

SharePlex Manager 3.1

Install Guide



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Preface

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About This Guide

This guide describes how to install SharePlex Manager.

Additional Information

In addition to this guide, there are a number of options available for quickly finding the information you need.

Online Help

There are several ways to access online help topics.

To...	Do This...
Display the table of contents for help topics	You can open online help by selecting the Help tab in the action panel. Then select the Contents tab in the Help window.
Search for a specific help topic	Select the Search tab in an open Help window.
Display the index for help topics	Select Help Index . If required, in the Help window, select the Index tab.
Display help for a specific window or dialog	In the window or dialog, do one of the following: <ul style="list-style-type: none">• Click Help• Press F1 Note Not all windows and dialogs are linked to specific help topics.

Release Notes

To access the release notes, please visit the SharePlex product support page at: <https://support.quest.com/shareplex-manager>.

About Us

We are more than just a name

We are on a quest to make your information technology work harder for you. That is why we build community-driven software solutions that help you spend less time on IT administration and more time on business innovation. We help you modernize your data center, get you to the cloud quicker and provide the expertise, security and accessibility you need to grow your data-driven business. Combined with Quest's invitation to the global community to be a part of its innovation, and our firm commitment to ensuring customer satisfaction, we continue to deliver solutions that have a real impact on our customers today and leave a legacy we are proud of. We are challenging the status quo by transforming into a new software company. And as your partner, we work tirelessly to make sure your information technology is designed for you and by you. This is our mission, and we are in this together. Welcome to a new Quest. You are invited to Join the Innovation.

Our brand, our vision. Together.

Our logo reflects our story: innovation, community and support. An important part of this story begins with the letter Q. It is a perfect circle, representing our commitment to technological precision and strength. The space in the Q itself symbolizes our need to add the missing piece—you—to the community, to the new Quest.

Contact Quest Software

For sales or other inquiries, visit www.quest.com/contact.

Technical Support Resources

Technical support is available to Quest customers with a valid maintenance contract and customers who have trial versions. You can access the Quest Support Portal at <https://support.quest.com>.

The Support Portal provides self-help tools you can use to solve problems quickly and independently, 24 hours a day, 365 days a year. The Support Portal enables you to:

- Submit and manage a Service Request
- View Knowledge Base articles
- Sign up for product notifications
- Download software and technical documentation
- View how-to-videos
- Engage in community discussions
- Chat with support engineers online
- View services to assist you with your product

Installation Instructions

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Before you Install

SharePlex Manager provides 24 x 7 monitoring of your entire SharePlex infrastructure, including all source and target instances. If the data replication processes managed by SharePlex are not meeting specific performance requirements, SharePlex Manager helps you detect the source of these problems so that you can quickly resolve them.

Before attempting to install SharePlex Manager 3.1, please do the following:

- Read this installation guide in its entirety
- The user installing or uninstalling SharePlex Manager on a Windows platform must be logged in as an “Administrator” locally on that workstation. This requirement does not apply to Linux.
- Quit all programs that are running on the machine you will install SharePlex Manager, including any SharePlex Web Services instances
- If upgrading SharePlex Manager, do the following:
 - a Verify that you are on version 2.2 or higher.
 - b Back up your existing Foglight server and database.
 - c Stop SharePlex Web Services.

Note If you are not on SharePlex Manager version 2.2, you need to upgrade to 2.2 before upgrading to 3.1. For versions earlier than 2.2, contact Quest Support for instructions on upgrading to 3.1.

After downloading and executing the appropriate installer tar or zip file, you install SharePlex Manager in two stages:

1 Install Foglight 6.1.

Detailed instructions (including system requirements) are provided in the document, *Foglight Installation and Setup Guide*.

2 Install SharePlex Manager 3.1.

This will install both the SharePlex Manager cartridge and SharePlex Web Services, which enables SharePlex Manager to communicate with your SharePlex instances. Both the cartridge and SharePlex Web Services must be installed on the same machine as Foglight.

System Requirements

For a complete list of SharePlex Manager 3.1 system requirements, see *SharePlex Manager Release Notes*.

For a complete list of Foglight system requirements, see *Foglight Installation and Setup Guide*.

Upgrading SharePlex Manager

If you have SharePlex Manager version 3.0 or earlier version installed and want to upgrade to version 3.1, back up your Foglight server and database, stop SharePlex Web Services (if running) and then follow the installation instructions as described in this document.

