

Veritas Storage Foundation™ Manager Installation Guide

for Storage Foundation—AIX, HP-UX,
Linux, Solaris, Windows

2.0



Storage Foundation Manager Installation Guide

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Planning your SF Manager installation

This chapter includes the following topics:

- [About Storage Foundation Manager](#)
- [Downloading Storage Foundation Manager packages](#)
- [Using the product documentation](#)
- [Host considerations for installing SF Manager](#)
- [Typical SF Manager deployment configurations](#)
- [SF Manager installation overview](#)
- [Choosing a Management Server host](#)
- [Choosing managed hosts](#)

About Storage Foundation Manager

Storage Foundation Manager by Symantec (SF Manager) gives you a single, centralized management console for the Veritas Storage Foundation (SF) products. You can use it to monitor, visualize, and manage storage resources and generate reports about them. SF Manager lets administrators centrally manage diverse datacenter environments.

A typical SF Manager deployment consists of the following:

- A Management Server
See [“Management Server”](#) on page 10.
- Managed hosts

See “[Managed host](#)” on page 10.

- Standalone hosts

See “[Standalone \(unmanaged\) host](#)” on page 11.

Management Server

In a centrally managed deployment, you must configure one host as Management Server. Management Server receives information about all the resources in its domain. When you log on to Management Server, you can gain access to the resources on different hosts within the centrally-managed deployment.

When you install Management Server, the Web Server component is installed automatically.

Managed host

A managed host runs at least one Storage Foundation product and belongs to a central management domain controlled by Management Server.

Managed hosts include the following:

- Storage Foundation 5.0 managed host on UNIX
- Storage Foundation 5.x for Windows managed host
- Storage Foundation 4.x managed host on UNIX
- Storage Foundation 4.x for Windows managed host
- Storage Foundation 3.5 managed host on HP-UX

Typically, a managed host is a production server (database File Server) on which you install and run Storage Foundation product components. A typical site can have thousands of hosts using some or all of the Storage Foundation products. In SF Manager, Management Server is also configured as a managed host. You can manage Management Server itself as part of a central management domain.

In a centrally managed deployment, managed hosts relay information about storage network resources and applications to Management Server. Management Server coalesces the data it receives from the managed hosts within its database. Using this coalesced data, the Storage Foundation Manager Console can present centralized views and reports.

You can use the Web Server on Management Server to access the managed hosts in the centrally managed deployment. You log on to the Management Server URL and Web Server port 14161 (for example, <https://myhost.example.com:14161>).

Standalone (unmanaged) host

A standalone (unmanaged) host is a Storage Foundation host that has been configured so it does not belong to a central management domain.

To manage individual 5.0 or 4.x hosts, you can install and use the Java-based Veritas Enterprise Administrator. This console lets you manage hosts using the Storage Foundation products installed on them.

If you want a standalone host to participate in the central management domain, you must update it by installing the SF Manager package.

Note: You can convert any standalone host to a managed host. However, because Management Server is also a managed host, you cannot configure it to be a standalone host.

Downloading Storage Foundation Manager packages

SF Manager is a free license add-on to Veritas Storage Foundation. You can download SF Manager packages from the following URL:

<http://www.symantec.com/sfm>

Using the product documentation

The following guides provide information about Storage Foundation Manager:

- *Veritas Storage Foundation Manager Administrator's Guide*
- *Veritas Storage Foundation Manager Getting Started Guide*
- *Veritas Storage Foundation Manager Installation Guide*

For complete host operating system and system resource specifications, as well as any known limitations or issues in this release, see the *Veritas Storage Foundation Manager Release Notes*.

Host considerations for installing SF Manager

Host considerations for installing and configuring SF Manager include the following:

- Before you begin the SF Manager installation, ensure that you have the following information:
 - Administrator accounts and passwords for all target hosts

- A diagram of your storage network (suggested for your reference)
- The managed hosts within a central management domain must report synchronized universal time clock time (UC/UTC).
- You must have at least one valid support contract for Storage Foundation to gain support for SF Manager.

Typical SF Manager deployment configurations

You have several options for deploying SF Manager.

