# **■** NetApp

## **Install the SnapCenter Custom Plug-ins**

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## Install the SnapCenter Custom Plug-ins

### Add hosts and install plug-in packages on remote hosts

You must use the SnapCenterAdd Host page to add hosts, and then install the plug-in packages. The plug-ins are automatically installed on the remote hosts. You can add a host and install the plug-in packages either for an individual host or for a cluster.

#### What you will need

- You should be a user that is assigned to a role that has the plug-in install and uninstall permissions, such as the SnapCenter Admin role.
- You should ensure that the message queueing service is running.
- If you are using group Managed Service Account (gMSA), you should configure gMSA with administrative privileges.

Configure group Managed Service Account on Windows Server 2012 or later for custom applications

#### About this task

You cannot add a SnapCenter Server as a plug-in host to another SnapCenter Server.

If you install plug-ins on a cluster (WSFC), the plug-ins are installed on all of the nodes of the cluster.

#### Steps

- 1. In the left navigation pane, click **Hosts**.
- 2. Verify that the **Managed Hosts** tab is selected at the top.
- 3. Click Add.
- 4. In the Hosts page, perform the following actions:

For this field	Do this	
Host Type	Select the host type:	
	<ul><li>Windows</li><li>Linux</li></ul>	
	i	The custom plug-ins can be used in both Windows and Linux environments.

For this field	Do this		
Host name	Enter the fully qualified domain name (FQDN) or the IP address of the host.		
	SnapCenter depends on the proper configuration of the DNS. Therefore, the best practice is to enter the FQDN.		
	For Windows environments, the IP address is supported for untrusted domain hosts only if it resolves to the FQDN.		
	You can enter the IP addresses or FQDN of a stand-alone host.		
	If you are adding a host by using SnapCenter and the host is part of a subdomain, you must provide the FQDN.		
Credentials	Either select the credential name that you created, or create new credentials.		
	The credentials must have administrative rights on the remote host. For details, see the information about creating credentials.		
	You can view details about the credentials by positioning your cursor over the credential name that you specified.		
	The credentials authentication mode is determined by the host type that you specify in the Add Host wizard.		

- 5. In the **Select Plug-ins to Install** section, select the plug-ins to install.
- 6. (Optional) Click More Options.

For this field	Do this	
Port	Either retain the default port number, or specify the port number.  The default port number is 8145. If the SnapCenter Server was installed on a custom port, that port number will be displayed as the default port.	
	i	If you manually installed the plug-ins and specified a custom port, you must specify the same port. Otherwise, the operation fails.

For this field	Do this
For this field Installation Path	<ul> <li>Do this</li> <li>The custom plug-ins can be installed on either a Windows system or a Linux system.</li> <li>For the SnapCenter Plug-ins Package for Windows, the default path is C:\Program Files\NetApp\SnapCenter.</li> <li>Optionally, you can customize the path.</li> <li>For SnapCenter Plug-ins Package for Linux, the default path is /opt/NetApp/snapcenter.</li> <li>Optionally, you can customize the path.</li> <li>For the SnapCenter Custom Plug-ins: <ol> <li>In the Custom Plug-ins section, click Browse, and select the zipped custom plug-in folder.</li> </ol> </li> <li>The zipped folder contains the custom plug-iner.</li> </ul>
	in code and the descriptor .xml file.  For Storage Plug-in, navigate to C:\ProgramData\NetApp\SnapCenter\Packa ge Repository and select Storage.zip folder.  ii. Click Upload.
	The descriptor .xml file in the zipped custom plug-in folder is validated before the package is uploaded.
	The custom plug-ins that are uploaded to the SnapCenter Server are listed.  If you want to manage MySQL or DB2 applications, you can use the MySQL and DB2 custom plug-ins that are provided by NetApp. The MySQL and DB2 custom plugins are available at the NetApp Automation Store
Skip preinstall checks	Select this check box if you already installed the plug-ins manually and you do not want to validate whether the host meets the requirements for installing the plug-in.

For this field	Do this	
Use group Managed Service Account (gMSA) to run the plug-in services	For Windows host, select this check box if you want to use group Managed Service Account (gMSA) to run the plug-in services.	
	i	Provide the gMSA name in the following format: domainName\accountName\$.
	i	gMSA will be used as a log on service account only for SnapCenter Plug-in for Windows service.

#### 7. Click Submit.

If you have not selected the **Skip prechecks** checkbox, the host is validated to verify whether the host meets the requirements for installing the plug-in. The disk space, RAM, PowerShell version, .NET version, location (for Windows plug-ins), and Java version (for Linux plug-ins) are validated against the minimum requirements. If the minimum requirements are not met, appropriate error or warning messages are displayed.

If the error is related to disk space or RAM, you can update the web.config file located at C:\Program Files\NetApp\SnapCenter WebApp to modify the default values. If the error is related to other parameters, you must fix the issue.

