

## Prerequisites to adding hosts and installing SnapCenter Plug-in for Microsoft SQL Server

SnapCenter Software

NetApp June 24, 2021

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# Prerequisites to adding hosts and installing SnapCenter Plug-in for Microsoft SQL Server

Before you add a host and install the plug-ins packages, you must complete all the requirements.

- If you are using iSCSI, the iSCSI service must be running.
- · You must have a user with local administrator privileges with local login permissions on the remote host.
- If you manage cluster nodes in SnapCenter, you must have a user with administrative privileges to all the nodes in the cluster.
- You must have a user with sysadmin permissions on the SQL Server.

SnapCenter Plug-in for Microsoft SQL Server uses Microsoft VDI Framework, which requires sysadmin access.

Microsoft Support Article 2926557: SQL Server VDI backup and restore operations require Sysadmin privileges

- When installing a plug-in on a Windows host, if you specify a credential that is not built-in or if the user belongs to a local workgroup user, you must disable UAC on the host.
- If SnapManager for Microsoft SQL Server is installed, you must have stopped or disabled the service and schedules.

If you plan to import backup or clone jobs into SnapCenter, do not uninstall SnapManager for Microsoft SQL Server.

• The host must be resolvable to the fully qualified domain name (FQDN) from the server.

If the hosts file is modified to make it resolvable and if both the short name and the FQDN are specified in the hosts file, create an entry in the SnapCenter hosts file in the following format: <ip\_address> <host\_fqdn> <host\_name>

## Host requirements to install SnapCenter Plug-ins Package for Windows

Before you install the SnapCenter Plug-ins Package for Windows, you should be familiar with some basic host system space requirements and sizing requirements.

Item	Requirements	
Operating Systems	You must enable the Cluster Shared Volumes (CSV) feature in Windows Server 2008 R2 SP1 if you want to create CSV-type disks.  For the latest information about supported versions, see the NetApp Interoperability Matrix Tool.	
Minimum RAM for the SnapCenter plug-in on host	1 GB	
Minimum install and log space for the SnapCenter plug-in on host	You should allocate sufficient disk space and monitor the storage consumption by the logs folder. The log space required varies depending on the number of the entities to be protected and the frequency of data protection operations. If there is no sufficient disk space, the logs will not be created for the recently run operations.	
Required software packages	<ul> <li>Microsoft .NET Framework 4.5.2 or later</li> <li>Windows Management Framework (WMF) 4.0 or later</li> <li>PowerShell 4.0 or later</li> <li>For the latest information about supported versions see the NetApp Interoperability Matrix Tool.</li> </ul>	

## Set up credentials for the SnapCenter Plug-ins Package for Windows

SnapCenter uses credentials to authenticate users for SnapCenter operations. You should create credentials for installing SnapCenter plug-ins and additional credentials for performing data protection operations on databases or Windows file systems.

## What you will need

- You must set up Windows credentials before installing plug-ins.
- You must set up the credentials with administrator privileges, including administrator rights on the remote host.

SQL authentication on Windows hosts

You must set up SQL credentials after installing plug-ins.

If you are deploying SnapCenter Plug-in for Microsoft SQL Server, you must set up SQL credentials after installing plug-ins. Set up a credential for a user with SQL Server sysadmin permissions.

The SQL authentication method authenticates against a SQL Server instance. This means that a SQL Server instance must be discovered in SnapCenter. Therefore, before adding a SQL credential, you must add a host, install plug-in packages, and refresh resources. You need SQL Server authentication for performing operations such as scheduling or discovering resources.

## Steps

- 1. In the left navigation pane, click **Settings**.
- 2. In the Settings page, click Credential.
- 3. Click New.
- 4. In the **Credential** page, specify the information required for configuring credentials:

For this field	Do this
Credential name	Enter a name for the credential.
User name/Password	Enter the user name and password that are to be used for authentication.
	Domain administrator
	Specify the domain administrator on the system on which you are installing the SnapCenter plug-in. Valid formats for the Username field are:
	° NetBIOS\UserName
	° Domain FQDN\UserName
	Local administrator (for workgroups only)
	For systems that belong to a workgroup, specify the built-in local administrator on the system on which you are installing the SnapCenter plug-in. You can specify a local user account that belongs to the local administrators group if the user account has elevated privileges or the User Access control feature is disabled on the host system. The valid format for the Username field is: UserName
	Do not use double quotes (") in passwords.

For this field	Do this
Authentication Mode	Select the authentication mode that you want to use. If you select the SQL authentication mode, you must also specify the SQL server instance and the host where the SQL instance is located.

#### 5. Click OK.

After you finish setting up the credentials, you might want to assign credential maintenance to a user or group of users on the **My SnapCenter Assets** page.

