

Evidence-Based Practice for Nursing and Healthcare Quality Improvement

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Get-ADUser

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Gets one or more Active Directory users.

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Syntax

```
Get-ADUser [-AuthType ] [-Credential ] -Filter [-Properties ] [-ResultPageSize ] [-ResultSetSize ] [-SearchBase ] [-SearchScope ] [-Server ] []
```

```
Get-ADUser [-AuthType ] [-Credential ] [-Identity] [-Partition ] [-Properties ] [-Server ] []
```

```
Get-ADUser [-AuthType ] [-Credential ] -LDAPFilter [-Properties ] [-ResultPageSize ] [-ResultSetSize ] [-SearchBase ] [-SearchScope ] [-Server ] []
```

Description

The Get-ADUser cmdlet gets a specified user object or performs a search to get 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), or Security Account Manager (SAM) account name. You can also set the parameter to a user object variable such as \$ 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, type Get-Help about_ActiveDirectory_Filter . If you have existing Lightweight Directory Access Protocol (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 how to determine the properties for user objects, see the Properties parameter description.

Examples

Example 1: Get all of the users in a container

P

```
PS C:> Get-ADUser -Filter * -SearchBase
"OU=Finance,OU=UserAccounts,DC=FABRIKAM,DC=COM"
```

This command gets all users in the container OU=Finance,OU=UserAccounts,DC=FABRIKAM,DC=COM.

Example 2: Get a filtered list of users

```
PS C:> Get-ADUser -Filter 'Name -like "*SvcAccount"' | Format-Table Name,SamAccountName -A Name SamAccountName ----
-----
SQL01 SvcAccount SQL01 SQL02 SvcAccount SQL02 IIS01 SvcAccount IIS01
```

This command gets all users that have a name that ends with SvcAccount.

Example 3: Get all of the properties for a specified user

```
PS C:> Get-ADUser -Identity ChewDavid -Properties * Surname : David Name : Chew David UserPrincipalName : GivenName :
David Enabled : False SamAccountName : ChewDavid ObjectClass : user SID :
S-1-5-21-2889043008-4136710315-2444824263-3544 ObjectGUID : e1418d64-096c-4cb0-b903-ebb66562d99d DistinguishedName :
CN=Chew David,OU=NorthAmerica,OU=Sales,OU=UserAccounts,DC=FABRIKAM,DC=COM
```

This command gets all of the properties of the user with the SAM account name ChewDavid.

Example 4: Get a specified user

```
PS C:> Get-ADUser -Filter "Name -eq 'ChewDavid'" -SearchBase "DC=AppNC" -Properties "mail" -Server
lds.Fabrikam.com:50000
```

This command gets the user with the name ChewDavid in the Active Directory Lightweight Directory Services (AD LDS) instance.

Example 5: Get all enabled user accounts

210.0015555556

```
C:PS> Get-ADUser -LDAPFilter '(!userAccountControl:1.2.840.113556.1.4.803:=2)'
```

This command gets all enabled user accounts in Active Directory using an LDAP filter.

Parameters

-AuthType

Specifies the authentication method to use. The acceptable values for this parameter are: Negotiate or 0

Basic or 1 The default authentication method is Negotiate. A Secure Sockets Layer (SSL) connection is required for the Basic authentication method. Type: ADAuthType Accepted values: Negotiate, Basic Position: Named Default value: None Accept pipeline input: False Accept wildcard characters: False

-Credential

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. To specify this parameter, you can type a user name, such as User1 or Domain01User01 or you can specify a PSCredential object. If you specify a user name for this parameter, the cmdlet prompts for a password. You can also create a PSCredential object by using a script or by using the Get-Credential cmdlet. You can then set the Credential parameter to the PSCredential object. If the acting credentials do not have directory-level permission to perform the task, Active Directory PowerShell returns a terminating error. Type: PSCredential Position: Named Default value: None Accept pipeline input: False Accept wildcard characters: False

-Filter

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, type `Get-Help about_ActiveDirectory_Filter` .
Syntax: The following syntax uses Backus-Naur form to show how to use the PowerShell Expression Language for this parameter. ::= "{" "}" ::= | | ::= | "(" ")" ::= "-eq" | "-le" | "-ge" | "-ne" | "-lt" | "-gt" | "-approx" | "-bor" | "-band" | "-recursivematch" | "-like" | "-notlike" ::= "-and" | "-or" ::= "-not" ::= | ::=

For a list of supported types for , type `Get-Help about_ActiveDirectory_ObjectModel` . Note: For String parameter type, PowerShell will cast the filter query to a string while processing the command. When using a string variable as a value in the filter component, make sure that it complies with the PowerShell Quoting Rules. For example, if the filter expression is double-quoted, the variable should be enclosed using single quotation marks: `Get-ADUser -Filter "Name -like '$UserName'"`. On the contrary, if curly braces are used to enclose the filter, the variable should not be quoted at all: `Get-ADUser -Filter {Name -like $UserName}`. Note: PowerShell wildcards other than *, such as ?, are not supported by the Filter syntax. Note: To query using LDAP query strings, use the `LDAPFilter` parameter. Type: String
Position: Named Default value: None Accept pipeline input: False Accept wildcard characters: False

-Identity

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. The acceptable values for this parameter are: A distinguished name

