



CHAPTER 2

Installing and Logging Into Cisco Prime Fulfillment

Use the information described in this chapter in the following order:



Note

See [Chapter 1, “System Recommendations,”](#) before installing Cisco Prime Fulfillment.



Note

If you are planning to use an Oracle Database with Prime Fulfillment instead of the default embedded database, see [Appendix A, “Setting Up Oracle for Prime Fulfillment”](#) before continuing with the installation.

- [Initial Configuration—Creating the Prime Fulfillment Owner, page 2-2](#)
- [Installing Prime Fulfillment, page 2-2](#)
 - [Installing Prime Fulfillment Using the Graphical User Interface, page 2-3](#)
 - [Installing Prime Fulfillment Using the Command Line Installer, page 2-13](#)
- [Upgrading an Existing Installation to Prime Fulfillment 6.2, page 2-18](#)
 - [Upgrade Matrix, page 2-19](#)
 - [Locating the Cisco Prime Fulfillment 6.2 Upgrade Tool, page 2-19](#)
 - [Using the Repository Upgrade Tool, page 2-20](#)
- [Restoring Your Sybase Repository to a New Server, page 2-20](#)
- [Configuring HTTPS, page 2-21](#)
- [Logging In for the First Time, page 2-22](#)
- [Installing License Keys, page 2-22](#)
- [Launching Topology Tool, page 2-23](#)
- [Uninstalling Prime Fulfillment, page 2-23](#)

Initial Configuration—Creating the Prime Fulfillment Owner



Note

If you are planning to use an Oracle Database with Prime Fulfillment instead of the default embedded database, see [Appendix A, “Setting Up Oracle for Prime Fulfillment”](#) before continuing with the installation.

The first time you install Prime Fulfillment, create a UNIX user to own the software. This user is the default username when you log into Prime Fulfillment. Create the user and group using Solaris commands or the Solaris Admintool. This user must have a valid group ID and read and write permissions to the install directory.

To add a user to your server using the standard Solaris commands, follow these steps:

Step 1 At the Solaris prompt, log in as **root**.

Step 2 To create the user, enter:

```
useradd -d /users/<username> -m -s /bin/<shell_type> <username>
passwd <username>
```

where:

-m creates the directory specified in **-d**

<shell_type> is **sh** for the Bourne shell. The Bourne shell is the only supported shell.

iscadm is recommended as the **<username>**.

Step 3 At the prompt, enter a password.

Installing Prime Fulfillment

Before installing Prime Fulfillment, configure the server to be able to perform hostname to IP address translations. Ensure that Domain Naming System (DNS) or an alternative is configured.

Prime Fulfillment accesses its database using a connection based on the hostname of the server. Ensure that you can reach the host via its hostname. For example, if the hostname is ‘pollux’, set up hostname resolution such that you do not get an error response when entering ‘ping pollux’.



Note

When Prime Fulfillment is integrated with Cisco Prime IP-NGN (suite mode) by a non-root user, then the **<PRIME_F_HOME>/bin/host_edit.pl** script file has to be executed manually by the root user in order to enable the SSL functionality.

To execute the **host_edit.pl** script file:

- 1) Login as root user using the CLI in Prime Fulfillment server.
- 2) Execute the **host_edit.pl** script as shown below by providing the Prime Central hostname and IP address.

```
<PRIME_F_HOME>/bin/host_edit.pl <IPADDRESS> <HOSTNAME>
```

This updates the **/etc/hosts** file on the Prime Fulfillment server and enables the SSL functionality.

To add Prime Fulfillment to your system, either as a new Prime Fulfillment customer or a customer upgrading from an existing Prime Fulfillment release, you can choose one of the following two ways to install:

- [Installing Prime Fulfillment Using the Graphical User Interface, page 2-3](#)
- [Installing Prime Fulfillment Using the Command Line Installer, page 2-13](#)

**Note**

After installing Prime Fulfillment, the installation log can be found in `<PRIMEF_HOME>/tmp`, where `<PRIMEF_HOME>` is the directory specified for Prime Fulfillment to be installed to. Then, for example, if you installed in `/opt/PrimeFulfillment`, look for the installation log in `/opt/PrimeFulfillment/tmp/PrimeInstallationLog.txt`.