If you implement centralized management, a typical full installation of SF Manager consists of a single Management Server, multiple managed hosts, and any number of Web Consoles. We recommend this form of management because of the advantages you gain from being able to perform management operations on multiple hosts across the datacenter.

If you implement traditional, single-host management, you have the following options:

- Install a "thick" client, the Java-based VEA Console.
- Install a light-weight Web Server that relies on a standard Web browser client.

Only the Java Console supports single-host management of both 5.0 and 4.x hosts. Only 5.0 hosts support the light-weight Web Server.

Typical deployment scenarios include the following:

- Centralized management of Storage Foundation 5.0 and 4.x hosts
See [“Centralized management of Storage Foundation 5.0 and 4.x hosts”](#) on page 12.
- Centralized management of Storage Foundation 5.0 hosts only
See [“Centralized management of only Storage Foundation 5.0 hosts”](#) on page 13.
- Standalone management of Storage Foundation 5.0 and 4.x hosts
See [“Standalone management of Storage Foundation 5.0 and 4.x hosts”](#) on page 13.

Centralized management of Storage Foundation 5.0 and 4.x hosts

In this deployment scenario, you centrally manage your Storage Foundation 5.0 and your legacy (4.x) hosts. We recommend this deployment because centralized management offers you the flexibility of performing operations on multiple Storage Foundation hosts.

Advantages also include the following:

- Aggregated information for reporting
- Performance management across the datacenter
- Monitoring storage utilization across the datacenter

Centralized management of only Storage Foundation 5.0 hosts

In this deployment scenario, you centrally manage only your Storage Foundation 5.0 products. You manage your 4.x hosts individually using the Java-based Veritas Enterprise Administrator (VEA) console. Programmatically-aggregated information from multiple hosts is available from 5.0 managed hosts only.

Standalone management of Storage Foundation 5.0 and 4.x hosts

In this deployment scenario, you use the Java-based Veritas Enterprise Administrator console to perform traditional, single-host management for Storage Foundation 5.0 and any 4.x hosts. Unlike centralized management options, connections to multiple hosts are not concurrent and are independent of each other. In this scenario, you cannot easily aggregate information from multiple hosts across the datacenter .

SF Manager installation overview

Installing the Storage Foundation Manager involves the following:

- Reviewing the SF Manager architecture and typical deployment configurations
- Verifying that you have met system requirements
- Installing and configuring the SF Manager Management Server
- Installing SF Manager host management on the hosts that will be centrally managed

Choosing a Management Server host

Management Server is the central point for collecting and managing the information that Storage Foundation managed hosts relay back to it. When you install Management Server, the Web and Database servers are also installed on the host. The Web server supplies the views and reports that SF Manager Console users see. The Database server manages the SF Manager Database.

To identify a host that is appropriate for the Management Server, use the following criteria:

- The host should meet or exceed recommended system requirements. See the *Veritas Storage Foundation Manager Release Notes*.
- The host should provide data security and space for a growing database as Management Server discovers new managed hosts and monitors network events. Ideally, the host should have RAID-protected storage and the capacity to grow its file systems.
- Clients that connect to Management Server using the SF Manager Console (web browser) must be able to access the host.

Choosing managed hosts

A managed host is configured to belong to a centrally-managed deployment. The managed host has an SF Manager agent that collects component-pertinent status information from network resources, such as hardware and applications, and relays that information to the management host. Typically, a managed host is a production server (such as a database or a file server) in which different components of Storage Foundation products are installed and running.

The varieties of managed hosts are the following:

- SF 5.0 for UNIX
- SF 5.x for Windows
- SF 4.x for UNIX
- SF 4.x for Windows
- SF 3.5 for HP-UX

Before you install a managed host, make sure it meets or exceeds the recommended system requirements.

See the *Veritas Storage Foundation Manager Release Notes*.

Installing and uninstalling SF Manager

This chapter includes the following topics:

- [Packages included in SF Manager](#)
- [Installing SF Manager Management Server](#)
- [Verifying SF Manager Management Server installations](#)
- [Configuring SF Manager](#)
- [Setting up Internet Explorer 7.0 and Firefox 3.0 for SF Manager](#)
- [Installing SF Manager host management](#)
- [Installing SF Manager host management through jumpstart](#)
- [Verifying SF Manager host management installations](#)
- [Installing Storage Foundation Manager Add-ons](#)
- [Uninstalling SF Manager Management Server](#)
- [Uninstalling SF Manager host management](#)

Packages included in SF Manager

[Table 2-1](#) lists the software packages that are included in SF Manager.