A GUID (objectGUID)

A security identifier (objectSid)

A SAM account name (sAMAccountName) The cmdlet searches the default naming context or partition to find the object. If two or more objects are found, the cmdlet returns a non-terminating error. This parameter can also get this object through the pipeline or you can set this parameter to an object instance. Type: ADUser Position: 0 Default value: None
Accept pipeline input: True Accept wildcard characters: False

-LDAPFilter

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 or type Get-Help about_ActiveDirectory_Filter . Type: String Position: Named Default value: None Accept pipeline input: False Accept wildcard characters: False

-Partition

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. In many cases, a default value is used for the Partition parameter if no value is specified. The rules for determining the default value are given below. Note that rules listed first are evaluated first, and when a default value can be determined, no further rules are evaluated. In AD DS environments, a default value for Partition is set in the following cases: If the Identity parameter is set to a distinguished name, the default value of Partition is automatically generated from this distinguished name.

If running cmdlets from an Active Directory provider drive, the default value of Partition is automatically generated from the current path in the drive.

If none of the previous cases apply, the default value of Partition is set to the default partition or naming context of the target domain. In AD LDS environments, a default value for Partition is set in the following cases: If the Identity parameter is set to a distinguished name, the default value of Partition is automatically generated from this distinguished name.

If running cmdlets from an Active Directory provider drive, the default value of Partition is automatically generated from the current path in the drive.

If the target AD LDS instance has a default naming context, the default value of Partition is set to the default naming context. To specify a default naming context for an AD LDS environment, set the msDS-defaultNamingContext property of the Active Directory directory service agent object (nTDSDSA) for the AD LDS instance.

property of the Active Directory directory service agent object () for the AD LDS instance. If none of the previous cases apply, the Partition parameter does not take any default value. Type: String Position: Named Default value: None

Accept pipeline input: False Accept wildcard characters: False

-Properties

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. Specify properties for this parameter as a comma-separated list of names. To display all of the attributes that are set on the object, specify * (asterisk). To specify an individual extended property, use the name of the property. For properties that are not default or extended properties, you must specify the LDAP display name of the attribute. To retrieve properties and display them for an object, you can use the Get-* cmdlet associated with the object and pass the output to the Get-Member cmdlet. Type: String [] Aliases: Property Position: Named Default value: None Accept pipeline input: False Accept wildcard characters: False

-ResultPageSize

Specifies the number of objects to include in one page for an Active Directory Domain Services query. The default is 256 objects per page. Type: Int32 Position: Named Default value: None Accept pipeline input: False Accept wildcard characters: False

-ResultSetSize

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. The default is \$Null. Type: Int32 Position: Named Default value: None Accept pipeline input: False Accept wildcard characters: False

-SearchBase

Specifies an Active Directory path to search under. When you run a cmdlet from an Active Directory provider drive, the default value of this parameter is the current path of the drive. When you run a cmdlet outside of an Active Directory provider drive against an AD DS target, the default value of this parameter is the default naming context of the target domain. When you run a cmdlet outside of an Active Directory provider drive against an AD LDS target, the

default value is the default naming context of the target LDS instance if one has been specified by setting the msDS-defaultNamingContext property of the Active Directory directory service agent (DSA) object (nTDSDSA) for the AD LDS instance. If no default naming context has been specified for the target AD LDS instance, then this parameter has no default value. When the value of the SearchBase parameter is set to an empty string and you are connected to a GC port, all partitions are searched. If the value of the SearchBase parameter is set to an empty string and you are not connected to a GC port, an error is thrown. Type: String Position: Named Default value: None Accept pipeline input: False Accept wildcard characters: False

-SearchScope

Specifies the scope of an Active Directory search. The acceptable values for this parameter are: Base or 0

OneLevel or 1

Subtree or 2 A SearchScope with a Base value searches only for the given user. If an OU is specified in the SearchBase parameter, no user will be returned by, for example, a specified Filter statement. A OneLevel query searches the immediate children of that path or object. This option only works when an OU is given as the SearchBase. If a user is given, no results are returned. A Subtree query searches the current path or object and all children of that path or object. Type: ADSearchScope Accepted values: Base, OneLevel, Subtree Position: Named Default value: None Accept pipeline input: False Accept wildcard characters: False

-Server

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. Domain name values: Fully qualified domain name (FQDN)

NetBIOS name Directory server values: Fully qualified directory server name

NetBIOS name

Fully qualified directory server name and port The default value for the Server parameter is determined by one of the following methods in the order that they are listed: By using Server value from objects passed through the pipeline.

By using the server information associated with the Active Directory PowerShell provider drive, when running under that drive.

By using the domain of the computer running PowerShell. Type: String Position: Named Default value: None Accept pipeline input: False Accept wildcard characters: False

Inputs

None or Microsoft.ActiveDirectory.Management.ADUser

A user object is received by the Identity parameter.

Outputs

ADUser

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 | Get-Member
```

To get a list of the most commonly used properties of an ADUser object, use the following command:

```
Get-ADUser -Properties Extended | Get-Member
```


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

```
Get-ADUser -Properties * | Get-Member
```

Notes

Reference

[The Day I Die: The Untold Story of Assisted Dying in America](#)

[Data Analytics in Healthcare Research: Tools and Strategies](#)