



Install Windows Host Utilities

ONTAP SAN Host Utilities

NetApp
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Install Windows Host Utilities

Install Windows Host Utilities 8.0 for ONTAP storage

The Windows Host Utilities enable you to connect a Windows host computer to NetApp storage systems.

The Windows Host Utilities support the following versions of Windows:

- Windows 2025
- Windows 2022
- Windows 2019
- Windows 2016

Windows Host Utilities includes an installation program that sets the required Windows registry and Host Bus Adapter (HBA) parameters so that a Windows host can correctly handle the storage system behaviors for ONTAP platforms.

When you install the Host Utilities software, the installer sets the required Windows registry and HBA parameters.

The following programs and files are installed on the Windows host computer. The default directory is C:\Program Files\NetApp\Windows Host Utilities.

Program	Purpose
\NetAppQCLI\fcconfig.exe	Used by the installation program to set the HBA parameters.
\NetAppQCLI\fcconfig.ini	Used by the installation program to set the HBA parameters.
san_version.exe	Displays the version of the Host Utilities and FC HBAs.

The Host Utilities support different Windows host configurations, protocols, and multipathing options. For more information, see the [Interoperability Matrix Tool](#).

Step 1: Verify your host and storage system configuration

Verify that your host and storage system configuration are supported before you install Windows Host Utilities for the [supported Windows version](#).

Steps

1. Check the supported configuration in the [Interoperability Matrix Tool](#).
2. Check the hotfixes required for your Windows Server host version in the [SAN host Windows documentation](#).

For example, the [Configure Windows Server 2025 for ONTAP storage](#) documentation provides the instructions for installing Windows hotfixes for Windows Server 2025.

3. [Add the iSCSI or FCP license.](#)
4. Start the target service.
5. Verify your cabling.

Refer to the [SAN configuration reference](#) for detailed cabling and configuration information.

Step 2: Configure FC HBAs and switches

Install and configure one or more supported FC host bus adapters (HBAs) for FC connections to the storage system.

The Windows Host Utilities installer sets the required FC HBA settings.



You should only allow the Windows Host Utilities installer to set the HBA parameters. This ensures that the Windows host can correctly handle the storage system behaviors for ONTAP platforms.

Steps

1. Install one or more supported FC HBAs according to the instructions provided by the HBA vendor.
2. Obtain the supported HBA drivers and management utilities and install them according to the instructions provided by the HBA vendor.
3. [Connect the HBAs to your FC switches or directly to the storage system.](#)
4. [Create zones on the FC switch according to your FC switch documentation.](#)
5. For ONTAP, zone the switch by the WWPN. Be sure to use the WWPN of the logical interfaces (LIFs) and not the WWPN of the physical ports on the storage controllers. Refer to the [SAN configuration reference](#) for more information.

Step 3: Install the Windows Host Utilities

The installation program installs the Windows Host Utilities package and sets the Windows registry and HBA settings.

About this task

Optionally, you can include multipathing support when you install the Windows Host Utilities software package. The installer prompts you for the following options:

- Choose **MPIO** if you have more than one path from the Windows host or virtual machine to the storage system.
- Choose **no MPIO** only if you're using a single path to the storage system.

You can also choose multipathing support using a Windows command line prompt.

For Hyper-V guests, raw (pass-through) disks don't appear in the guest OS if you choose multipathing support. You can use either raw disks or MPIO, but you can't use both in the guest OS.



If you don't install the MPIO software, the Windows OS might see each path as a separate disk. This can lead to data corruption.



Windows XP or Windows Vista running in a Hyper-V virtual machine doesn't support MPIO.

Steps

You can install the Host Utilities interactively or by using the Windows command line. The new Host Utilities installation package must be in a path that is accessible to the Windows host.

Install interactively

Install the Windows Host Utilities software package interactively by running the installation program and following the prompts.

1. Download the executable file from the [NetApp Support Site](#).
2. Change to the directory where you downloaded the executable file.
3. Run the `netapp_windows_host_utilities_8.0.0_x64` file and follow the instructions on the screen.
4. Reboot the Windows host when prompted.

Install noninteractively

Perform a noninteractive installation of the Host Utilities by using the Windows command line. The system automatically reboots when the installation is complete.

1. Enter the following command at the Windows command prompt:

```
msiexec /i installer.msi /quiet MULTIPATHING= {0 | 1}  
[INSTALLDIR=inst_path]
```

- `installer` is the name of the `.msi` file for your CPU architecture.
- `MULTIPATHING` specifies whether MPIO support is installed. The allowed values are "0" for no and "1" for yes.
- `inst_path` is the path where the Host Utilities files are installed. The default path is `C:\Program Files\NetApp\Windows Host Utilities\`.