Table 2-1 Software packages

Package name	Description
VRTSsfmcs	SF Manager package that is required on Management Server
VRTSsfmh	SF Manager package that is required on the managed host

Installing SF Manager Management Server

You can install Management Server on any one of the following hosts:

- A Linux host
- A Solaris host
- A Windows host

After you install Management Server, you have to configure SF Manager before you can use it.

See [“Installing Management Server on UNIX”](#) on page 16.

See [“Installing Management Server on Windows”](#) on page 17.

Installing Management Server on UNIX

You can install the SF Manager Management Server on a Linux host or a Solaris host using a `.bin` file. The `.bin` file installs the `VRTSsfmcs` and the `VRTSsfmh` packages on the target host.

Note: On a Solaris host, you can install Management Server in a non-global zone.

To install SF Manager Management Server on UNIX

- 1 Make sure that the host where you plan to install Management Server meets or exceeds system and operating system requirements.

See [“Choosing a Management Server host”](#) on page 13.

- 2 Download one of the following `.bin` files:

- `Veritas_Storage_Foundation_Manager_CMS_2.0_Linux.bin`: To install Management Server on a Linux host
- `Veritas_Storage_Foundation_Manager_CMS_2.0_SolSparc.bin`: To install Management Server on a Solaris host

See [“Downloading Storage Foundation Manager packages”](#) on page 11.

- 3 Open an operating system console.
- 4 On the host where you plan to install Management Server, log on as root.
- 5 Change directory to where you downloaded the `.bin` file.
- 6 At the command prompt, enter one of the following:

- On a Linux host:

```
./Veritas_Storage_Foundation_Manager_CMS_2.0_Linux.bin
```

- On a Solaris host:

```
./Veritas_Storage_Foundation_Manager_CMS_2.0_SolSparc.bin
```

If you see the error `Permission Denied`, change the permissions for the `.bin` file so that it can be run. Enter one of the following:

- On a Linux host: `chmod +x`

```
Veritas_Storage_Foundation_Manager_CMS_2.0_Linux.bin
```

- On a Solaris host: `chmod +x`

```
Veritas_Storage_Foundation_Manager_CMS_2.0_SolSparc.bin
```

The installation is complete when you see messages similar to the following:

```
Installation is complete. You will need to configure Storage  
Foundation Manager.
```

```
Please open your browser and type the following URL to configure:
```

```
https://myhost.example.com:5634/
```

- 7 Verify that the packages are installed and the processes are started.
See [“Verifying Management Server installation on UNIX”](#) on page 18.
- 8 Configure SF Manager.
See [“Configuring SF Manager”](#) on page 19.

Installing Management Server on Windows

You can install the SF Manager Management Server on a Windows host using the `Veritas_Storage_Foundation_Manager_CMS_2.0_Windows.exe` file.

To install SF Manager Management Server on Windows

- 1 Make sure that the host where you plan to install Management Server meets or exceeds system and operating system requirements.
See [“Choosing a Management Server host”](#) on page 13.
- 2 On the host where you plan to install Management Server, log on as a user with administrator privileges.

- 3 Download the `Veritas_Storage_Foundation_Manager_CMS_2.0_Windows.exe` file.
See [“Downloading Storage Foundation Manager packages”](#) on page 11.
- 4 To launch the installer, run the `Veritas_Storage_Foundation_Manager_CMS_2.0_Windows.exe` file.
- 5 To install Management Server, click **Install**.
- 6 After the installation is complete, click **Finish** to close the installer.
- 7 Verify that Management Server is installed and the required service is started.
See [“Verifying Management Server installation on Windows”](#) on page 19.
- 8 Configure SF Manager.
See [“Configuring SF Manager”](#) on page 19.

Verifying SF Manager Management Server installations

After you install SF Manager Management Server on a host, you can verify that the installation was successful.

See [“Verifying Management Server installation on UNIX”](#) on page 18.

See [“Verifying Management Server installation on Windows”](#) on page 19.

