



# **Upgrade SnapCenter Server and plug-ins**

## **SnapCenter Software**

NetApp  
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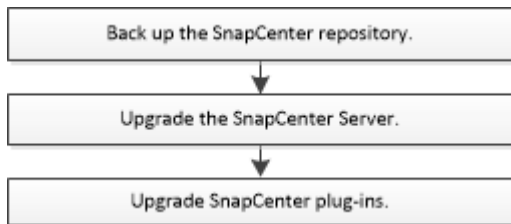
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# Upgrade SnapCenter Server and plug-ins

## Upgrade workflow

Each release of SnapCenter contains an updated SnapCenter Server and plug-in package. Plug-in package updates are distributed with the SnapCenter installer. You can configure SnapCenter to check for available updates.

The workflow shows the different tasks required to upgrade the SnapCenter Server and the Plug-in packages.



## Configure SnapCenter to check for available updates

SnapCenter periodically communicates with the NetApp Support Site to notify you of available software updates. You can also create a schedule to specify the interval in which you want to receive information about available updates.

### Steps

1. In the left navigation pane, click **Settings**.
2. In the Settings page, click **Software**.

The Available Software page displays the available plug-in packages, versions available, and their installation status.

3. Click **Check for updates** to see if any newer versions of plug-in packages are available.
4. Click **Schedule Updates** to create a schedule to specify the interval in which you want to receive information about available updates:
  - a. Select the interval in **Check for updates**.
  - b. Select the Windows credential and click **OK**.

## Upgrade the SnapCenter Server

You can use the SnapCenter Server installer executable file to upgrade the SnapCenter Server.

### What you will need

- The SnapCenter Server host must be up to date with Windows updates, with no pending system restarts.
- You should ensure that no other operations are running before initiating the upgrade operation.
- You should back up the SnapCenter repository (MySQL) database after ensuring that no jobs are running.

For information, see [Back up the SnapCenter repository](#).

- You should back up all the SnapCenter configuration files that you have modified either on the SnapCenter Server host or the plug-in host.

Examples of SnapCenter configuration files: SnapDriveService.exe.config, SMCOREServiceHost.exe.config, and so on.

### About this task

- During upgrade, the host is automatically put into maintenance mode that prevents the host from running any scheduled jobs. After upgrade, the host is automatically pulled out of maintenance mode.
- Before initiating the upgrade operation, if you have manually placed the host in maintenance mode, post upgrade you need to manually bring the host out of maintenance mode by clicking **Hosts** > **Activate Schedule**.
- Supported upgrade paths:

If you are using...	You can...
4.0.x	<ul style="list-style-type: none"><li>• Directly upgrade to 4.1.x or 4.2.x</li><li>• Upgrade to 4.3.x by first upgrading to 4.1.x or 4.2.x, and then upgrade to 4.3.x</li><li>• Upgrade to 4.4.x by first upgrading to 4.2.x, and then upgrade to 4.4.x</li><li>• Upgrade to 4.5 by first upgrading to 4.2.x, then upgrade to 4.4.x, and then upgrade to 4.5</li></ul>
4.1.x	<ul style="list-style-type: none"><li>• Directly upgrade to 4.2.x or 4.3.x</li><li>• Upgrade to 4.4.x by first upgrading to 4.2.x or 4.3.x, and then upgrade to 4.4.x</li><li>• Upgrade to 4.5 by first upgrading to 4.3.x and then upgrade to 4.5</li></ul>
4.2.x	<ul style="list-style-type: none"><li>• Directly upgrade to 4.3.x or 4.4.x</li><li>• Upgrade to 4.5 by first upgrading to 4.3.x or 4.4.x and then upgrade to 4.5</li></ul>
4.3.x	Directly upgrade to 4.4.x or 4.5
4.4.x	Directly upgrade to 4.5

### Steps

1. Download the SnapCenter Server installation package from the NetApp Support Site.

<https://mysupport.netapp.com/site/products/all/details/snapcenter/downloads-tab>

2. In the left navigation pane, click **Hosts**., and in the Managed Hosts list, select the host that you want to

upgrade.

3. Create a copy of the web.config located at C:\Program Files\NetApp\SnapCenter WebApp.
4. Export the SnapCenter schedules related to plug-in host from windows task schedule so that you can use it to restore the schedules if upgrade fails.  

```
md d:\SCBackup`schtasks /query /xml /TN taskname >> "D:\SCBackup\taskname.xml"
```
5. Create the SnapCenter MySQL database dump if the repository backup is not configured.  

```
md d:\SCBackup`mysqldump --all-databases --single-transaction --add-drop -database --triggers --routines --events -u root -p > D:\SCBackup\SCRepoBackup.dmp
```

When prompted, enter the password.

6. Initiate the SnapCenter Server upgrade by double-clicking the downloaded .exe file.

After you initiate the upgrade, all the prechecks are performed, and if the minimum requirements are not met, appropriate error or warning messages are displayed. You can ignore the warning messages and proceed with the installation. However, errors should be fixed.



SnapCenter will continue to use the existing MySQL Server repository database password provided during installation of the earlier version of SnapCenter Server.

7. Click **Upgrade**.

At any stage if you click the **Cancel** button, the upgrade workflow will be cancelled. It will not rollback the SnapCenter Server to previous state.

**Best Practice:** You should either log out and then log into SnapCenter, or close and then open a new browser to access SnapCenter GUI.

## After you finish

- If the plug-in is installed using a sudo user, you should copy the sha224 keys available at C:\ProgramData\NetApp\SnapCenter\Package Repository\oracle\_checksum.txt to update the /etc/sudoers file.
- You should perform a fresh discovery of resources on the hosts.