To see the standard Microsoft Installer (MSI) options for logging and other functions, enter `msiexec /help` at the Windows command prompt. For example, the `msiexec /i install.msi /quiet /l*v <install.log> LOGVERBOSE=1` command displays logging information.

What's next?

[Learn about the Windows Host Utilities configuration for ONTAP storage](#)

Install Windows Host Utilities 7.2 for ONTAP storage

The Windows Host Utilities enable you to connect a Windows host computer to NetApp storage systems.

The Windows Host Utilities support the following versions of Windows:

- Windows 2025
- Windows 2022
- Windows 2019
- Windows 2016
- Windows 2012R2
- Windows 2012

Windows Host Utilities includes an installation program that sets the required Windows registry and Host Bus Adapter (HBA) parameters so that a Windows host can correctly handle the storage system behaviors for ONTAP and E-Series platforms.

When you install the Host Utilities software, the installer sets the required Windows registry and HBA parameters.

The following programs and files are installed on the Windows host computer. The default directory is C:\Program Files\NetApp\Windows Host Utilities.

Program	Purpose
emulexhba.reg	Troubleshooting program; run this program only if instructed to do so by technical support personnel.
\NetAppQCLI\fcconfig.exe	Used by the installation program to set the HBA parameters.
\NetAppQCLI\fcconfig.ini	Used by the installation program to set the HBA parameters.
\NetAppQCLI*.*	Used by the installation program to set the QLogic FC HBA parameters.
san_version.exe	Displays the version of the Host Utilities and FC HBAs.

The Host Utilities support different Windows host configurations, protocols, and multipathing options. For more information, see the [Interoperability Matrix Tool](#).

Step 1: Verify your host and storage system configuration

Verify that your host and storage system configuration are supported before you install Windows Host Utilities for the [supported Windows version](#).

Steps

1. Check the supported configuration in the [Interoperability Matrix Tool](#).
2. Check the hotfixes required for your Windows Server host version in the [SAN host Windows documentation](#).

For example, the [Configure Windows Server 2022 for ONTAP storage](#) documentation provides the instructions for installing Windows hotfixes for Windows server 2022.

3. [Add the iSCSI or FCP license](#).



The FC and iSCSI protocols don't require licenses on E-Series storage systems using the SANtricity Storage Manager.

4. Start the target service.
5. Verify your cabling.

Refer to the [SAN configuration reference](#) for detailed cabling and configuration information.

Step 2: Configure FC HBAs and switches

Install and configure one or more supported FC host bus adapters (HBAs) for FC connections to the storage system.

The Windows Host Utilities installer sets the required FC HBA settings.



You should only allow the Windows Host Utilities installer to set the HBA parameters. This ensures that the Windows host can correctly handle the storage system behaviors for ONTAP platforms.

Steps

1. Install one or more supported FC HBAs according to the instructions provided by the HBA vendor.
2. Obtain the supported HBA drivers and management utilities and install them according to the instructions provided by the HBA vendor.
3. [Connect the HBAs to your FC switches or directly to the storage system.](#)
4. [Create zones on the FC switch according to your FC switch documentation.](#)
5. For ONTAP, zone the switch by the WWPN. Be sure to use the WWPN of the logical interfaces (LIFs) and not the WWPN of the physical ports on the storage controllers. Refer to the [SAN configuration reference](#) for more information.

Step 3: Install the Windows Host Utilities

The installation program installs the Windows Host Utilities package and sets the Windows registry and HBA settings.

About this task

Optionally, you can include multipathing support when you install the Windows Host Utilities software package. The installer prompts you for the following options:

- Choose **MPIO** if you have more than one path from the Windows host or virtual machine to the storage system.
- Choose **no MPIO** only if you're using a single path to the storage system.

You can also choose multipathing support using a Windows command line prompt.

For Hyper-V guests, raw (pass-through) disks don't appear in the guest OS if you choose multipathing support. You can use either raw disks or MPIO, but you can't use both in the guest OS.



If you don't install the MPIO software, the Windows OS might see each path as a separate disk. This can lead to data corruption.



Windows XP or Windows Vista running in a Hyper-V virtual machine doesn't support MPIO.

Steps

You can install the Host Utilities interactively or by using the Windows command line. The new Host Utilities installation package must be in a path that is accessible to the Windows host.

Install interactively

Install the Host Utilities software package interactively by running the Host Utilities installation program and following the prompts.

1. Download the executable file from the [NetApp Support Site](#).
2. Change to the directory where you downloaded the executable file.
3. Run the `netapp_windows_host_utilities_7.2_x64` file and follow the instructions on the screen.
4. Reboot the Windows host when prompted.

Install noninteractively

Perform a noninteractive installation of the Host Utilities by using the Windows command line. The system automatically reboots when the installation is complete.

