter. To remove an object property, you must use the LDAP display name. You can remove more than one property by specifying a semicolon-separated list. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Replace

Description :Specifies values for an object property that will replace the current values. Use this parameter to replace one or more values of a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can modify more than one property by specifying a comma-separated list. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ReplicationFrequencyInMinutes

Description :Species the frequency (in minutes) for which replication will occur where this site link is in use between sites. Active Directory preserves bandwidth between sites by minimizing the frequency of replication and by allowing you to schedule the availability of site links for replication. By default, intersite replication across each site link occurs every 180 minutes (3 hours). You can adjust this frequency to match your specific needs. Be aware that increasing this frequency increases the amount of bandwidth used by replication.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ReplicationSchedule

Description :Specifies the default replication schedule for any connections within this site link (intra-site replication). This allows you to schedule the availability of site links for use by replication. By default, a site link is available to carry replication traffic 24 hours a day, 7 days a week. You can limit this schedule to specific days of the week and times of day. You can, for example, schedule intersite replication so that it only occurs after normal business hours.

Required	false
Position	named
Default value	

Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**SitesIncluded**

Description :Specifies the list of sites included in the site link. For Set-ADReplicationSiteLink operations, you can add or include new sites within an existing site link by specifying them using this parameter. You do not have to specify all previously listed sites already within this link.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A site link object is received by the Identity parameter.

A site link object that was retrieved by using the Get-ADReplicationSiteLink cmdlet and then modified is received by the Instance parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADReplicationSiteLink

Examples

----- EXAMPLE 1 -----

Description

Add site 'Asia2' to the site link 'Europe-Asia', and remove site 'Asia'.

```
C:\PS>Set-ADReplicationSiteLink "Europe-Asia" -SitesIncluded
@{Add="Asia2";Remove="Asia"}
```

----- EXAMPLE 2 -----

Description

Get all the site links in the directory with replication frequency greater than or equal to 60 minutes. Set the Cost property on these site link objects to 200.

```
C:\PS>Get-ADReplicationSiteLink -Filter
{ReplicationFrequencyInMinutes -ge 60} -Properties Cost | %
{Set-ADReplicationSiteLink $_ -Cost 200}
```

----- EXAMPLE 3 -----

Description

Set the daily replication schedule of the site link with name 'NorthAmerica-SouthAmerica'.

```
C:\PS>$schedule = New-Object -TypeName
System.DirectoryServices.ActiveDirectory.ActiveDirectorySchedule;
$schedule.ResetSchedule();
$schedule.SetDailySchedule("Twenty", "Zero", "TwentyTwo", "Thirty
");
Set-ADReplicationSiteLink "NorthAmerica-SouthAmerica" -
ReplicationSchedule $schedule
```

----- EXAMPLE 4 -----

Description

Enable change notification on the site link with name 'Europe-Asia'.

```
C:\PS>Set-ADReplicationSiteLink "Europe-Asia" -Replace
@{'options'=1}
```

Cmdlet: Set-ADReplicationSiteLinkBridge

Synops

Sets the properties of a replication site link bridge in Active Directory.

Syntax

```
Set-ADReplicationSiteLinkBridge [-Identity]
<ADReplicationSiteLinkBridge>
    [-Add <Hashtable>] [-AuthType {Negotiate | Basic}] [-Clear
<String[]>]
    [-Credential <PSCredential>] [-Description <String>] [-
PassThru] [-Remove
    <Hashtable>] [-Replace <Hashtable>] [-Server <String>] [-
SiteLinksIncluded
    <Hashtable>] [-Confirm] [-WhatIf] [<CommonParameters>]
```

```
Set-ADReplicationSiteLinkBridge [-AuthType {Negotiate | Basic}]
    [-Credential <PSCredential>] [-Instance
<ADReplicationSiteLinkBridge>]
    [-PassThru] [-Server <String>] [-Confirm] [-WhatIf]
[<CommonParameters>]
```

Description

The Set-ADReplicationSiteLinkBridge object sets the properties for a replication site link bridge in Active Directory. A site link bridge connects two or more site links and enables transitivity between site links. Each site link in a bridge must have a site in common with another site link in the bridge.

Parameters

Parameter :**Add**

Description :Specifies values to add to an object property. Use this parameter to add one or more values to a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can specify multiple values to a property by specifying a comma-separated list of values and more than one property by separating them using a semicolon.. The format for this parameter

is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :AuthType

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Clear

Description :Specifies an array of object properties that will be cleared in the directory. Use this parameter to clear one or more values of a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can modify more than one property by specifying a comma-separated list. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Description

Description :Specifies a description of the object. This parameter sets the value of the Description property for the object. The LDAP Display Name (ldapDisplayName) for this property is "description".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Instance

Description :Specifies an instance of a site link bridge object to use as a template for a new site link bridge object.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PassThru

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Remove

Description :Specifies that the cmdlet remove values of an object property. Use this parameter to remove one or more values of a property that cannot be modified using a cmdlet parameter. To remove an object property, you must use the LDAP display name. You can remove more than one property by specifying a semicolon-separated list. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Replace

Description :Specifies values for an object property that will replace the current values. Use this parameter to replace one or more values of a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can modify more than one property by specifying a comma-separated list. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by

providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**SiteLinksIncluded**

Description :Specifies the list of site links that are included in this site link bridge. Accepted values for this parameter are the distinguished name (DN), a GUID, or the name of a site link.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false

Accept wildcard characters?	false
-----------------------------	-------

Inputs

A site link bridge object is received by the Identity parameter.

A site link bridge object that was retrieved by using the Get-ADReplicationSiteLinkBridge cmdlet and then modified is received by the Instance parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADReplicationSiteLinkBridge

Examples

----- EXAMPLE 1 -----

Description

Update the site link bridge 'NorthAmerica-Asia' to use 'Europe2' instead of 'Europe'.

```
C:\PS>Set-ADReplicationSiteLinkBridge "NorthAmerica-Asia" -
SiteLinksIncluded @{Add='NorthAmerica-Europe2','Europe2-
Asia';Remove='NorthAmerica-Europe','Europe-Asia'}
```

----- EXAMPLE 2 -----

Description

Get all the site link bridges in the directory that includes site links 'NorthAmerica-Europe' and 'Europe-Asia'. Update the site link bridge objects to use 'Europe2' instead of 'Europe'.

```
C:\PS>Get-ADReplicationSiteLinkBridge -Filter
{SiteLinksIncluded -eq "NorthAmerica-Europe" -and
SiteLinksIncluded -eq "Europe-Asia"} -Properties
SiteLinksIncluded | % {Set-ADReplicationSiteLinkBridge $_ -
SiteLinksIncluded @{Add='NorthAmerica-Europe2','Europe2-
Asia';Remove='NorthAmerica-Europe','Europe-Asia'}}
```

Cmdlet: Set-ADReplicationSubnet

Synops

Sets the properties of an Active Directory replication subnet object.

Syntax

```
Set-ADReplicationSubnet [-Identity] <ADReplicationSubnet> [-Add  
    <Hashtable>] [-AuthType {Negotiate | Basic}] [-Clear  
<String[]>]  
    [-Credential <PSCredential>] [-Description <String>] [-  
Location <String>]  
    [-PassThru] [-Remove <Hashtable>] [-Replace <Hashtable>] [-  
Server  
    <String>] [-Site <ADReplicationSite>] [-Confirm] [-WhatIf]  
    [<CommonParameters>]
```

```
Set-ADReplicationSubnet [-AuthType {Negotiate | Basic}] [-  
Credential  
    <PSCredential>] [-Instance <ADReplicationSubnet>] [-PassThru]  
[-Server  
    <String>] [-Confirm] [-WhatIf] [<CommonParameters>]
```

Description

The Set-ADReplicationSubnet cmdlet sets the properties of an Active Directory replication subnet object. Subnet objects (class subnet) define network subnets in Active Directory. A network subnet is a segment of a TCP/IP network to which a set of logical IP addresses is assigned. Subnets group computers in a way that identifies their physical proximity on the network. Subnet objects in Active Directory are used to map computers to sites.