Note When you upgrade SharePlex Manager, there is a 5 to 8 second time span during which SharePlex Manager 3.0 or earlier version is disabled and SharePlex Manager 3.1 is enabled. During this time, you may receive “Unable to connect to adaptor” messages, which can be ignored.

Upgrade to SharePlex Manager 3.1:

- 1 Download the SharePlex Manager 3.1 and Foglight 6.1 installers from the Quest support portal.
- 2 Shut down the Foglight Management Server.
- 3 Stop SharePlex Manager Web Services.
- 4 Run the Foglight 6.1 installer and click **Upgrade**. For upgrading Foglight product version, see [Foglight documentation](#).
- 5 Clear the **Run Now** checkbox and click **Next**.
- 6 Click **Done** to exit the installer upon successful installation of the Foglight application.

Note Ensure the Foglight Management Server is not running.

- 7 Run the SharePlex Manager 3.1 installer. For additional details, see “Installing SharePlex Manager”.
- 8 After completing the SharePlex Manager installation, manually start the Foglight Management Server.

Installing SharePlex Manager

Download the SharePlex Manager Installer

To download the SharePlex Manager installer:

- 1 Depending on your operating system, download one of the following three files to a temporary location (a dedicated, empty directory is preferred):
 - For Windows - *SharePlexManager-3_1_0-windows.zip*
 - For Linux - *SharePlexManager-3_1_0-linux-ia.tar*
- 2 Depending on your operating system, do one of the following
 - For Windows, open *SharePlexManager-3_1_0-windows.zip*
 - For Linux, execute the following command:

```
tar xfv SharePlexManager-3_1_0-linux-ia.tar
```

The directory will then contain:

- The SharePlex Manager installer
- OpenSource, a directory containing the legally required third-party sources.

Pre-requisites for installing SharePlex Manager on a Linux machine

Before installing the SharePlex Manager on a Linux machine, ensure the following libraries are installed on the machine:

- libxcrypt.i686
- glibc.i686
- libXrender.i686

If these libraries are not already installed on your machine, run the following commands to install them:

- `yum install -y libxcrypt.i686`
- `yum install -y glibc.i686`
- `yum install -y libXrender.i686`

Install Foglight

If you are upgrading from SharePlex Manager version 2.2 to version 3.1, it is strongly recommended that you back up your Foglight server and database before attempting to upgrade it to version.

To install Foglight:

- 1 Start the installation process by initiating the appropriate executable file located in the *FoglightManagementServer* directory of the SharePlex Manager install media.

Each supported platform includes a separate executable file for 32-bit and 64-bit operating systems.

Windows:

- `Foglight-<version number>-install_windows-ia32.exe`
- `Foglight-<version number>-install_windows-x86_64.exe`

Linux:

- `Foglight-<version number>-install_linux-ia32.bin`
- `Foglight-<version number>-install_linux-x86_64.bin`

- 2 Follow the installation instructions provided in the appropriate Foglight Installation Guide located in the *FoglightServer\Documentation* directory of the SharePlex Manager install media.

Caution When installing Foglight be aware of the following:

- During a custom install, the Foglight installer prompts you to add a license file. You can disregard this prompt, because the SharePlex Manager install media includes the current Foglight license file.
- At the end of a standard install, the Foglight server is started automatically. You must shut down the server before installing SharePlex Manager, either by selecting the

Stop Foglight option on the **Start** Menu (for Windows) or by executing the shutdown script *FmsShutdown.sh* (for Linux) located in the *bin* directory.

Install SharePlex Manager 3.1

You can run the SharePlex Manager installer in either GUI mode or in console mode (Linux only). The instructions in this guide are based on a GUI installation. However, since the sequence of steps are the same, you can still perform a console installation by following these instructions. The only differences are operational. For example, in GUI mode you click **Cancel**, **Previous**, and **Next**, while in console mode you type 'quit' and 'back' and press <Enter>.

To install the SharePlex Manager 3.1:

- 1 Open one of the executable files included on the SharePlex Manager install media:

- **Windows** - *SharePlexManager-3_1_0-install-windows.exe*
- **Linux** - *SharePlexManager-3_1_0-install-linux-ia32.bin*

Note To run the installer in console mode, execute one of the following commands:

- `SharePlexManager-3_1_0-install-linux-ia32.bin -i console`

The SharePlex Manager Installer opens and displays the Welcome window.