Verifying Management Server installation on UNIX

You can verify the Management Server installation by making sure that the packages are installed and the required processes are started.

To verify Management Server installation on UNIX

- 1 On the host where you installed Management Server, check whether the `VRTSsfmcs` package is installed. Enter one of the following:
 - On a Linux host: `rpm -q VRTSsfmcs`
 - On a Solaris host: `pkginfo -l VRTSsfmcs`
- 2 Check whether the `VRTSsfmh` package is installed. Enter one of the following:
 - On a Linux host: `rpm -q VRTSsfmh`
 - On a Solaris host: `pkginfo -l VRTSsfmh`

- 3 Check whether the `xprtld` process is started. Enter the following:

```
ps -ef | grep xprtld
```

- 4 Check whether the `vxdclid` process is started. Enter the following:

```
ps -ef | grep vxdclid
```

Verifying Management Server installation on Windows

You can verify the Management Server installation by making sure that the **Veritas Storage Foundation Manager for Windows** program is installed, and the Veritas Storage Foundation Messaging Service is started.

To verify Management Server installation on Windows

- 1 On the host where you installed host management, on the Windows Control Panel, click **Add or Remove Programs**.
- 2 Check whether **Veritas Storage Foundation Manager for Windows** appears in the list of installed programs.
- 3 On the Windows Services panel, check whether the **Veritas Storage Foundation Messaging Service** has started.

Configuring SF Manager

When Management Server is successfully installed, messages similar to the following are displayed:

```
Installation is complete. You will need to configure Storage  
Foundation Manager.
```

```
Please open your browser and type the following URL to configure:
```

```
https://myhost.example.com:5634/
```

Use the URL displayed in the message to configure SF Manager.

Note: For Internet Explorer 7.0 on Windows Server 2008, or Firefox 3.0, if the Web page does not get displayed, you have to set up the browser. See [“Setting up Internet Explorer 7.0 and Firefox 3.0 for SF Manager”](#) on page 21.

During the configuration, you are prompted to specify a location to store the SF Manager database. You can accept the default location or specify your own.

Note: On UNIX, the default database location is `/var/opt/VRTSsfmcs/db`. On Windows, the default location is `C:\Documents and Settings\All Users\Application Data\Symantec\VRTSsfmcs\db`.

To configure SF Manager

- 1 On a host that has a network connection to the Management Server host, open a Web browser.
- 2 In the browser's address field, type the following URL and press **Enter**:
`https://hostname:5634/`
where *hostname* is the Management Server's host name, fully-qualified host name, or IP address.
Example: **`https://myhost.example.com:5634/`**
- 3 In the **Authentication Required** dialog, enter Management Server host's root user name and password.
- 4 In the **Server Setting** page, check and modify the **Server Name**, if required.
- 5 Check and modify the **Server Address**, if required.
- 6 Enter the **Initial Domain Password** that is to be used to configure SF Manager database security.
- 7 In the **Password confirm** field, re-enter the password and click **Next**.
- 8 In the **Database Setting** page, check the default **Database location** and modify it, if required.

The default database directory is `/var/opt/VRTSsfmcs/db` on UNIX, and `C:\Documents and Settings\All Users\Application Data\Symantec\VRTSsfmcs\db` on Windows.

Note: While setting up SF Manager for high availability, the database directory should not be the same as, or a subdirectory of, the shared mount file system. Else, failover does not succeed.

- 9 Click **Next**.
- 10 In the **Analytics Setting** page, select **Enable Analytics Gathering** to allow Symantec to gather data on your SF Manager usage.
- 11 Do one of the following:
 - To change settings, click **Back**,

- To start the configuration, click **Finish**.

At the end of the SF Manager configuration, messages similar to the following are displayed:

```
Configuration successful
```

```
Click the Launch Web Console button to login.
```

- 12 Click **Launch Web Console** to log on to SF Manager on the configured Management Server host.

Note: For Internet Explorer 7.0 on Windows Server 2008, or Firefox 3.0, if the Web page does not get displayed, you have to set up the browser. See [“Setting up Internet Explorer 7.0 and Firefox 3.0 for SF Manager”](#) on page 21.