Parameters

Parameter :**Add**

Description :Specifies values to add to an object property. Use this parameter to add one or more values to a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can specify

multiple values to a property by specifying a comma-separated list of values and more than one property by separating them using a semicolon.. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :AuthType

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Clear

Description :Specifies an array of object properties that will be cleared in the directory. Use this parameter to clear one or more values of a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can modify more than one property by specifying a comma-separated list. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies a user account that has permission to perform this action. The default is the current user.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Description

Description :Specifies a description of the object. This parameter sets the value of the Description property for the object. The LDAP Display Name (ldapDisplayName) for this property is "description".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Instance

Description :Specifies an instance of a subnet object to use as a template for a new subnet object.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Location

Description :Can be used to describe the physical location of this subnet. This value may be displayed or made visible when the subnet object appears in other Active Directory administrative tools.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PassThru

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Remove

Description :Specifies that the cmdlet remove values of an object property. Use this parameter to remove one or more values of a property that cannot be modified using a cmdlet parameter. To remove an object property, you must use the LDAP display name. You can remove more than one property by specifying a semicolon-separated list. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Replace

Description :Specifies values for an object property that will replace the current values. Use this parameter to replace one or more values of a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display

name. You can modify more than one property by specifying a comma-separated list. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Site**

Description :Specifies the site associated with this subnet.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false

Accept wildcard characters?	false
-----------------------------	-------

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A subnet object is received by the Identity parameter.

A subnet object that was retrieved by using the Get-ADReplicationSubnet cmdlet and then modified is received by the Instance parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADReplicationSubnet

Examples

----- EXAMPLE 1 -----

Description

Set the properties of the subnet named '10.0.0.12/22'.

```
C:\PS>Set-ADReplicationSubnet "10.0.0.12/22" -Site Asia -
Location "Tokyo, Japan"
```

----- EXAMPLE 2 -----

Description

Get all the subnets in the directory that are in Japan, and set 'Asia' as their associated site.

```
C:\PS>Get-ADReplicationSubnet -Filter {Location -like
"*Japan"} -Properties Site | % {Set-ADReplicationSubnet $_ -
Site Asia}
```


Cmdlet: Set-ADResourceProperty

Synops

Modifies a resource property in Active Directory.

Syntax

```
Set-ADResourceProperty [-Identity] <ADResourceProperty> [-Add  
<Hashtable>]  
    [-AppliesToResourceTypes <Hashtable>] [-AuthType {Negotiate |  
Basic}]  
    [-Clear <String[]>] [-Credential <PSCredential>] [-  
Description <String>]  
    [-DisplayName <String>] [-Enabled <Boolean>] [-PassThru]  
    [-ProtectedFromAccidentalDeletion <Boolean>] [-Remove  
<Hashtable>]  
    [-Replace <Hashtable>] [-Server <String>] [-SharesValuesWith  
    <ADClaimType>] [-SuggestedValues <ADSuggestedValueEntry[]>]  
[-Confirm]  
    [-WhatIf] [<CommonParameters>]
```

```
Set-ADResourceProperty [-AuthType {Negotiate | Basic}] [-  
Credential  
    <PSCredential>] [-PassThru] [-Server <String>] -Instance  
    <ADResourceProperty> [-Confirm] [-WhatIf]  
[<CommonParameters>]
```

Description

The Set-ADResourceProperty cmdlet can be used to modify a resource property in Active Directory.

Parameters

Parameter :**Add**

Description :Specifies values to add to an object property. Use this parameter to add one or more values to a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can specify

multiple values to a property by specifying a comma-separated list of values and more than one property by separating them using a semicolon.. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :AppliesToResourceTypes

Description :Specifies the list of resource types that this property applies to. For Set-ADResourceProperty operations, you can add or include new resource types within an existing property by specifying them using this parameter. You do not have to specify all previously listed resource types already within this property.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :AuthType

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Clear

Description :Specifies an array of object properties that will be cleared in the directory. Use this parameter to clear one or more values of a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can modify more than one property by specifying a comma-separated list.

The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Description**

Description :Specifies a description of the object. This parameter sets the value of the Description property for the object. The LDAP Display Name (ldapDisplayName) for this property is "description".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**DisplayName**

Description :Displays the name of the resource property. The display name of the resource property must be unique.

Required	false
Position	named

Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Enabled**

Description :Specifies if the resource property is enabled.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Identity**

Description :Specifies an Active Directory object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :**Instance**

Description :Specifies an instance of a resource property object to use as a template for a new resource property object.

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**PassThru**

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ProtectedFromAccidentalDeletion

Description :Specifies whether to prevent the object from being deleted. When this property is set to true, you cannot delete the corresponding object without changing the value of the property. Possible values for this parameter include:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Remove

Description :Specifies that the cmdlet remove values of an object property. Use this parameter to remove one or more values of a property that cannot be modified using a cmdlet parameter. To remove an object property, you must use the LDAP display name. You can remove more than one property by specifying a semicolon-separated list. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Replace

Description :Specifies values for an object property that will replace the current values. Use this parameter to replace one or more values of a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can modify more than one property by specifying a comma-separated list. The format for this parameter is

Required	false
----------	-------

Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :SharesValuesWith

Description :Use this parameter to create a reference resource property. Reference resource properties do not provide their own suggested values, but rather use the suggested values from the claim type object specified in this parameter. This enables the resource property to be always valid for comparisons with the referred claim type in a central access rule.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :SuggestedValues

Description :Specifies one or more suggested values for the resource property. An application may choose to present this list of suggested values for the user to choose from. When RestrictValues is set to true, the application should restrict the user to pick values from this list only.

Required	false
Position	named

Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Notes

Examples

----- EXAMPLE 1 -----

Description

Set the suggested values of the resource property with display name 'Country' to 'US' and 'JP'. Applications using this resource property would allow their users to specify one of the suggested values as this resource property's value.

```
C:\PS>$us = New-Object
Microsoft.ActiveDirectory.Management.ADSuggestedValueEntry("US",
"United States of America", "United States of America");
$jp = New-Object
Microsoft.ActiveDirectory.Management.ADSuggestedValueEntry("JP",
"Japan", "Japan");
Set-ADResourceProperty Country -SuggestedValues $us,$jp
```

----- EXAMPLE 2 -----

Description

Sets the resource property with display name 'Country' to reference an existing claim type named 'Country' for its suggested values. This enables the resource property to be always valid for comparisons with the referenced claim type in a central access rule.

```
C:\PS>Set-ADResourceProperty Country -SharesValuesWith Country
```

Cmdlet: Set-ADResourcePropertyList

Synops

Modifies a resource property list in Active Directory.

Syntax

```
Set-ADResourcePropertyList [-Identity] <ADResourcePropertyList>
[-Add
    <Hashtable>] [-AuthType {Negotiate | Basic}] [-Clear
<String[]>]
    [-Credential <PSCredential>] [-Description <String>] [-
PassThru]
    [-ProtectedFromAccidentalDeletion <Boolean>] [-Remove
<Hashtable>]
    [-Replace <Hashtable>] [-Server <String>] [-Confirm] [-
WhatIf]
    [<CommonParameters>]
```

```
Set-ADResourcePropertyList [-AuthType {Negotiate | Basic}] [-
Credential
    <PSCredential>] [-PassThru] [-Server <String>] -Instance
    <ADResourcePropertyList> [-Confirm] [-WhatIf]
[<CommonParameters>]
```

Description

The Set-ADResourcePropertyList cmdlet can be used to modify a resource property list in Active Directory.

Parameters

Parameter :**Add**

Description :Specifies values to add to an object property. Use this parameter to add one or more values to a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can specify multiple values to a property by specifying a comma-separated list of values and more than one property by separating them using a semicolon.. The format for this parameter

is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :AuthType

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Clear

Description :Specifies an array of object properties that will be cleared in the directory. Use this parameter to clear one or more values of a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can modify more than one property by specifying a comma-separated list. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Description

Description :Specifies a description of the object. This parameter sets the value of the Description property for the object. The LDAP Display Name (ldapDisplayName) for this property is "description".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Instance

Description :Specifies an instance of a resource property list object to use as a template for a new resource property list object.