## Configure credentials for an individual SQL Server resource

You can configure credentials to perform data protection jobs on individual SQL Server resources for each user. While you can configure the credentials globally, you might want to do this only for a particular resource.

#### About this task

• If you are using Windows credentials for authentication, you must set up your credential before installing plug-ins.

However, if you are using an SQL Server instance for authentication, you must add the credential after installing plug-ins.

• If you have enabled SQL authentication while setting up the credentials, the discovered instance or database is shown with a red color padlock icon.

If the padlock icon appears, you must specify the instance or database credentials to successfully add the instance or database to a resource group.

- You must assign the credential to a role-based access control (RBAC) user without sysadmin access when the following conditions are met:
  - The credential is assigned to an SQL instance.
  - The SQL instance or host is assigned to an RBAC user.

The user must have both the resource group and backup privileges

#### Steps

- 1. In the left navigation pane, click **Settings**.
- 2. In the Settings page, click Credential.
- 3. To add a new credential, click New.
- 4. In the **Credential** page, configure the credentials:

For this field	Do this
Credential name	Enter a name for the credentials.

For this field	Do this
Username	Enter the user name used for SQL Server authentication.  • Domain administrator or any member of the administrator group Specify the domain administrator or any member of the administrator group on the system on which you are installing the SnapCenter plug-in. Valid formats for the Username field are:  • NetBIOS\UserName  • Domain FQDN\UserName  • Local administrator (for workgroups only) For systems that belong to a workgroup, specify the built-in local administrator on the system on which you are installing the SnapCenter plug-in. You can specify a local user account that belongs to the local administrators group if the user account has elevated privileges or the User Access control feature is disabled on the host system. The valid format for the Username field is: UserName
Password	Enter the password used for authentication.
Authentication mode	Select the SQL Server authentication mode. You can also choose Windows authentication if the Windows user has sysadmin privileges on the SQL server.
Host	Select the host.
SQL Server Instance	Select the SQL Server instance.

- 5. Click **OK** to add the credential.
- 6. In the left navigation pane, click **Resources**.
- 7. In the **Resources** page, select **Instance** from the **View** list.
  - a. Click  $\[ \]$ , and then select the host name to filter the instances.
  - b. Click to close the filter pane.
    - The credential option does not apply to databases and availability groups.
- 8. In the Instance Protect page, protect the instance, and if required, click Configure Credentials.

If the user who is logged in to the SnapCenter Server does not have access to SnapCenter Plugin for Microsoft SQL Server, then the user has to configure the credentials.

Click Refresh Resources.

## Configure gMSA on Windows Server 2012 or later

Windows Server 2012 or later enables you to create a group Managed Service Account (gMSA) that provides automated service account password management from a managed domain account.

### What you will need

- · You should have a Windows Server 2012 or later domain controller.
- You should have a Windows Server 2012 or later host, which is a member of the domain.

## Steps

- 1. Create a KDS root key to generate unique passwords for each object in your gMSA.
- 2. For each domain, run the following command from the Windows domain controller: Add-KDSRootKey -EffectiveImmediately
- Create and configure your gMSA:
  - a. Create a user group account.
  - b. Add computer objects to the group.
  - c. Use the user group you just created to create the gMSA.

For example,

```
New-ADServiceAccount -name <ServiceAccountName> -DNSHostName <fqdn>
-PrincipalsAllowedToRetrieveManagedPassword <group>
-ServicePrincipalNames <SPN1,SPN2,...>
```

- d. Run Get-ADServiceAccount command to verify the service account.
- 4. Configure the gMSA on your hosts:
  - a. Enable the Active Directory module for Windows PowerShell on the host where you want to use the gMSA account.

To do this, run the following command from PowerShell:

```
PS C:\> Get-WindowsFeature AD-Domain-Services
Display Name
                                  Name
                                                    Install
State
_____
                                  ____
_____
[ ] Active Directory Domain Services AD-Domain-Services Available
PS C:\> Install-WindowsFeature AD-DOMAIN-SERVICES
Success Restart Needed Exit Code Feature Result
-----
                                 _____
                   Success
True No
                                {Active Directory Domain
Services, Active ...
WARNING: Windows automatic updating is not enabled. To ensure that
your newly-installed role or feature is
automatically updated, turn on Windows Update.
```

- b. Restart your host.
- c. Install the gMSA on your host by running the following command from the PowerShell command prompt: Install-AdServiceAccount <gMSA>
- d. Verify your gMSA account by running the following command: Test-AdServiceAccount <qMSA>
- 5. Assign the administrative privileges to the configured gMSA on the host.
- 6. Add the Windows host by specifying the configured gMSA account in the SnapCenter Server.

SnapCenter Server will install the selected plug-ins on the host and the specified gMSA will be used as the service log on account during the plug-in installation.

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