Setting up Internet Explorer 7.0 and Firefox 3.0 for SF Manager

If you use Internet Explorer 7.0 on Windows Server 2008, or Firefox 3.0, the web pages for configuring and launching SF Manager are not displayed. You need to set up the browser to display the web pages. For Internet Explorer 7.0 on Windows Server 2008, if the Web pages are not displayed, add each Web site to the **Trusted Sites** list. On Firefox 3.0, if a security exception is displayed, add the exception to the browser to override how Firefox identifies the sites.

To set up Internet Explorer 7.0 on Windows Server 2008 for SF Manager

- 1 In Internet Explorer, select **Tools > Internet Options**.
- 2 Select the **Security** tab.
- 3 Click **Sites** to add the following Web sites:
 - **https://hostname:5634/**—URL to configure SF Manager
 - **https://hostname:14161/sfm**—URL to launch SF Managerwhere, *hostname* is the name of the Management Server host.

The Web pages are now displayed.

To set up Firefox 3 for SF Manager

- 1 On the security exception page that is displayed when you attempt to open an SF Manager Web page, click the **Or you can add an exception** link.
- 2 Click **Add Exception**.

- 3 In the **Add Security Exception** dialog, verify that the location is one of the following:
 - **https://hostname:5634/**—URL to configure SF Manager
 - **https://hostname:14161/sfm**—URL to launch SF Managerwhere, *hostname* is the name of the Management Server host.
- 4 Click **Get Certificate**.
- 5 Select the **Permanently store this exception** check box.
- 6 Click **Confirm Security Exception**.
The Web page is now displayed.

Installing SF Manager host management

Three varieties of managed hosts are supported: a Storage Foundation 5.x managed host, a Storage Foundation 4.x managed host, or a Storage Foundation 3.5 managed host on HP-UX.

You must install the `VRTSsfmh` package on the host so you can manage it using SF Manager Management Server.

See the *Veritas Storage Foundation Manager Administrator's Guide* for more information on adding hosts to a Management Server domain.

See [“Installing host management on UNIX”](#) on page 22.

See [“Installing host management on Windows”](#) on page 23.

Installing host management on UNIX

You can install SF Manager host management on a UNIX host by installing the `VRTSsfmh` package on it.

Note: By default, the `VRTSsfmh` package is installed in the `/opt` directory. You cannot specify a different location to install the package.

To install SF Manager host management on a UNIX host

- 1 Make sure that the host where you plan to install host management meets or exceeds system and operating system requirements.
See [“Choosing managed hosts”](#) on page 14.
- 2 Download the `VRTSsfmh` package.
See [“Downloading Storage Foundation Manager packages”](#) on page 11.
- 3 Open an operating system console.
- 4 On the host where you plan to install host management, log on as root.
- 5 Change directory to where you downloaded the `VRTSsfmh` package.
- 6 If the host is an HP-UX host, uncompress the downloaded file.
- 7 At the command prompt, enter one of the following commands to install the package:
 - For AIX, enter the following:

```
installp -ac -d Veritas_Storage_Foundation_Manager_2.0_AIX.bff VRTSsfmh
```
 - For HP-UX, enter the following:

```
swinstall -s $PWD VRTSsfmh
```
 - For Linux, enter the following:

```
rpm -ivh Veritas_Storage_Foundation_Manager_2.0_Linux.rpm
```
 - For Solaris on SPARC, enter the following:

```
pkgadd -d Veritas_Storage_Foundation_Manager_2.0_SolSparc.pkg
```
 - For Solaris on x86, enter the following:

```
pkgadd -d Veritas_Storage_Foundation_Manager_2.0_Solx86.pkg
```
- 8 Verify that the `VRTSsfmh` package is installed and the required processes have started.
See [“Verifying host management installation on UNIX”](#) on page 25.

Installing host management on Windows

You can install SF Manager host management on a Windows host by running the `Veritas_Storage_Foundation_Manager_2.0_Win32.msi` package or the `Veritas_Storage_Foundation_Manager_2.0_Win64.msi` package on it.

To install SF Manager host management on a Windows host

- 1 Log on to the target host as a user with administrator privileges.
- 2 Download the `Veritas_Storage_Foundation_Manager_2.0_Win32.msi` package or the `Veritas_Storage_Foundation_Manager_2.0_Win64.msi` package.