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**PassThru**

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**ProtectedFromAccidentalDeletion**

Description :Specifies whether to prevent the object from being deleted. When this property is set to true, you cannot delete the corresponding object without changing the value of the property. Possible values for this parameter include:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Remove**

Description :Specifies that the cmdlet remove values of an object property. Use this parameter to remove one or more values of a property that cannot be modified using a cmdlet parameter. To remove an object property, you must use the LDAP display name. You can remove more than one property by specifying a semicolon-separated list. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Replace**

Description :Specifies values for an object property that will replace the current values. Use this parameter to replace one or more values of a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display

name. You can modify more than one property by specifying a comma-separated list. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false

Accept wildcard characters?	false
-----------------------------	-------

Notes

Examples

----- EXAMPLE 1 -----

Description

Sets the resource property list named "Corporate Resource Property List" with the description "For corporate documents."

```
C:\PS>Set-ADResourcePropertyList "Corporate Resource Property List" -Description "For corporate documents."
```

----- EXAMPLE 2 -----

Description

Gets the resource property list named "Corporate Resource Property List" and then sets its description to "For corporate documents."

```
C:\PS>Get-ADResourcePropertyList "Corporate Resource Property List" | Set-ADResourcePropertyList -Description "For corporate documents."
```

Cmdlet: Set-ADServiceAccount

Synops

Modifies an Active Directory managed service account or group managed service account object.

Syntax

```
Set-ADServiceAccount [-Identity] <ADServiceAccount>
    [-AccountExpirationDate <DateTime>] [-AccountNotDelegated
<Boolean>] [-Add
    <Hashtable>] [-AuthenticationPolicy <ADAuthenticationPolicy>]

    [-AuthenticationPolicySilo <ADAuthenticationPolicySilo>] [-
AuthType
    {Negotiate | Basic}] [-Certificates <String[]>] [-Clear
<String[]>]
    [-CompoundIdentitySupported <Boolean>] [-Credential
<PSCredential>]
    [-Description <String>] [-DisplayName <String>] [-DNSHostName
<String>]
    [-Enabled <Boolean>] [-HomePage <String>] [-
KerberosEncryptionType {None |
    DES | RC4 | AES128 | AES256}] [-Partition <String>] [-
PassThru]
    [-PrincipalsAllowedToDelegateToAccount <ADPrincipal[]>]
    [-PrincipalsAllowedToRetrieveManagedPassword <ADPrincipal[]>]
[-Remove
    <Hashtable>] [-Replace <Hashtable>] [-SamAccountName
<String>] [-Server
    <String>] [-ServicePrincipalNames <Hashtable>] [-
TrustedForDelegation
    <Boolean>] [-Confirm] [-WhatIf] [<CommonParameters>]
```

```
Set-ADServiceAccount [-AuthType {Negotiate | Basic}] [-Credential
    <PSCredential>] [-PassThru] [-Server <String>] -Instance
    <ADServiceAccount> [-Confirm] [-WhatIf] [<CommonParameters>]
```

Description

The Set-ADServiceAccount cmdlet modifies the properties of an Active Directory managed service account (MSA). You can modify commonly used property values by using the cmdlet parameters. Property values that are not associated with cmdlet parameters can be modified by using the Add, Replace, Clear and Remove parameters.

The Identity parameter specifies the Active Directory MSA to modify. You can identify a MSA by its distinguished name (DN), GUID, security identifier (SID), or Security Accounts Manager (SAM) account name. You can also set the Identity parameter to an object variable such as \$<localServiceAccountObject>, or you can pass an object through the pipeline to the Identity parameter. For example, you can use the Get-ADServiceAccount cmdlet to retrieve a MSA object and then pass the object through the pipeline to the Set-ADServiceAccount cmdlet.

The Instance parameter provides a way to update a MSA object by applying the changes made to a copy of the object. When you set the Instance parameter to a copy of an Active Directory MSA object that has been modified, the Set-ADServiceAccount cmdlet makes the same changes to the original MSA object. To get a copy of the object to modify, use the Get-ADServiceAccount object. When you specify the Instance parameter you should not pass the Identity parameter. For more information about the Instance parameter, see the Instance parameter description.

For more information about how the Instance concept is used in Active Directory cmdlets, see [about_ActiveDirectory_Instance](#).

The following examples show how to modify the ServicePrincipalNames property of a MSA object by using three methods:

- By specifying the Identity and the ServicePrincipalNames parameters
- By passing a service account object through the pipeline and specifying the ServicePrincipalNames parameter
- By specifying the Instance parameter.

Method 1: Modify the ServicePrincipalNames property for the AccessIndia MSA by using the Identity and ServicePrincipalNames parameters.

```
Set-ADServiceAccount -Identity AccessIndia -ServicePrincipalNames  
@{Add=ACCESSAPP/india.contoso.com}
```

Method 2: Modify the ServicePrincipalNames property for the AccessIndia MSA by passing the AccessIndia MSA through the pipeline and specifying the ServicePrincipalNames parameter.

```
Get-ADServiceAccount -Identity "AccessIndia" | Set-ADServiceAccount -  
ServicePrincipalNames @{Add=ACCESSAPP/india.contoso.com}
```

Method 3: Modify the <property> property for the AccessIndia MSA by using the Windows PowerShell command line to modify a local instance of the AccessIndia MSA.

Then set the Instance parameter to the local instance.

```
$serviceAccount = Get-ADServiceAccount -Identity "AccessIndia"
```

```
$serviceAccount.ServicePrincipalNames = @{Add=ACCESSAPP/india.contoso.com}
```

```
Set-ADServiceAccount -Instance $serviceAccount.
```

Parameters

Parameter :**AccountExpirationDate**

Description :Specifies the expiration date for an account. When you set this parameter to 0, the account never expires. This parameter sets the AccountExpirationDate property of an account object. The LDAP Display name (ldapDisplayName) for this property is accountExpires.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**AccountNotDelegated**

Description :Specifies whether the security context of the user is delegated to a service. When this parameter is set to true, the security context of the account is not delegated to a service even when the service account is set as trusted for Kerberos delegation. This parameter sets the AccountNotDelegated property for an Active Directory account. This parameter also sets the ADS_UF_NOT_DELEGATED flag of the Active Directory User Account Control (UAC) attribute. Possible values for this parameter include

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Add**

Description :Specifies values to add to an object property. Use this parameter to add one or more values to a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can specify multiple values to a property by specifying a comma-separated list of values and more than one property by separating them using a semicolon.. The format for this parameter

is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**AuthenticationPolicy**

Description :

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**AuthenticationPolicySilo**

Description :

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Certificates

Description :Modifies the DER-encoded X.509v3 certificates of the account. These certificates include the public key certificates issued to this account by the Microsoft Certificate Service. This parameter sets the Certificates property of the account object. The LDAP Display Name (ldapDisplayName) for this property is "userCertificate".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Clear

Description :Specifies an array of object properties that will be cleared in the directory. Use this parameter to clear one or more values of a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can modify more than one property by specifying a comma-separated list. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :CompoundIdentitySupported

Description :Specifies whether an account supports Kerberos service tickets which includes the authorization data for the user's device. This value sets the compound identity supported flag of the Active Directory msDS-SupportedEncryptionTypes attribute. Possible values for this parameter are:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :DNSHostName

Description :Specifies the DNS host name.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Description

Description :Specifies a description of the object. This parameter sets the value of the Description property for the object. The LDAP Display Name (ldapDisplayName) for this property is "description".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :DisplayName

Description :Specifies the display name of the object. This parameter sets the DisplayName property of the object. The LDAP Display Name (ldapDisplayName) for this property is "displayName".

Required	false
----------	-------

Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Enabled

Description :Specifies if an account is enabled. An enabled account requires a password. This parameter sets the Enabled property for an account object. This parameter also sets the ADS_UF_ACCOUNTDISABLE flag of the Active Directory User Account Control (UAC) attribute. Possible values for this parameter include:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :HomePage

Description :Specifies the URL of the home page of the object. This parameter sets the homePage property of an Active Directory object. The LDAP Display Name (ldapDisplayName) for this property is "WWWHomePage".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory account object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Instance

Description :Specifies a modified copy of a service account object to use to update the actual Active Directory service account object. When this parameter is used, any modifications made to the modified copy of the object are also made to the corresponding Active Directory object. The cmdlet only updates the object properties that have changed.