If the status of the host is displayed as stopped, you can wait for sometime and perform a fresh discovery. You can also change the value of **HostRefreshInterval** parameter (default value is 3600 seconds) to any value more than 10 minutes.

- If the upgrade fails, you should clean up the failed installation, reinstall the earlier version of SnapCenter, and then restore the NSM database to its previous state.
- After upgrading the SnapCenter Server host, you must also upgrade the plug-ins before adding any storage system.

## Upgrade your plug-in packages

The plug-in packages are distributed as part of the SnapCenter upgrade.

### What you will need

- If you are a non-root user with access to the Linux machines, you should update the `/etc/sudoers` file with the latest checksum values before performing the upgrade operation.
- By default SnapCenter detects `JAVA_HOME` from the environment. If you want to use a fixed `JAVA_HOME` and if you are upgrading the plug-ins on a Linux host, you should manually add the `SKIP_JAVAHOME_UPDATE` parameter in the `spl.properties` file located at `/var/opt/snapcenter/spl/etc/` and set the value to `TRUE`.

The value of `JAVA_HOME` gets updated when the plug-in is upgraded or when the SnapCenter plug-in loader (SPL) service restarts. Before upgrading or restarting the SPL, if you add the `SKIP_JAVAHOME_UPDATE` parameter and set the value to `TRUE`, the value of `JAVA_HOME` is not updated.

- You should have backed up all the SnapCenter configuration files that you have modified either on the SnapCenter Server host or the plug-in host.

Examples of SnapCenter configuration files: `SnapDriveService.exe.config`, `SMCoreServiceHost.exe.config`, and so on.

## About this task

- You can only upgrade one host at a time.



If your hosts are in a Microsoft cluster, you can upgrade the SQL and Windows plug-ins on all the hosts in the cluster at one time.

For more information, see [Upgrade might fail on hosts with SQL databases on VMDK](#).

- The upgrade procedure places your Windows, Linux, or AIX host in “maintenance” mode, which prevents the host from running any scheduled jobs.
- SQL host plug-in upgrade fails if the ISO path is unavailable for Windows roles and features.
- Supported upgrade paths:

If using are using...	You can...
4.0.x	<ul style="list-style-type: none"> <li>• Directly upgrade to 4.1.x</li> <li>• Upgrade to 4.2.x by first upgrading to 4.1.x, and then upgrade to 4.2.x</li> <li>• Upgrade to 4.3.x by first upgrading to 4.1.x, then upgrade to 4.2.x, and then upgrade to 4.3.x</li> <li>• Upgrade to 4.4.x by first upgrading to 4.1.x, then upgrade to 4.2.x, then upgrade to 4.3.x, and then upgrade to 4.4.x</li> <li>• Upgrade to 4.5 by first upgrading to 4.1.x, then upgrade to 4.2.x, then upgrade to 4.3.x, then upgrade to 4.4.x, and then upgrade to 4.5</li> </ul>

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4.1.x	<ul style="list-style-type: none"> <li>• Directly upgrade to 4.2.x</li> <li>• Upgrade to 4.3.x by first upgrading to 4.2.x, and then upgrade to 4.3.x</li> <li>• Upgrade to 4.4.x by first upgrading to 4.2.x, then upgrade to 4.3.x, and then upgrade to 4.4.x</li> <li>• Upgrade to 4.5 by first upgrading to 4.2.x, then upgrade to 4.3.x, then upgrade to 4.4.x, and then upgrade to 4.5</li> </ul>
4.2.x	<ul style="list-style-type: none"> <li>• Directly upgrade to 4.3.x</li> <li>• Upgrade to 4.4.x by first upgrading to 4.3.x, and then upgrade to 4.4.x</li> <li>• Upgrade to 4.5 by first upgrading to 4.3.x, then upgrade to 4.4.x, and then upgrade to 4.5</li> </ul>
4.3.x	<ul style="list-style-type: none"> <li>• Directly upgrade to 4.4.x</li> <li>• Upgrade to 4.5 by first upgrading to 4.4.x, and then upgrade to 4.5</li> </ul>
4.4.x	Directly upgrade to 4.5




For information about upgrading the SnapCenter Plug-in for VMware vSphere, see [Upgrade SnapCenter Plug-in for VMware vSphere](#).

## Steps

1. In the left navigation pane, click **Hosts > Managed Hosts**.
2. Upgrade the hosts by performing one of the following tasks:
  - If the Overall Status column displays “Upgrade available” for one of the hosts, click the host name and perform the following:
    - a. Click **More Options**.
    - b. Select **Skip prechecks** if you do not want to validate whether the host meets the requirements to upgrade the plug-in.
    - c. Click **Upgrade**.



After upgrading SnapCenter Plug-in for Microsoft SQL Server, you must refresh the resources to view the Availability Group type, and you must also provide new values for **Repeat every** option for monthly schedules because the values are not retained.

- If you want to upgrade multiple hosts, select all the hosts, click , and then click **Upgrade > OK**.



All the plug-ins in the package gets selected, but only the plug-ins that were installed with the earlier version of SnapCenter are upgraded, and the remaining plug-ins are not installed. You must use the **Add plug-ins** option to install any new plug-in.

If you have not selected the **Skip prechecks** check box, the host is validated to see if it meets the requirements to install the plug-in. If the minimum requirements are not met, appropriate error or warning messages are displayed. After fixing the issue, click **Validate** to re-validate the requirements.



If the error is related to disk space or RAM, you can update either the web.config located at C:\Program Files\NetApp\SnapCenter WebApp, or the PowerShell config files located at C:\Windows\System32\WindowsPowerShell\v1.0\Modules\SnapCenter\ to modify the default values. If the error is related to remaining parameters then you must fix the issue, and then validate the requirements again.

### After you finish

You should bring the host out of maintenance mode by clicking **Activate Schedule**.



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