See [“Downloading Storage Foundation Manager packages”](#) on page 11.

- 3 Run one of the following:

- On a 32-bit host, run

```
Veritas_Storage_Foundation_Manager_2.0_Win32.msi
```

- On a 64-bit host, run

```
Veritas_Storage_Foundation_Manager_2.0_Win64.msi
```

Note: To install host management on a Windows host on IA64, use the `Veritas_Storage_Foundation_Manager_2.0_Win32.msi` package.

- 4 On the Welcome screen of the InstallShield Wizard, click **Next**.
- 5 On the Ready to Install the Program screen, click **Install** to start the installation.
- 6 Click **Finish** to exit the InstallShield Wizard.
- 7 Verify that the host management program is installed and the required service has started.

See [“Verifying host management installation on Windows”](#) on page 26.

Installing SF Manager host management through jumpstart

You can install host management and add a managed host to the domain through jumpstart installation without any user interaction. You can use the `gendeploy.pl` script to create a script that adds the host to the Management Server domain. The script that is generated by `gendeploy.pl` can be included in the finalized stages of the jumpstart installation process.

The following are the highlights of installing SF Manager host management as a part of the jumpstart installation:

- Use the `gendeploy.pl` script to create a script that adds the host to the Management Server domain.

- In the finalized stages of the jumpstart installation, run the script that is created through `gendeploy.pl`.

To create the script to be used for adding the hosts in jumpstart installation

- 1 Log on as root on Management Server.
- 2 Run `gendeploy.pl` to create the script file:

```
/opt/VRTSsfmh/bin/gendeploy.pl --out scriptfilename
```

Verifying SF Manager host management installations

After you install host management on a host, you can verify that the installation was successful.

See [“Verifying host management installation on UNIX”](#) on page 25.

See [“Verifying host management installation on Windows”](#) on page 26.

Verifying host management installation on UNIX

You can verify host management installation on UNIX by making sure that the `VRTSsfmh` package is installed, and the required processes are started.

To verify host management installation on UNIX

- 1 On the host where you installed host management, enter one of the following at the command prompt to verify that the package is installed:
 - On AIX, enter the following:

```
lslpp -l VRTSsfmh
```
 - On HP-UX, enter the following:

```
swlist VRTSsfmh
```
 - On Linux, enter the following:

```
rpm -q VRTSsfmh
```
 - On Solaris, enter the following:

```
pkginfo -l VRTSsfmh
```
- 2 Check whether the `xprtld` process is started. Enter the following:

```
#ps -ef | grep xprtld
```
- 3 Check whether the `vxdcld` process is started. Enter the following:

```
#ps -ef | grep vxdcld
```

Verifying host management installation on Windows

You can verify host management installation on Windows by making sure that the Veritas Storage Foundation Manager for Windows program is installed, and the SF Messaging Service is started.

To verify host management installation on Windows

- 1 On the host where you installed host management, on the Windows Control Panel, click **Add or Remove Programs**.
- 2 Check whether **Veritas Storage Foundation Manager for Windows (Host Component)** appears in the list of installed programs.
- 3 On the Windows Services panel, check whether the **SF Messaging Service** has started.

Installing Storage Foundation Manager Add-ons

Storage Foundation Manager Add-ons are independent optional feature packs that you can deploy on managed hosts. Add-ons are independent of each other, and they can be installed or uninstalled based on your business requirements.

Add-ons are installed on Management Server and are deployed from there on the managed hosts. Some add-ons are installed on Management Server during Management Server installation. You can also download the latest available add-ons to Management Server from the following URL:

http://www.symantec.com/sfm_addons

For more information on deploying add-ons, see the *Veritas Storage Foundation Manager Administrator's Guide*.

Uninstalling SF Manager Management Server

You can remove the installed packages on UNIX, or the installed program on Windows, to uninstall Management Server from a host.

See “[Uninstalling Management Server on UNIX](#)” on page 26.

See “[Uninstalling Management Server on Windows](#)” on page 27.

Uninstalling Management Server on UNIX

You can uninstall SF Manager Management Server by removing the `VRTSsfmcs` and `VRTSsfmh` packages from the Management Server host.