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :KerberosEncryptionType

Description :Specifies whether an account supports Kerberos encryption types which are used during creation of service tickets. This value sets the encryption types supported flags of the Active Directory msDS-SupportedEncryptionTypes attribute. Possible values for this parameter are:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Partition

Description :Specifies the distinguished name of an Active Directory partition. The distinguished name must be one of the naming contexts on the current directory server. The cmdlet searches this partition to find the object defined by the Identity parameter.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PassThru

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PrincipalsAllowedToDelegateToAccount

Description :Specifies the accounts which can act on the behalf of users to services running as this Managed Service Account or Group Managed Service Account. This parameter sets the msDS-AllowedToActOnBehalfOfOtherIdentity attribute of the object.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PrincipalsAllowedToRetrieveManagedPassword

Description :Specifies the membership policy for systems which can use a group managed service account. For a service to run under a group managed service account, the system must be in the membership policy of the account. This parameter sets the msDS-GroupMSAMembership attribute of a group managed service account object. This parameter should be set to the principals allowed to use this group managed service account.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Remove

Description :Specifies that the cmdlet remove values of an object property. Use this parameter to remove one or more values of a property that cannot be modified using a cmdlet parameter. To remove an object property, you must use the LDAP display name.

You can remove more than one property by specifying a semicolon-separated list. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Replace

Description :Specifies values for an object property that will replace the current values. Use this parameter to replace one or more values of a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can modify more than one property by specifying a comma-separated list. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :SamAccountName

Description :Specifies the Security Account Manager (SAM) account name of the user, group, computer, or service account. The maximum length of the description is 256 characters. To be compatible with older operating systems, create a SAM account name that is 20 characters or less. This parameter sets the SamAccountName for an account object. The LDAP display name (ldapDisplayName) for this property is "sAMAccountName".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by

providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ServicePrincipalNames

Description :Specifies the service principal names for the account. This parameter sets the ServicePrincipalNames property of the account. The LDAP display name (ldapDisplayName) for this property is servicePrincipalName. This parameter uses the following syntax to add remove, replace or clear service principal name values.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :TrustedForDelegation

Description :Specifies whether an account is trusted for Kerberos delegation. A service that runs under an account that is trusted for Kerberos delegation can assume the identity of a client requesting the service. This parameter sets the TrustedForDelegation property of an account object. This value also sets the ADS_UF_TRUSTED_FOR_DELEGATION flag of the Active Directory User Account Control attribute. Possible values for this parameter are:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Confirm

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A managed service account object is received by the Identity parameter.

A managed service account object that was retrieved by using the Get-ADServiceAccount cmdlet and then modified is received by the Instance parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADServiceAccount

Outputs

Returns the modified managed service account object when the PassThru parameter is specified. By default, this cmdlet does not generate any output.

Type : None or Microsoft.ActiveDirectory.Management.ADServiceAccount

Notes

Examples

----- EXAMPLE 1 -----

Description

Set the description of Managed Service Account 'service1' to "Secretive Data Server"

```
C:\PS>Set-ADServiceAccount service1 -Description "Secretive
Data Server"
```

----- EXAMPLE 2 -----

Description

Replace the value of property ServicePrincipalNames with "ADAMwdb/a.contoso.com", "ADAMBdb/a.contoso.com"

```
C:\PS>Set-ADServiceAccount Mongol01ADAM -ServicePrincipalNames  
@{replace="ADAMwdb/a.contoso.com", "ADAMBdb/a.contoso.com"}
```

----- EXAMPLE 3 -----

Description

Sets the principals allowed to retrieve the password for this managed service account to be limited to only members of the specified Active Directory group account.

```
C:\PS>Set-ADServiceAccount service1 -  
PrincipalsAllowedToRetrieveManagedPassword  
"MsaAdmins.corp.contoso.com"
```

Cmdlet: Set-ADUser

Synops

Modifies an Active Directory user.

Syntax

```
Set-ADUser [-Identity] <ADUser> [-AccountExpirationDate
<DateTime>]
    [-AccountNotDelegated <Boolean>] [-Add <Hashtable>]
    [-AllowReversiblePasswordEncryption <Boolean>] [-
AuthenticationPolicy
    <ADAuthenticationPolicy>] [-AuthenticationPolicySilo
    <ADAuthenticationPolicySilo>] [-AuthType {Negotiate | Basic}]

    [-CannotChangePassword <Boolean>] [-Certificates <Hashtable>]

    [-ChangePasswordAtLogon <Boolean>] [-City <String>] [-Clear
<String[]>]
    [-Company <String>] [-CompoundIdentitySupported <Boolean>] [-
Country
    <String>] [-Credential <PSCredential>] [-Department <String>]

    [-Description <String>] [-DisplayName <String>] [-Division
<String>]
    [-EmailAddress <String>] [-EmployeeID <String>] [-
EmployeeNumber <String>]
    [-Enabled <Boolean>] [-Fax <String>] [-GivenName <String>] [-
HomeDirectory
    <String>] [-HomeDrive <String>] [-HomePage <String>] [-
HomePhone <String>]
    [-Initials <String>] [-KerberosEncryptionType {None | DES |
RC4 | AES128 |
    AES256}] [-LogonWorkstations <String>] [-Manager <ADUser>] [-
MobilePhone
    <String>] [-Office <String>] [-OfficePhone <String>] [-
Organization
    <String>] [-OtherName <String>] [-Partition <String>] [-
PassThru]
    [-PasswordNeverExpires <Boolean>] [-PasswordNotRequired
<Boolean>] [-POBox
```

```

        <String>] [-PostalCode <String>] [-
PrincipalsAllowedToDelegateToAccount
        <ADPrincipal[]>] [-ProfilePath <String>] [-Remove
<Hashtable>] [-Replace
        <Hashtable>] [-SamAccountName <String>] [-ScriptPath
<String>] [-Server
        <String>] [-ServicePrincipalNames <Hashtable>] [-
SmartcardLogonRequired
        <Boolean>] [-State <String>] [-StreetAddress <String>] [-
Surname <String>]
        [-Title <String>] [-TrustedForDelegation <Boolean>] [-
UserPrincipalName
        <String>] [-Confirm] [-WhatIf] [<CommonParameters>]

Set-ADUser [-AuthType {Negotiate | Basic}] [-Credential
<PSCredential>]
        [-PassThru] [-SamAccountName <String>] [-Server <String>] -
Instance
        <ADUser> [-Confirm] [-WhatIf] [<CommonParameters>]

```

Description

The Set-ADUser cmdlet modifies the properties of an Active Directory user. You can modify commonly used property values by using the cmdlet parameters. Property values that are not associated with cmdlet parameters can be modified by using the Add, Replace, Clear and Remove parameters.

The Identity parameter specifies the Active Directory user to modify. You can identify a user by its distinguished name (DN), GUID, security identifier (SID) or Security Accounts Manager (SAM) account name. You can also set the Identity parameter to an object variable such as \$<localUserObject>, or you can pass an object through the pipeline to the Identity parameter. For example, you can use the Get-ADUser cmdlet to retrieve a user object and then pass the object through the pipeline to the Set-ADUser cmdlet.

The Instance parameter provides a way to update a user object by applying the changes made to a copy of the object. When you set the Instance parameter to a copy of an Active Directory user object that has been modified, the Set-ADUser cmdlet makes the same changes to the original user object. To get a copy of the object to modify, use the Get-ADUser object. The Identity parameter is not allowed when you use the Instance parameter. For more information about the Instance parameter, see the Instance parameter description. For more information about how the Instance concept is used in

Active Directory cmdlets, see `about_ActiveDirectory_Instance`.

Accounts created with the `New-ADUser` cmdlet will be disabled if no password is provided.

The following examples show how to modify the Manager property of a user object by using three methods:

- By specifying the Identity and the Manager parameters
- By passing a user object through the pipeline and specifying the Manager parameter
- By specifying the Instance parameter.