- 2 Click **Next**.

The installer prompts you to specify the Foglight home directory.

- 3 Specify the Foglight home directory.

Note If the Installer cannot locate Foglight in the specified directory, it displays an error message and prompts you to specify a different location.

- 4 Click **Next**.

The installer prompts you to specify the location where you want to install SharePlex Manager.

- 5 Specify the location where you want to install SharePlex Manager.

Note If the directory you specify already contains files, the installer displays a warning message that these files will be overwritten.

- 6 Click **Next**.

If installing on Windows, the installer prompts you to specify the location where you want to create product shortcuts, if any.

Note There are no product shortcuts on Linux.

7 Specify the location where you want to create product shortcuts.

8 Click **Next**.

Note At this point, the installer tries to detect if there is an active SharePlex Web Services instance currently running. If so, it displays a warning message that you must shut down the SharePlex Web Services instance before continuing with the installation.

The installer prompts you to specify a dedicated port for SharePlex Manager.

9 Specify the number of the dedicated port (by default, 3000).

10 Click **Next**.

Note If the port you specify is currently unavailable, the installer displays a warning message that SharePlex Web Services will not be able to start automatically at the end of the installation. At this point, you can either specify a different port number, or you can continue with the installation. If you continue, you will later need to start SharePlex Web Services manually after the port becomes available.

The installer displays the Pre-Installation Summary window.

11 Do one of the following:

- Click **Install** to continue.

Make sure you accept the pre-installation settings before clicking **Install**. The installer modifies the Foglight server, and these changes cannot be undone even if you click **Cancel** during the installation process.

- Click **Previous** if you want to go back and change an installation setting

Note If there is not enough disk space, the installer displays a warning message. You must make enough disk space available to continue with the installation.

The installer displays a progress bar as it installs the SharePlex Manager cartridge and SharePlex Web Services.

On Windows, SharePlex Web Services is configured to start automatically when the host machines reboots. On Linux, the installer prompts you to specify how you want to start SharePlex Web Services. The installer can start SharePlex Web Services immediately, or you can start SharePlex Web Services manually at a later time. For more information, see the section, “[Starting SharePlex Web Services](#)” on page 9.

12 Do one of the following:

- Select **Start SharePlex Web Services Now** to have the installer start SharePlex Web Services immediately
- Select **Not Now** to start SharePlex Web Services yourself at a later time

13 Click **Next**.

Note If you selected the **Start SharePlex Web Services Now** option, the installer displays a warning messages if for any reason it is unable to start SharePlex Web Services. This may be because the port number you specified previously is unavailable. When this is the case, you will need to start SharePlex Web Services manually after you complete the installation and make the port available. See the next section for more information on starting SharePlex Web Services manually.

14 In the next window, the installer reports that it has successfully installed SharePlex Manager 3.1.

15 Click **Done**.

Troubleshooting

If you encounter an “Installer User Interface Mode Not Supported” error when attempting to run the installer in Windows, use one of the following workarounds.

Workaround 1:

- 1 Open the Windows Command Prompt.
- 2 Change the directory to the location of the SharePlex Manager installer.
- 3 Enter "SharePlexManager-<version_number>-install-windows.exe -i GUI" where *version_number* is the version of SharePlex Manager you are installing.
- 4 Press ENTER to install in GUI mode.

Workaround 2:

- 1 Right-click the installer and select Properties.
- 2 Select the **Compatibility** tab and select **Run this program in compatibility mode for**. Then select **Windows 7**.
- 3 Click **Apply**. Then click **OK**.
- 4 Double-click the installer to start the installation process.

Starting SharePlex Web Services

SharePlex Web Services must be running to monitor your SharePlex instances. On Windows, SharePlex Web Services starts automatically at reboot. On Linux, you can start SharePlex Web Services manually, or you can configure it to start at reboot.