Note: You must remove the `VRTSsfmcs` package before you remove the `VRTSsfmh` package.

To uninstall SF Manager Management Server on UNIX

- 1 Open an operating system console.
- 2 On the Management Server host, log on as root.
- 3 Remove the `VRTSsfmcs` package. Enter one of the following:
 - On a Linux host: `rpm -e VRTSsfmcs`
 - On a Solaris host: `pkgrm VRTSsfmcs`
- 4 Remove the `VRTSsfmh` package. Enter one of the following:
 - On a Linux host: `rpm -e VRTSsfmh`
 - On a Solaris host: `pkgrm VRTSsfmh`

Uninstalling Management Server on Windows

You can uninstall SF Manager Management Server from a Windows host.

To uninstall SF Manager Management Server on Windows

- 1 Log on to the target host as a user with administrator privileges.
- 2 On the Windows Control Panel, click **Add or Remove Programs**.
- 3 From the list of installed programs, select **Veritas Storage Foundation Manager for Windows**.
- 4 Click **Remove**.
- 5 In the dialog box, do one of the following:
 - To confirm that you want to uninstall Management Server, click **Yes**.
 - To exit without uninstalling Management Server, click **No** and skip step 6.
- 6 On the message window that indicates that the uninstall was successful, click **OK**.

Uninstalling SF Manager host management

You can uninstall SF Manager host management by removing the `VRTSsfmh` package from the managed host.

See [“Uninstalling host management on UNIX”](#) on page 28.

See “[Uninstalling host management on Windows](#)” on page 28.

Uninstalling host management on UNIX

You can use an operating system command to remove the `VRTSsfmh` package from a UNIX managed host. When you remove the package, SF Manager host management is uninstalled from the managed host.

To uninstall SF Manager host management on UNIX

- 1 Open an operating system console.
- 2 On the managed host where you plan to uninstall host management, log on as root.
- 3 At the command prompt, enter one of the following commands to uninstall the package:
 - On AIX, enter the following:
`installp -u VRTSsfmh`
 - On HP-UX, enter the following:
`swremove VRTSsfmh`
 - On Linux, enter the following:
`rpm -e VRTSsfmh`
 - On Solaris, enter the following:
`pkgrm VRTSsfmh`

Uninstalling host management on Windows

You can uninstall SF Manager host management on a Windows managed host.

To uninstall SF Manager host management on Windows

- 1 Log on to the target host as a user with administrator privileges.
- 2 On the Windows Control Panel, click **Add or Remove Programs**.
- 3 From the list of installed programs, select **Veritas Storage Foundation Manager for Windows (Host Component)**.
- 4 Click **Remove**.
- 5 In the dialog box, do one of the following:
 - To confirm that you want to uninstall host management, click **Yes**.
 - To exit without uninstalling host management, click **No**.

Migrating Storage Foundation Manager 1.1.1 to 2.0 on UNIX

This chapter includes the following topics:

- [About migrating to Storage Foundation Manager 2.0 on UNIX](#)
- [Removing managed hosts from the 1.1.1 Management Server domain](#)
- [Migrating application groups data from Storage Foundation Manager 1.1.1 to 2.0 on UNIX](#)

About migrating to Storage Foundation Manager 2.0 on UNIX

If you have an existing Storage Foundation Manager (SF Manager) 1.1.1 UNIX-based environment, you can migrate the 1.1.1 managed hosts and application group data to SF Manager 2.0 on UNIX. You can install the SF Manager 2.0 managed host package (`VRTSsfmh`) on a 1.1.1 managed host, and then add it to the 2.0 Management Server domain. You can then run a script to remove the managed host from the 1.1.1 Management Server domain. You can also use a script to migrate the application groups data that exists in SF Manager 1.1.1, to SF Manager 2.0.

Note: You can migrate only from a 1.1.1 Management Server managing UNIX-based managed hosts, to a 2.0 Management Server on UNIX.

Removing managed hosts from the 1.1.1 Management Server domain

After you install the SF Manager 2.0 managed host package (`VRTSsfmh`) on a 1.1.1 managed host and add it to the 2.0 Management Server domain on UNIX, you can remove it from the 1.1.1 Management Server domain. You can run the `tostandalone.pl` script using `xdistc` to remove the UNIX and Windows managed hosts.