Method 1: Modify the Manager property for the "saraDavis" user by using the Identity and Manager parameters.

```
Set-ADUser -Identity "saraDavis" -Manager "JimCorbin"
```

Method 2: Modify the Manager property for the "saraDavis" user by passing the "saraDavis" user through the pipeline and specifying the Manager parameter.

```
Get-ADUser -Identity "saraDavis" | Set-ADUser -Manager "JimCorbin"
```

Method 3: Modify the Manager property for the "saraDavis" user by using the Windows PowerShell command line to modify a local instance of the "saraDavis" user. Then set the Instance parameter to the local instance.

```
$user = Get-ADUser -Identity "saraDavis"
```

```
$user.Manager = "JimCorbin"
```

```
Set-ADUser -Instance $user.
```

For AD LDS environments, the Partition parameter must be specified except in the following two conditions:

- The cmdlet is run from an Active Directory provider drive.
- A default naming context or partition is defined for the AD LDS environment. To specify a default naming context for an AD LDS environment, set the `msDS-defaultNamingContext` property of the Active Directory directory service agent (DSA) object (`nTDSDSA`) for the AD LDS instance.

Parameters

Parameter :**AccountExpirationDate**

Description :Specifies the expiration date for an account. When you set this parameter to 0, the account never expires. This parameter sets the `AccountExpirationDate` property of an account object. The LDAP Display name (`IdapDisplayName`) for this property is `accountExpires`.

Required	false
Position	named

Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :AccountNotDelegated

Description :Specifies whether the security context of the user is delegated to a service. When this parameter is set to true, the security context of the account is not delegated to a service even when the service account is set as trusted for Kerberos delegation. This parameter sets the AccountNotDelegated property for an Active Directory account. This parameter also sets the ADS_UF_NOT_DELEGATED flag of the Active Directory User Account Control (UAC) attribute. Possible values for this parameter include

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Add

Description :Specifies values to add to an object property. Use this parameter to add one or more values to a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can specify multiple values to a property by specifying a comma-separated list of values and more than one property by separating them using a semicolon.. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :AllowReversiblePasswordEncryption

Description :Specifies whether reversible password encryption is allowed for the account. This parameter sets the AllowReversiblePasswordEncryption property of the account. This parameter also sets the ADS_UF_ENCRYPTED_TEXT_PASSWORD_ALLOWED flag of the Active Directory User Account Control (UAC) attribute. Possible values for this parameter include:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**AuthenticationPolicy**

Description :

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**AuthenticationPolicySilo**

Description :

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Manage ment.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**CannotChangePassword**

Description :Specifies whether the account password can be changed. This parameter sets the CannotChangePassword property of an account. Possible values for this parameter include:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Certificates**

Description :Modifies the DER-encoded X.509v3 certificates of the account. These certificates include the public key certificates issued to this account by the Microsoft Certificate Service. This parameter sets the Certificates property of the account object. The LDAP Display Name (ldapDisplayName) for this property is "userCertificate".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**ChangePasswordAtLogon**

Description :Specifies whether a password must be changed during the next logon attempt. Possible values for this parameter include:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**City**

Description :Specifies the user's town or city. This parameter sets the City property of a user. The LDAP display name (ldapDisplayName) of this property is "I".

Required	false
----------	-------

Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Clear**

Description :Specifies an array of object properties that will be cleared in the directory. Use this parameter to clear one or more values of a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can modify more than one property by specifying a comma-separated list. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Company**

Description :Specifies the user's company. This parameter sets the Company property of a user object. The LDAP display name (ldapDisplayName) of this property is "company".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**CompoundIdentitySupported**

Description :Specifies whether an account supports Kerberos service tickets which includes the authorization data for the user's device. This value sets the compound identity supported flag of the Active Directory msDS-SupportedEncryptionTypes attribute. Possible values for this parameter are:

Required	false
Position	named
Default value	
Accept pipeline input?	false

Accept wildcard characters?	false
-----------------------------	-------

Parameter :Country

Description :Specifies the country or region code for the user's language of choice. This parameter sets the Country property of a user object. The LDAP Display Name (ldapDisplayName) of this property is "c". This value is not used by Windows 2000.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Department

Description :Specifies the user's department. This parameter sets the Department property of a user. The LDAP Display Name (ldapDisplayName) of this property is "department".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Description

Description :Specifies a description of the object. This parameter sets the value of the Description property for the object. The LDAP Display Name (ldapDisplayName) for this property is "description".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**DisplayName**

Description :Specifies the display name of the object. This parameter sets the DisplayName property of the object. The LDAP Display Name (ldapDisplayName) for this property is "displayName".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Division**

Description :Specifies the user's division. This parameter sets the Division property of a user object. The LDAP Display Name (ldapDisplayName) of this property is "division".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**EmailAddress**

Description :Specifies the user's e-mail address. This parameter sets the EmailAddress property of a user object. The LDAP Display Name (ldapDisplayName) of this property is "mail".

Required	false
----------	-------

Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :EmployeeID

Description :Specifies the user's employee ID. This parameter sets the EmployeeID property of a user object. The LDAP Display Name (ldapDisplayName) of this property is "employeeID".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :EmployeeNumber

Description :Specifies the user's employee number. This parameter sets the EmployeeNumber property of a user object. The LDAP Display Name (ldapDisplayName) of this property is "employeeNumber".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Enabled

Description :Specifies if an account is enabled. An enabled account requires a password. This parameter sets the Enabled property for an account object. This parameter also sets the ADS_UF_ACCOUNTDISABLE flag of the Active Directory User Account Control (UAC) attribute. Possible values for this parameter include:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Fax

Description :Specifies the user's fax phone number. This parameter sets the Fax property of a user object. The LDAP Display Name (ldapDisplayName) of this property is "facsimileTelephoneNumber".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :GivenName

Description :Specifies the user's given name. This parameter sets the GivenName property of a user object. The LDAP Display Name (ldapDisplayName) of this property is "givenName".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :HomeDirectory

Description :Specifies a user's home directory. This parameter sets the HomeDirectory property of a user object. The LDAP Display Name (ldapDisplayName) for this property is "homeDirectory".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :HomeDrive

Description :Specifies a drive that is associated with the UNC path defined by the HomeDirectory property. The drive letter is specified as "<DriveLetter>:" where <DriveLetter> indicates the letter of the drive to associate. The <DriveLetter> must be a

single, uppercase letter and the colon is required. This parameter sets the HomeDrive property of the user object. The LDAP Display Name (ldapDisplayName) for this property is "homeDrive".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**HomePage**

Description :Specifies the URL of the home page of the object. This parameter sets the homePage property of an Active Directory object. The LDAP Display Name (ldapDisplayName) for this property is "wWWHomePage".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**HomePhone**

Description :Specifies the user's home telephone number. This parameter sets the HomePhone property of a user. The LDAP Display Name (ldapDisplayName) of this property is "homePhone".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Identity**

Description :Specifies an Active Directory user object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
----------	------

Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :**Initials**

Description :Specifies the initials that represent part of a user's name. You can use this value for the user's middle initial. This parameter sets the Initials property of a user. The LDAP Display Name (IdapDisplayName) of this property is "initials".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Instance**

Description :Specifies an ADUser object that identifies the Active Directory user object that should be modified and the set of changes that should be made to that object. When this parameter is used, any modifications made to the ADUser object are also made to the corresponding Active Directory object. The cmdlet only updates the object properties that have changed.