1. Enter the following command at the Windows command prompt:

```
msiexec /i installer.msi /quiet MULTIPATHING= {0 | 1}  
[INSTALLDIR=inst_path]
```

- `installer` is the name of the `.msi` file for your CPU architecture.
- `MULTIPATHING` specifies whether MPIO support is installed. The allowed values are "0" for no and "1" for yes.
- `inst_path` is the path where the Host Utilities files are installed. The default path is `C:\Program Files\NetApp\Windows Host Utilities\`.

To see the standard Microsoft Installer (MSI) options for logging and other functions, enter `msiexec /help` at the Windows command prompt. For example, the `msiexec /i install.msi /quiet /l*v <install.log> LOGVERBOSE=1` command displays logging information.

What's next?

[Learn about the Windows Host Utilities configuration for ONTAP storage](#)

Install Windows Host Utilities 7.1 for ONTAP storage

The Windows Host Utilities enable you to connect a Windows host computer to NetApp storage systems.

Windows Host Utilities supports the following versions of Windows:

- Windows 2022
- Windows 2019
- Windows 2016
- Windows 2012R2
- Windows 2012

Windows Host Utilities includes an installation program that sets the required Windows registry and Host Bus Adapter (HBA) parameters so that a Windows host can correctly handle the storage system behaviors for ONTAP and E-Series platforms.

When you install the Host Utilities software, the installer sets the required Windows registry and HBA parameters.

The following programs and files are installed on the Windows host computer. The default directory is C:\Program Files\NetApp\Windows Host Utilities.

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\NetAppQCLI*.*	Used by the installation program to set QLogic FC HBA parameters.
san_version.exe	Displays the version of the Host Utilities and FC HBAs.

The Host Utilities support different Windows host configurations, protocols, and multipathing options. See the [Interoperability Matrix Tool](#) for the current list of supported configurations.

Step 1: Verify your host and storage system configurations

Verify that your host and storage system configuration are supported before you install Windows Host Utilities for the [supported Windows version](#).

Steps

1. Check the supported configuration in the [Interoperability Matrix Tool](#).
2. Check the hotfixes required for your Windows Server host version in the [SAN host Windows documentation](#).

For example, the [Configure Windows Server 2022 for ONTAP storage](#) documentation provides the instructions for installing Windows hotfixes for Windows server 2022.

3. [Add the iSCSI or FCP license](#).



The FC and iSCSI protocols don't require licenses on E-Series storage systems using the SANtricity Storage Manager.

4. Start the target service.
5. Verify your cabling.

Refer to the [SAN configuration reference](#) for detailed cabling and configuration information.

Step 2: Configure FC HBAs and switches

Install and configure one or more supported FC host bus adapters (HBAs) for FC connections to the storage system.

The Windows Host Utilities installer sets the required FC HBA settings.



You should only allow the Windows Host Utilities installer to set the HBA parameters. This ensures that the Windows host can correctly handle the storage system behaviors for ONTAP platforms.

Steps

1. Install one or more supported FC HBAs according to the instructions provided by the HBA vendor.
2. Obtain the supported HBA drivers and management utilities and install them according to the instructions provided by the HBA vendor.
3. [Connect the HBAs to your FC switches or directly to the storage system.](#)
4. [Create zones on the FC switch according to your FC switch documentation.](#)
5. For ONTAP, zone the switch by the WWPN. Be sure to use the WWPN of the logical interfaces (LIFs) and not the WWPN of the physical ports on the storage controllers. Refer to the [SAN configuration reference](#) for more information.

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Steps

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Install interactively

Install the Host Utilities software package interactively by running the Host Utilities installation program and following the prompts.

1. Download the executable file from the [NetApp Support Site](#).
2. Change to the directory from which you downloaded the executable file.
3. Run the `netapp_windows_host_utilities_7.1_x64` file and follow the instructions on the screen.
4. Reboot the Windows host when prompted.

Install noninteractively

Perform a noninteractive installation of the Host Utilities by using the Windows command line. The system automatically reboots when the installation is complete.

1. Enter the following command at a Windows command prompt:

```
msiexec /i installer.msi /quiet MULTIPATHING= {0 | 1}  
[INSTALLDIR=inst_path]
```

- `installer` is the name of the `.msi` file for your CPU architecture
- `MULTIPATHING` specifies whether MPIO support is installed. Allowed values are "0" for no, "1" for yes
- `inst_path` is the path where the Host Utilities files are installed. The default path is `C:\Program Files\NetApp\Windows Host Utilities\`.



To see the standard Microsoft Installer (MSI) options for logging and other functions, enter `msiexec /help` at a Windows command prompt. For example, the ``msiexec /i install.msi /quiet /l*v <install.log> LOGVERBOSE=1`` command displays logging information.

What's next?

[Learn about the Windows Host Utilities configuration for ONTAP storage](#)

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