Note Before starting SharePlex Web Services, be aware of the following:

- It is not recommended that you start multiple instances of SharePlex Web Services on different ports using the same installation. You should only run one instance of SharePlex Web Services at a time.
 - Occasionally you may receive an error message that SharePlex Web Services is not available at the specified port. This may be because SharePlex Web Services is down, or it may be because SharePlex Web Services is running but not responding. In either case, you should make sure SharePlex Web Services is not running by executing a `stop` command before executing a `start` command. If you execute a `stop` command when SharePlex Web Services is already stopped you will receive an error message which you can safely ignore.
-

Windows

As a Windows NT service, SharePlex Web Services is configured to start automatically when the machine reboots. However, if it is necessary to start SharePlex Web Services manually (for example, due to a port conflict), you can start it manually in two ways:

- By going to the **Start** menu and selecting **All Programs>Quest Software>SharePlex Manager>Start SharePlex Web Services**.

Note To stop SharePlex Web Services, select the **Stop SharePlex Web Services** option.

- By executing the command `web-services start` from the `web-services.bat` file located in the `<install_dir>\Webservices\bin` directory.

The commands are:

```
web-services start
```

Note To stop SharePlex Web Services, execute the command `web-services stop`.

Linux

After the installation is complete, you can start SharePlex Web Services manually, or you can configure it to start at reboot.

- 1 To start SharePlex Web Services manually on Linux, execute the following command:

```
sh <install_dir>/Webservices/bin/web-services.sh start
```

Note To stop SharePlex Web Services for Linux, execute

```
sh <install_dir>/Webservices/bin/web-services.sh stop.
```

 For Windows, close the window it is running in.

If started successfully, SharePlex Web Services writes log entries to stdout that indicate it's running. For example:

```
$ sh ./bin/web-services.sh start
```

Activated on port 3000: <process entry from ps>

- 2 To configure SharePlex Web Services to start at reboot, do the following:
 - a Create the file `/etc/init.d/spo-web-services` with the following content (assumes that Java is installed in the default `<install_dir>/jre` directory and the SharePlex Web Services is installed in `<install_dir>/Webservices/bin`):

```
#!/bin/sh

JAVA_HOME=<install_dir>/jre
PATH=/bin:/usr/bin:/usr/local/bin

export JAVA_HOME PATH

sh <install_dir>/Webservices/bin/web-services.sh "${@}"

#!/bin/bash

#

# SharePlex for Oracle Web Services

#

# chkconfig: 35 <start priority> <stop priority>
# description: SharePlex for Oracle Web Services

JAVA_HOME=<install_dir>/jre

PATH=/bin:/usr/bin:/usr/local/bin

export JAVA_HOME PATH

sh <install_dir>/Webservices/bin/web-services.sh "${@}"
```

Replace `<install_dir>` with the directory for the installation of SharePlex Manager.

Note Unless there is a good reason to the contrary, the `<endpriority>` should be equal to 100 minus `<startpriority>`. `<startpriority>` is the “priority” weight for starting the service, while `<endpriority>` is the “priority” weight for stopping the service. Services

are started and stopped in numerical order starting at 0, e.g., 90 for <startpriority> and 10 for <endpriority>.

Replace <start priority> and <stop priority> with

- b Use the `chkconfig` command to configure the script to start at boot
`[root@hostname dir]# /sbin/chkconfig --level 35 spo-web-services on`
- c Verify the installation with
`[root@hostname dir]# service spo-web-services status`
SharePlex Web Services is configured to start on next reboot.

Login to SharePlex Manager

When you start the Foglight server for the first time after installing SharePlex Manager, SharePlex Manager automatically creates two Foglight user accounts named **SharePlexMgr** and **SPOMgrAdmin** and adds them to a new user group named **SharePlex Manager**.

SharePlexMgr is a basic default user account that has all the rights associated with Foglight User. and is configured with the following security rights:

- Can access all monitoring screens
- Can set parameters and execute process control commands (stop/start/abort) only on the streams it is specifically authorized to manage
- Cannot run the Discovery Wizard or perform configuration tasks

Note Until the **SharePlexMgr** account is granted permissions on a particular stream, the **Administration** link on the Replication Overview window is deactivated.

SPOMgrAdmin is a default administrator account and is configured with the following security rights:

- Can access all of the SharePlex Manager screens and Foglight administration screens.
- Can run the Discovery Wizard and perform configuration tasks, such as configure views, manage Foglight users, and modify alerts and alarms
- Does not belong to the Foglight user group **Cartridge Developers**, which means **SPOMgrAdmin** is not allowed to modify monitoring screens.

As a Foglight administrator, **SPOMgrAdmin** can modify the security rights of other users (including itself) and can also create additional SharePlex Manager user accounts and user groups as needed. For more information, see your Foglight documentation.