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**KerberosEncryptionType**

Description :Specifies whether an account supports Kerberos encryption types which are used during creation of service tickets. This value sets the encryption types supported flags of the Active Directory msDS-SupportedEncryptionTypes attribute. Possible values for this parameter are:

Required	false
Position	named
Default value	

Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :LogonWorkstations

Description :Specifies the computers that the user can access. To specify more than one computer, create a single comma-separated list. You can identify a computer by using the Security Accounts Manager (SAM) account name (sAMAccountName) or the DNS host name of the computer. The SAM account name is the same as the NetBIOS name of the computer.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Manager

Description :Specifies the user's manager. This parameter sets the Manager property of a user. This parameter is set by providing one of the following property values. Note: The identifier in parentheses is the LDAP display name for the property.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :MobilePhone

Description :Specifies the user's mobile phone number. This parameter sets the MobilePhone property of a user object. The LDAP Display Name (ldapDisplayName) of this property is "mobile".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Office

Description :Specifies the location of the user's office or place of business. This parameter sets the Office property of a user object. The LDAP display name (ldapDisplayName) of this property is "office".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :OfficePhone

Description :Specifies the user's office telephone number. This parameter sets the OfficePhone property of a user object. The LDAP display name (ldapDisplayName) of this property is "telephoneNumber".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Organization

Description :Specifies the user's organization. This parameter sets the Organization property of a user object. The LDAP display name (ldapDisplayName) of this property is "o".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :OtherName

Description :Specifies a name in addition to a user's given name and surname, such as the user's middle name. This parameter sets the OtherName property of a user object. The LDAP Display Name (ldapDisplayName) of this property is "middleName".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :POBox

Description :Specifies the user's post office box number. This parameter sets the POBox property of a user object. The LDAP Display Name (ldapDisplayName) of this property is "postOfficeBox".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Partition

Description :Specifies the distinguished name of an Active Directory partition. The distinguished name must be one of the naming contexts on the current directory server. The cmdlet searches this partition to find the object defined by the Identity parameter.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PassThru

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**PasswordNeverExpires**

Description :Specifies whether the password of an account can expire. This parameter sets the PasswordNeverExpires property of an account object. This parameter also sets the ADS_UF_DONT_EXPIRE_PASSWD flag of the Active Directory User Account Control attribute. Possible values for this parameter include:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**PasswordNotRequired**

Description :Specifies whether the account requires a password. This parameter sets the PasswordNotRequired property of an account, such as a user or computer account. This parameter also sets the ADS_UF_PASSWD_NOTREQD flag of the Active Directory User Account Control attribute. Possible values for this parameter are:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**PostalCode**

Description :Specifies the user's postal code or zip code. This parameter sets the PostalCode property of a user. The LDAP Display Name (ldapDisplayName) of this property is "postalCode".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**PrincipalsAllowedToDelegateToAccount**

Description :This parameter sets the msDS-AllowedToActOnBehalfOfOtherIdentity

attribute of a computer account object.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ProfilePath

Description :Specifies a path to the user's profile. This value can be a local absolute path or a Universal Naming Convention (UNC) path. This parameter sets the ProfilePath property of the user object. The LDAP display name (ldapDisplayName) for this property is "profilePath".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Remove

Description :Specifies that the cmdlet remove values of an object property. Use this parameter to remove one or more values of a property that cannot be modified using a cmdlet parameter. To remove an object property, you must use the LDAP display name. You can remove more than one property by specifying a semicolon-separated list. The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Replace

Description :Specifies values for an object property that will replace the current values. Use this parameter to replace one or more values of a property that cannot be modified using a cmdlet parameter. To modify an object property, you must use the LDAP display name. You can modify more than one property by specifying a comma-separated list.

The format for this parameter is

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**SamAccountName**

Description :Specifies the Security Account Manager (SAM) account name of the user, group, computer, or service account. The maximum length of the description is 256 characters. To be compatible with older operating systems, create a SAM account name that is 20 characters or less. This parameter sets the SAMAccountName for an account object. The LDAP display name (IdapDisplayName) for this property is "sAMAccountName".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**ScriptPath**

Description :Specifies a path to the user's log on script. This value can be a local absolute path or a Universal Naming Convention (UNC) path. This parameter sets the ScriptPath property of the user. The LDAP display name (IdapDisplayName) for this property is "scriptPath".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain

Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ServicePrincipalNames

Description :Specifies the service principal names for the account. This parameter sets the ServicePrincipalNames property of the account. The LDAP display name (ldapDisplayName) for this property is servicePrincipalName. This parameter uses the following syntax to add remove, replace or clear service principal name values.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :SmartcardLogonRequired

Description :Specifies whether a smart card is required to logon. This parameter sets the SmartCardLoginRequired property for a user. This parameter also sets the ADS_UF_SMARTCARD_REQUIRED flag of the Active Directory User Account Control attribute. Possible values for this parameter are:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :State

Description :Specifies the user's or Organizational Unit's state or province. This parameter sets the State property of a User or Organizational Unit object. The LDAP display name (ldapDisplayName) of this property is "st".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :StreetAddress

Description :Specifies the user's street address. This parameter sets the StreetAddress property of a user object. The LDAP display name (IdapDisplayName) of this property is "streetAddress".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Surname

Description :Specifies the user's last name or surname. This parameter sets the Surname property of a user object. The LDAP display name (IdapDisplayName) of this property is "sn".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Title

Description :Specifies the user's title. This parameter sets the Title property of a user object. The LDAP display name (IdapDisplayName) of this property is "title".

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :TrustedForDelegation

Description :Specifies whether an account is trusted for Kerberos delegation. A service that runs under an account that is trusted for Kerberos delegation can assume the identity of a client requesting the service. This parameter sets the TrustedForDelegation property of an account object. This value also sets the ADS_UF_TRUSTED_FOR_DELEGATION flag of the Active Directory User Account Control attribute. Possible values for this parameter are:

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :UserPrincipalName

Description :Each user account has a user principal name (UPN) in the format <user>@<DNS-domain-name>. A UPN is a friendly name assigned by an administrator that is shorter than the LDAP distinguished name used by the system and easier to remember. The UPN is independent of the user object's DN, so a user object can be moved or renamed without affecting the user logon name. When logging on using a UPN, users no longer have to choose a domain from a list on the logon dialog box.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Confirm

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A user object is received by the Identity parameter.

A user object that was retrieved by using the Get-ADUser cmdlet and then modified is received by the Instance parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADUser

Outputs

Returns the modified user object when the PassThru parameter is specified. By default, this cmdlet does not generate any output.

Type : None or Microsoft.ActiveDirectory.Management.ADUser

Notes

Examples

----- EXAMPLE 1 -----

Description

Set the user with samAccountName AntonioAl's property homepage to http://fabrikam.com/employees/AntonioAl and the LogonWorkstations property to AntonioAl-DSKTOP,AntonioAl-LPTOP.

```
C:\PS>Set-ADUser AntonioAl -HomePage  
'http://fabrikam.com/employees/AntonioAl' -LogonWorkstations  
'AntonioAl-DSKTOP,AntonioAl-LPTOP'
```

----- EXAMPLE 2 -----

Description

Get all the users in the directory that are located underneath the OU=HumanResources,OU=UserAccounts,DC=FABRIKAM,DC=COM organizationalUnit. Set the DisplayName property on these user objects to the concatenation of the Surname property and the GivenName property.

```
C:\PS>Get-ADUser -Filter 'Name -like "*" ' -SearchBase
'OU=HumanResources,OU=UserAccounts,DC=FABRIKAM,DC=COM' -
Properties DisplayName | % {Set-ADUser $_ -DisplayName
($_.Surname + ' ' + $_.GivenName)}
```

----- EXAMPLE 3 -----

Description

Set the user with samAccountName GlenJohn's property title to director and property mail to glenjohn@fabrikam.com.

```
C:\PS>Set-ADUser GlenJohn -Replace
@{title="director";mail="glenjohn@fabrikam.com"}
```

----- EXAMPLE 4 -----

Description

Modify the user with samAccountName GlenJohn's object by removing glen.john from the otherMailbox property, adding fabrikam.com to the url property, replacing the title property with manager and clearing the description property.

```
C:\PS>Set-ADUser GlenJohn -Remove @{otherMailbox="glen.john"}
-Add @{url="fabrikam.com"} -Replace @{title="manager"} -Clear
description
```

----- EXAMPLE 5 -----

Description

Set the mail and department properties on the user object with samAccountName GlenJohn by using the instance parameter.

```
C:\PS>$user = Get-ADUser GlenJohn -Properties mail,department
$user.mail = "glen@fabrikam.com"
$user.department = "Accounting"
Set-ADUser -instance $user
```