Note: You cannot use the `xdistc` command from the Windows-based Management Server to remove the 1.1.1 managed hosts from the 1.1.1 Management Server domain.

See `xdistc(1m)`.

To remove managed hosts from the 1.1.1 Management Server domain

- 1 Log on as root on 2.0 Management Server on UNIX.
- 2 To remove the managed hosts, use `xdistc` to run the `/opt/VRTSsfmh/bin/tostandalone.pl` script on the managed hosts. Do one of the following:
 - To remove a single managed host, run the following command:

```
/opt/VRTSsfmh/bin/xdistc --when now --host hostname --run  
tostandalone.pl
```

where, *hostname* is the name of the managed host.
 - To remove multiple managed hosts, run the following command:

```
/opt/VRTSsfmh/bin/xdistc --when now --hostfile hostfilename  
--run tostandalone.pl
```

where, *hostfilename* is a whitespace delimited file that contains the names of the managed hosts.

Migrating application groups data from Storage Foundation Manager 1.1.1 to 2.0 on UNIX

If you have an existing Storage Foundation Manager (SF Manager) 1.1.1 Management Server managing UNIX-based managed hosts, you can migrate the application groups data to the SF Manager 2.0 Management Server that you have installed on a UNIX host. You can migrate the data when the 2.0 Management Server is installed on the same host, or on a different host.

Note: After migration, the private application groups become public and are owned by the root user.

Before you migrate the application groups data, you must meet the following prerequisites:

- The SF Manager 2.0 managed host package (`VRTSsfmh`) must be installed on all the existing 1.1.1 managed hosts that report to the 1.1.1 Management Server.
- The managed hosts must be added to the 2.0 Management Server domain. For more information on adding hosts to a Management Server domain, see the *Veritas Storage Foundation Manager Administrator's Guide*.

To migrate application groups data from a SF Manager 1.1.1 host to another SF Manager 2.0 host

- 1 Log on to the SF Manager 2.0 host as root.
- 2 Copy the `/opt/VRTSsfmcs/config/sql/base_tables_unload.sql` file from the SF Manager 2.0 host, to the `/tmp` directory on the SF Manager 1.1.1 host.

```
scp /opt/VRTSsfmcs/config/sql/base_tables_unload.sql
111_hostname:/tmp/
```

where, `111_hostname` is the name of the SF Manager 1.1.1 host.

- 3 Log on to the SF Manager 1.1.1 host as root.
- 4 On the SF Manager 1.1.1 host, create the `/var/opt/VRTSsfmcs/data_migration` directory.
- 5 On the SF Manager 1.1.1 host, run the `base_tables_unload.sql` file to copy the application groups data.

```
/opt/VRTScs/bin/db_adm --database ccsfdb --user DBA --file
/tmp/base_tables_unload.sql
```

- 6** Copy the contents of the `/var/opt/VRTSsfmcs/data_migration` directory from the SF Manager 1.1.1 host, to the SF Manager 2.0 host.

```
scp /var/opt/VRTSsfmcs/data_migration/*  
20_hostname:/var/opt/VRTSsfmcs/data_migration/
```

where, `20_hostname` is the name of the SF Manager 2.0 host.

- 7** On the SF Manager 2.0 host, run the `data_migration.pl` script to migrate the data copied from the SF Manager 1.1.1 host.

```
opt/VRTSsfmh/bin/xprtlc -u  
vxss://ManagementServer:14545/sfm_admin/sfm_domain/vx -l  
https://ManagementServer:5634/admin/cgi-bin/data_migration.pl
```

To migrate application groups data from a SF Manager 1.1.1 to SF Manager 2.0 on the same host

- 1** Log on to the SF Manager host as root.
- 2** Run the `data_migration.pl` script to migrate the application groups data from SF Manager 1.1.1 to SF Manager 2.0.

```
opt/VRTSsfmh/bin/xprtlc -u  
vxss://ManagementServer:14545/sfm_admin/sfm_domain/vx -l  
https://ManagementServer:5634/admin/cgi-bin/data_migration.pl -d  
unload=1
```

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