- In an HA setup, if you are updating web.config file, you must update the file on both nodes.
- 8. If host type is Linux, verify the fingerprint, and then click Confirm and Submit.
  - Fingerprint verification is mandatory even if the same host was added earlier to SnapCenter and the fingerprint was confirmed.
- 9. Monitor the installation progress.

The installation-specific log files are located at /custom location/snapcenter/logs.

## Install SnapCenter Plug-in Packages for Linux or Windows on multiple remote hosts by using cmdlets

You can install the SnapCenter Plug-in Packages for Linux or Windows on multiple hosts simultaneously by using the Install-SmHostPackage PowerShell cmdlet.

#### What you will need

The user adding a host should have the administrative rights on the host.

#### Steps

1. Launch PowerShell.

- 2. On the SnapCenter Server host, establish a session using the Open-SmConnection cmdlet, and then enter your credentials.
- 3. Install the plug-in on multiple hosts using the Install-SmHostPackage cmdlet and the required parameters.

The information regarding the parameters that can be used with the cmdlet and their descriptions can be obtained by running *Get-Help command\_name*. Alternatively, you can also refer to the SnapCenter Software Cmdlet Reference Guide.

You can use the -skipprecheck option when you have installed the plug-ins manually and do not want to validate whether the host meets the requirements to install the plug-in.

4. Enter your credentials for remote installation.

# Install the SnapCenter Custom Plug-ins on Linux hosts by using the command-line interface

You should install the SnapCenter Custom Plug-ins by using the SnapCenter user interface (UI). If your environment does not allow remote installation of the plug-in from the SnapCenter UI, you can install the custom plug-ins either in console mode or in silent mode by using the command-line interface (CLI).

#### **Steps**

1. Copy the SnapCenter Plug-ins Package for Linux installation file (snapcenter\_linux\_host\_plugin.bin) from C:\ProgramData\NetApp\SnapCenter\Package Repository to the host where you want to install the custom plug-ins.

You can access this path from the host where the SnapCenter Server is installed.

- 2. From the command prompt, navigate to the directory where you copied the installation file.
- 3. Install the plug-in: path\_to\_installation\_bin\_file/snapcenter\_linux\_host\_plugin.bin -i silent -DPORT=port\_number\_for\_host -DSERVER\_IP=server\_name\_or\_ip\_address -DSERVER\_HTTPS\_PORT=port\_number\_for\_server
  - -DPORT specifies the SMCore HTTPS communication port.
  - -DSERVER IP specifies the SnapCenter Server IP address.
  - · -DSERVER HTTPS PORT specifies the SnapCenter Server HTTPS port.
  - -DUSER\_INSTALL\_DIR specifies the directory where you want to install the SnapCenter Plug-ins Package for Linux.
  - DINSTALL\_LOG\_NAME specifies the name of the log file.

```
/tmp/sc-plugin-installer/snapcenter_linux_host_plugin.bin -i silent
-DPORT=8145 -DSERVER_IP=scserver.domain.com -DSERVER_HTTPS_PORT=8146
-DUSER_INSTALL_DIR=/opt
-DINSTALL_LOG_NAME=SnapCenter_Linux_Host_Plugin_Install_2.log
-DCHOSEN_FEATURE_LIST=CUSTOM
```

4. Add the host to the SnapCenter Server using the Add-Smhost cmdlet and the required parameters.

The information regarding the parameters that can be used with the command and their descriptions can be obtained by running *Get-Help command\_name*. Alternatively, you can also refer to the SnapCenter Software Cmdlet Reference Guide.

5. Log in to SnapCenter and upload the custom plug-in from the UI or by using PowerShell cmdlets.

You can upload the custom plug-in from the UI by referring to Add hosts and install plug-in packages on remote hosts section.

The SnapCenter cmdlet help and the cmdlet reference information contain more information about PowerShell cmdlets.

SnapCenter Software Cmdlet Reference Guide.

### Monitor the status of installing custom plug-ins

You can monitor the progress of SnapCenter plug-in package installation by using the Jobs page. You might want to check the progress of installation to determine when it is complete or if there is an issue.

#### About this task

The following icons appear on the Jobs page and indicate the state of the operation:

- In progress
- Completed successfully
- 🗶 Failed
- Completed with warnings or could not start due to warnings.
- 🤊 Queued

#### Steps

- 1. In the left navigation pane, click **Monitor**.
- 2. In the Monitor page, click **Jobs**.
- 3. In the Jobs page, to filter the list so that only plug-in installation operations are listed, do the following:
  - a. Click Filter.
  - b. Optional: Specify the start and end date.
  - c. From the Type drop-down menu, select Plug-in installation.
  - d. From the Status drop-down menu, select the installation status.
  - e. Click Apply.
- 4. Select the installation job and click **Details** to view the job details.
- 5. In the Job Details page, click View logs.

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