----- EXAMPLE 6 -----

Description

Set the user logon hours to Monday through Friday from 8:00 AM to 5:00 PM and add a description. It updates the "logonHours" attribute with the specified byte array and the description attribute with the specified string.

```
PS C:\># create a byte array for the M-F 8:00 am to 5 pm logon hours
```

```
PS C:\>$hours = New-Object byte[] 21
```

```
PS C:\>$hours[5] = 255; $hours[8] = 255; $hours[11] = 255;  
$hours[14] = 255; $hours[17] = 255;
```

```
PS C:\>$hours[6] = 1; $hours[9] = 1; $hours[12] = 1;  
$hours[15] = 1; $hours[18] = 1;
```

```
PS C:\># create a hashtable to update the logon hours and a description
```

```
PS C:\>$replaceHashTable = New-Object Hashtable
```

```
PS C:\>$replaceHashTable.Add("logonHours", $hours)
```

```
PS C:\>$replaceHashTable.Add("description", "Sarah Davis can  
only logon from Monday through Friday from 8:00 AM to 5:00  
PM")
```

```
PS C:\># set the value of the logonHours and description  
attributes
```

```
PS C:\>Set-ADUser "SarahDavis" -Replace $replaceHashTable
```

----- EXAMPLE 7 -----

Description

Set the Manager property for user with samAccountName of "AntonioAL" where the manager (GlenJohn) is a user in another domain.

```
PS C:\>$manager = Get-ADUser GlenJohn -Server Corp-DC01
```

```
PS C:\>Set-ADUser AntonioA1 -Manager $manager -Server Branch-DC02
```

Cmdlet: Show-ADAuthenticationPolicyExpression

Synops

Displays the Edit Access Control Conditions window update or create security descriptor definition language (SDDL) security descriptors.

Syntax

```
Show-ADAuthenticationPolicyExpression [[-SDDL] <String>] [[-Title]
    <String>] [-AuthType {Negotiate | Basic}] [-Credential
<PSCredential>]
    [-Server <String>] -AllowedToAuthenticateFrom [-Confirm] [-
WhatIf]
    [<CommonParameters>]
```

```
Show-ADAuthenticationPolicyExpression [[-SDDL] <String>] [[-Title]
    <String>] [-AuthType {Negotiate | Basic}] [-Credential
<PSCredential>]
    [-Server <String>] -AllowedToAuthenticateTo [-Confirm] [-
WhatIf]
    [<CommonParameters>]
```

Description

The Show-ADAuthenticationPolicyExpression cmdlet creates or modifies an SDDL security descriptor using the Edit Access Control Conditions window.

Parameters

Parameter :**AllowedToAuthenticateFrom**

Description :Indicates that the AllowedToAuthenticateFrom listings for an object are displayed in the Edit Access Control Conditions window.

Required	true
Position	named
Default value	

Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :AllowedToAuthenticateTo

Description :Indicates that the AllowedToAuthenticateTo listings for an object are displayed in the Edit Access Control Conditions window.

Required	true
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :AuthType

Description :Specifies the authentication method to use. The acceptable values for this parameter are:

--Negotiate or 0

--Basic or 1

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies a user account that has permission to perform the task. The default is the current user. Type a user name, such as "User01" or "Domain01\User01", or enter a PSCredential object, such as one generated by the Get-Credential cmdlet.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**SDDL**

Description :Specifies the SDDL of the security descriptor.

Required	false
Position	0
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :**Server**

Description :Specifies the Active Directory Domain Services instance to which to connect, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Title**

Description :Specifies a title for the SDDL security descriptor.

Required	false
Position	1
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Confirm**

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false

Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

This cmdlet accepts a SDDL security descriptor.

Type : None or System.String

Outputs

This cmdlet outputs a SDDL security descriptor.

Type : System.Object

Examples

Example 1: Retrieve the AllowedToAuthenticateFrom settings and store in a file

This command retrieves the AllowedToAuthenticateFrom access control list (ACL) by opening the Edit Access Control Conditions window and stores the ACL in a file named AuthSettings.txt. The file is then used to apply a new authentication policy to the retrieved ACL.

```
PS C:\>Show-ADAuthenticationPolicyExpression
-AllowedToAuthenticateFrom > someFile.txt
PS C:\> New-ADAuthenticationPolicy testAuthenticationPolicy -
UserAllowedToAuthenticateFrom (Get-Acl
.\AuthSettings.txt).sddl
```

Example 2: Set the UserAllowedToAuthenticateFrom property

This example uses the New-ADAuthenticationPolicy cmdlet to create an authentication policy, and then sets the UserAllowedToAuthenticateFrom property by specifying the Show-ADAuthenticationPolicyExpression cmdlet as the value for the parameter.

```
PS C:\>New-ADAuthenticationPolicy testAuthenticationPolicy -  
UserAllowedToAuthenticateFrom (Show-  
ADAuthenticationPolicyExpression -AllowedToAuthenticateFrom)
```

Cmdlet: Sync-ADObject

Synops

Replicates a single object between any two domain controllers that have partitions in common.

Syntax

```
Sync-ADObject [-Object] <ADObject> [[-Source] <String>] [-Destination]
    <String> [-AuthType {Negotiate | Basic}] [-Credential
    <PSCredential>]
    [-PassThru] [-PasswordOnly] [<CommonParameters>]
```

Description

The Sync-ADObject cmdlet replicates a single object between any two domain controllers that have partitions in common. The two domain controllers do not need to be direct replication partners. It can also be used to populate passwords in a read-only domain controller (RODC) cache.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Credential**

Description :Specifies a user account that has permission to perform this action. The default is the current user.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Destination

Description :Specifies the identity of the Active Directory server that acts as the destination for synchronizing this data. This parameter works similarly to the Server parameter as used on the Set-Object cmdlet with some restrictions. It does not allow domain or forest names to be used.

Required	true
Position	3
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Object

Description :Specifies an Active Directory object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	None
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :PassThru

Description :Returns the object once it has been synchronized on the destination server. By default if the PassThru parameter is not specified, this cmdlet does not generate any output.

Required	false
Position	named
Default value	False
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**PasswordOnly**

Description :Populates a read-only domain controller (RODC) password cache with the password of the account specified in the Object parameter. If specified, no other data is replicated other than the password.

Required	false
Position	named
Default value	False
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Source**

Description :Specifies the identity of the Active Directory server that acts as the source for synchronizing this data. This parameter works similarly to the Server parameter as used on the Set-Object cmdlet with some restrictions. It does not allow domain or forest names to be used.

Required	false
Position	2
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

Derived types, such as the following are also accepted:

Microsoft.ActiveDirectory.Management.ADGroup

Microsoft.ActiveDirectory.Management.ADUser

Microsoft.ActiveDirectory.Management.ADComputer

Microsoft.ActiveDirectory.Management.ADSERVICEACCOUNT

Microsoft.ActiveDirectory.Management.ADOrganizationalUnit

Microsoft.ActiveDirectory.Management.ADFineGrainedPasswordPolicy

Microsoft.ActiveDirectory.Management.ADDomain

Type : Microsoft.ActiveDirectory.Management.ADOBJECT

Examples

----- EXAMPLE 1 -----

Description

Replicate an object with DistinguishedName

'CN=AccountManagers,OU=AccountDeptOU,DC=corp,DC=contoso,DC=com' from corp-DC01 to corp-DC02.

```
C:\PS>Sync-ADObject  
"CN=AccountManagers,OU=AccountDeptOU,DC=corp,DC=contoso,DC=com"  
" corp-DC01 corp-DC02
```

----- EXAMPLE 2 -----

Description

Pre-cache the password of Sara Davis to the read-only Domain Controller corp-RODC01 using the user's SamAccountName

```
C:\PS>Get-ADUser saradavis | Sync-ADObject -Destination "corp-RODC01" -PasswordOnly
```

Cmdlet: Test-ADServiceAccount

Synops

Tests a managed service account from a computer.

Syntax

```
Test-ADServiceAccount [-Identity] <ADServiceAccount> [-AuthType  
{Negotiate  
| Basic}] [<CommonParameters>]
```

Description

The Test-ADServiceAccount cmdlet tests a managed service account (MSA) from a local computer.

The Identity parameter specifies the Active Directory MSA account to test. You can identify a MSA by its distinguished name (DN), GUID, security identifier (SID), or Security Accounts Manager (SAM) account name. You can also set the parameter to a MSA object variable, such as \$<localMSA> or pass a MSA object through the pipeline to the Identity parameter. For example, you can use the Get-ADServiceAccount to get a MSA object and then pass that object through the pipeline to the Test-ADServiceAccount cmdlet.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Manage ment.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**Identity**

Description :Specifies an Active Directory managed service account object by providing

one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Inputs

A managed service account object is received by the Identity parameter.