To login to SharePlex Manager:

- 1 Open your browser window and go to the Foglight login page.

If you installed Foglight on your local machine using the default 8080 port number, the SharePlex Manager login URL would be: <http://localhost:8080/>.

- 2 In the Foglight login page, enter your SharePlex Manager user name and password.

Note If you are logging in as **SharePlexMgr**, enter **SharePlexMgr** as both the user name and password. If you are logging in as **SPOMgrAdmin**, enter **SPOMgrAdmin** as both the user name and password.

The password is case sensitive.

- 3 Click **Login**.

Setup stunnel for a SharePlex Instance with SSL Enabled

SharePlex 9.1.3 (or later) allows you to use SSL/TLS connections for all network traffic. If you want to use SharePlex Manager to monitor an instance of SharePlex in which SSL/TLS is enabled, you can use stunnel. Setup and configure stunnel using the following procedure.

Before installing and configuring stunnel, review the following important details:

- Install stunnel on same host machine on which SharePlex Manager is installed.
- For every unique encrypted/secured SharePlex instance port number, a config section must be defined in **stunnel.conf** that maps between the “accept” port and a SharePlex “connect” port.
- SharePlex Manager discovery or setup to a secured SharePlex instance must use the “accept” port defined in **stunnel.conf** as the port number and not the encrypted/secured SharePlex instance port number.

Install and configure stunnel on Linux

- 1 Open a terminal as root or sudo.
- 2 Install stunnel using the following command.

```
yum install stunnel
```

3 Create a certificate for stunnel.

```
cd /etc/pki/tls/certs
make stunnel.pem
```

Answer all the questions to complete the process.

4 Create a config file for stunnel.

```
cd /etc/stunnel
vi stunnel.conf
```

5 In the `stunnel.conf` file, include the following values for the paths to the certificate and the process ID file and the ports.

```
; ---
pid = /var/run/stunnel/stunnel.pid
cert = /etc/pki/tls/certs/stunnel.pem
[shareplex_port_2100]
; accept == SharePlex Manager will connect to this port number for
discovery/setup
; accept == port is equivalent to 127.0.0.1:12100
accept = 12100
; connect == SharePlex SSL/TLS enabled port number
; connect == port is equivalent to 127.0.0.1:2100;
; if endpoint is remote then specify the remote IP (i.e., 10.0.0.25:2100)
connect = 2100
client = yes
; ---
```

6 Create an stunnel directory in the var directory.

```
mkdir /var/run/stunnel
chown nobody:nobody /var/run/stunnel
```

7 Start stunnel.

```
stunnel /etc/stunnel/stunnel.conf
```

Install and configure stunnel on Windows

- 1 Download the latest Windows installer file of stunnel from <https://www.stunnel.org/downloads.html>.

- 2 Create or copy a valid **stunnel.pem** SSL certificate to the installation directory (C:\Program Files\stunnel\stunnel.pem)
- 3 Edit the **stunnel.conf** file in the installation directory (C:\Program Files\stunnel\stunnel.conf).

```

; ---
cert = stunnel.pem
[shareplex_port_2100]
; accept == SharePlex Manager will connect to this port number for
discovery/setup
; accept == port is equivalent to 127.0.0.1:12100
accept = 12100
; connect == SharePlex SSL/TLS enabled port number
; connect == port is equivalent to 127.0.0.1:2100;
; if endpoint is remote then specify the remote IP (i.e., 10.0.0.25:2100)
connect = 2100
client = yes
; ---

```

- 4 Configure stunnel to start automatically as a service by navigating to the **Start** menu and opening the **stunnel** folder. Then click **Service Install**.
- 5 Start or check that the stunnel service has started.

Uninstalling SharePlex Manager

To uninstall SharePlex Manager:

- 1 Execute one of the following commands to uninstall the SharePlex Manager 3.1:
 For Linux: /<SHAREPLEX_MANAGER_DIR>/Uninstall_SharePlexManager/
 Uninstall_SharePlexManager.bin
 For Windows: /<SHAREPLEX_MANAGER_DIR>/
 Uninstall_SharePlexManager/Uninstall_SharePlexManager.exe
- 2 Uninstall the SharePlex Manager-provided Foglight server.
 For detailed instructions, see *Foglight Installation and Setup Guide*.