Type : None or Microsoft.ActiveDirectory.Management.ADSERVICEACCOUNT

Examples

----- EXAMPLE 1 -----

Description

Tests that the specified service account ("MSA1") is ready for use (it is able to be authenticated and access the domain using its currently configured credentials) from the local computer.

```
C:\PS>Test-ADServiceAccount -Identity MSA1
```

```
True
```

----- EXAMPLE 2 -----

Description

Test results returned if MsalInfoCannotInstall

```
C:\PS>Test-ADServiceAccount -Identity MSA1
```

```
False
```

```
WARNING: Test failed for Managed Service Account MSA. If standalone Managed Service Account, the account is linked to another computer object in the Active Directory. If group Managed Service Account, either this computer does not have permission to use the group MSA or this computer does not support all the Kerberos encryption types required for the gMSA. See the MSA operational log for more information.
```

----- EXAMPLE 3 -----

Description

Test returns MsalInfoCanInstall

```
C:\PS>Test-ADServiceAccount -Identity MSA1
```

False

WARNING: The Managed Service Account MSA is not linked with any computer object in the directory.

Cmdlet: Uninstall-ADServiceAccount

Synops

Uninstalls an Active Directory managed service account from a computer or removes a cached group managed service account from a computer.

Syntax

```
Uninstall-ADServiceAccount [-Identity] <ADServiceAccount> [-AuthType {Negotiate | Basic}] [-ForceRemoveLocal] [-Confirm] [-WhatIf] [  
    <CommonParameters>]
```

Description

The Uninstall-ADServiceAccount cmdlet removes an Active Directory standalone managed service account (MSA) on the computer on which the cmdlet is run. For group MSAs, the cmdlet removes the group MSA from the cache, however, if a service is still using the group MSA and the host has permission to retrieve the password a new cache entry will be created. The specified MSA must be installed on the computer.

The Identity parameter specifies the Active Directory MSA to uninstall. You can identify a MSA by its distinguished name (DN), GUID, security identifier (SID), or Security Accounts Manager (SAM) account name. You can also set the parameter to a MSA object variable, such as \$<localServiceAccountObject> or pass a MSA object through the pipeline to the Identity parameter. For example, you can use the Get-ADServiceAccount to get a MSA object and then pass that object through the pipeline to the Uninstall-ADServiceAccount cmdlet.

For standalone MSA, the ForceRemoveLocal switch parameter will allow you to remove the account from the local LSA without failing the command if an access to a writable DC is not possible. This is required if you are uninstalling the standalone MSA from a server that is placed in a segmented network (i.e. perimeter network) with access only to an RODC. If you pass this parameter and the server has access to a writable DC the standalone MSA will be un-linked from the computer account in the directory as well.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this

parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :ForceRemoveLocal

Description :The ForceRemoveLocal switch parameter will allow you to remove the account from the local LSA without failing the command if an access to a writable DC is not possible. This is required if you are uninstalling the MSA from a server that is placed in a segmented network (i.e. perimeter network) with access only to an RODC. If you pass this parameter and the server has access to a writable DC the account will be unlinked from the computer account in the directory as well.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory account object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Confirm

Description :Prompts you for confirmation before running the cmdlet.

Required	false
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Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :**WhatIf**

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

A managed service account object is received by the Identity parameter. A switch parameter with name ForceRemoveLocal is provided to un-install standalone MSAs on a RODC only site.

Type : None or Microsoft.ActiveDirectory.Management.ADServiceAccount

Notes

Examples

----- EXAMPLE 1 -----

Description

Uninstall the managed service account SQL-SRV1 from the local machine.

```
C:\PS>Uninstall-ADServiceAccount -Identity SQL-SRV1
```

----- EXAMPLE 2 -----

Description

Uninstall a standalone Managed Service Account from a server located in a RODC-only site with no access to writable DCs such as a perimeter network.

```
C:\PS>Uninstall-ADServiceAccount sql-hr-01 -ForceRemoveLocal
```


Cmdlet: Unlock-ADAccount

Synops

Unlocks an Active Directory account.

Syntax

```
Unlock-ADAccount [-Identity] <ADAccount> [-AuthType {Negotiate |  
Basic}]  
    [-Credential <PSCredential>] [-Partition <String>] [-  
PassThru] [-Server  
    <String>] [-Confirm] [-WhatIf] [<CommonParameters>]
```

Description

The Unlock-ADAccount cmdlet restores Active Directory Domain Services (AD DS) access for an account that is locked. AD DS access is suspended or locked for an account when the number of incorrect password entries exceeds the maximum number allowed by the account password policy.

The Identity parameter specifies the Active Directory account to unlock. You can identify an account by its distinguished name (DN), GUID, security identifier (SID) or Security Accounts Manager (SAM) account name. You can also set the Identity parameter to an account object variable such as \$<localADAccountObject>, or you can pass an object through the pipeline to the Identity parameter. For example, you can use the Search-ADAccount cmdlet to get an account object and then pass the object through the pipeline to the Unlock-ADAccount cmdlet to unlock the account. Similarly, you can use Get-ADUser and Get-ADComputer to get objects to pass through the pipeline.

For AD LDS environments, the Partition parameter must be specified except when:

- Using a DN to identify objects: the partition will be auto-generated from the DN.
- Running cmdlets from an Active Directory provider drive: the current path will be used to set the partition.
- A default naming context or partition is specified.

To specify a default naming context for an AD LDS environment, set the msDS-defaultNamingContext property of the Active Directory directory service agent (DSA) object (nTDSDSA) for the AD LDS instance.

Parameters

Parameter :**AuthType**

Description :Specifies the authentication method to use. Possible values for this

parameter include:

Required	false
Position	named
Default value	Microsoft.ActiveDirectory.Management.AuthType.Negotiate
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Credential

Description :Specifies the user account credentials to use to perform this task. The default credentials are the credentials of the currently logged on user unless the cmdlet is run from an Active Directory PowerShell provider drive. If the cmdlet is run from such a provider drive, the account associated with the drive is the default.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Identity

Description :Specifies an Active Directory account object by providing one of the following property values. The identifier in parentheses is the LDAP display name for the attribute.

Required	true
Position	1
Default value	
Accept pipeline input?	True (ByValue)
Accept wildcard characters?	false

Parameter :Partition

Description :Specifies the distinguished name of an Active Directory partition. The distinguished name must be one of the naming contexts on the current directory server. The cmdlet searches this partition to find the object defined by the Identity parameter.

Required	false
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Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :PassThru

Description :Returns the new or modified object. By default (i.e. if -PassThru is not specified), this cmdlet does not generate any output.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Server

Description :Specifies the Active Directory Domain Services instance to connect to, by providing one of the following values for a corresponding domain name or directory server. The service may be any of the following: Active Directory Lightweight Domain Services, Active Directory Domain Services or Active Directory Snapshot instance.

Required	false
Position	named
Default value	
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :Confirm

Description :Prompts you for confirmation before running the cmdlet.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Parameter :WhatIf

Description :Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required	false
Position	named
Default value	false
Accept pipeline input?	false
Accept wildcard characters?	false

Inputs

An account object is received by the Identity parameter.

Derived types, such as the following are also accepted:

Microsoft.ActiveDirectory.Management.ADUser

Microsoft.ActiveDirectory.Management.ADComputer

Microsoft.ActiveDirectory.Management.ADServiceAccount

Type : None or Microsoft.ActiveDirectory.Management.ADAccount

Notes

Examples

----- EXAMPLE 1 -----

Description

Unlocks the account with SamAccountName: KimAb.

```
C:\PS>Unlock-ADAccount -Identity KimAb
```

----- EXAMPLE 2 -----

Description

Unlocks the account with DistinguishedName: "CN=Kim

Abercrombie,OU=Finance,OU=UserAccounts,DC=FABRIKAM,DC=COM".

```
C:\PS>Unlock-ADAccount -Identity "CN=Kim  
Abercrombie,OU=Finance,OU=UserAccounts,DC=FABRIKAM,DC=COM"
```