**Note**

It is not possible to install Prime Fulfillment for use with an Oracle database using the Command Line Installer. Therefore, if you will be using Oracle, be sure to use the GUI installation method, explained in the [“Installing Prime Fulfillment Using the Graphical User Interface” section on page 2-3](#).

We recommend that you install Prime Fulfillment using the Graphical User Interface (GUI) installer. This enables more configuration options than the CLI installer.

The installer checks for two kinds of disk space:

- In the intended install location, you need 1.2 GB free for the binaries plus an extra 250 MB for log file growth and the installation of the Cisco Configuration Engine software.
- In the database directory, you need 1 GB free. For large systems, you should have 4 to 5 GB of space. If the directory has less than 1.2 GB free, you can still install Prime Fulfillment, but you might run out of space.

See [Chapter 1, “System Recommendations”](#) for more information about disk space and planning.

The complete installation for the Prime Fulfillment software requires 1.2 GB of free disk.

Installing Prime Fulfillment Using the Graphical User Interface

This section describes both a general installation procedure that applies to all upgrade path and specific details regarding individual upgrade paths.

After reviewing the information in the [“Installing Prime Fulfillment” section on page 2-2](#), you can follow these steps to install the Prime Fulfillment software using the Graphical User Interface (GUI):

Step 1 If an existing Prime Fulfillment installation is running, enter the `./prime.sh stop` command. If an existing ISC installation is running, enter the **Stop All** command. See the [Cisco Prime Fulfillment User Guide 6.2](#) for information about WatchDog commands.

Step 2 Insert the Prime Fulfillment installation CD-ROM.

**Caution**

When you insert the CD-ROM, the File Manager is invoked automatically. Do *not* use the File Manager to install the Prime Fulfillment product. Run the installation script from a terminal window.

**Note**

You can install as **root** or as the user you will designate as the Prime Fulfillment owner. If you want Prime Fulfillment to automatically restart when you reboot a server, it is recommended to install as **root**. If you choose not to do this, then you must restart Prime Fulfillment manually when rebooting a server.

Step 3 Open a terminal window and log in as the identified UNIX user.

Step 4 Change to the CD ROM directory:

```
$ cd /cdrom/cdrom0
```

Step 5 If you have an existing Prime Fulfillment installation with a database, you *must* back up your current database. See the instructions to back up and restore an Prime Fulfillment repository or create a standby system, as explained in [Appendix D, “Backup and Restore of Prime Fulfillment Repository and Standby System”](#).

Step 6 Change to the path in the cdrom where the Solaris and Linux installation files are available, as follows:

```
cdrom> cd <path name>
```

where:

<path name> Specify the location of the directory where the Solaris and Linux installation files are available.

Path for the Solaris installation files in cdrom is: **/prime_fulfillment_6_2_FCS/Solaris**

Path for the Linux installation files in cdrom is: **/prime_fulfillment_6_2_FCS/Linux**

Step 7 Execute the Prime Fulfillment product installation script as follows:

```
./install.sh
```

The Prime Fulfillment Graphical User Interface is initiated.

The Prime Fulfillment software is installed by default in the **/opt/PrimeFulfillment** directory.

Step 8 If you are upgrading an existing Prime Fulfillment installation, ensure that the existing Prime Fulfillment application is completely shut down, and use *one* of the following methods to specify the target directory:

- a. Install this version of Prime Fulfillment into the same directory as the existing Prime Fulfillment product.

For example, if you are upgrading from Prime Fulfillment 6.1 to Prime Fulfillment 6.2 and the existing Prime Fulfillment 6.1 installation is under the directory **/opt/isc-6.1**, then install Prime Fulfillment 6.2 in the same directory using the following steps:

- Invoke the Prime Fulfillment GUI using the command:
./install.sh
- Choose the installation directory as:
/opt/isc-6.1
- Choose the option **Upgrade Existing ISC Repository**
- Choose the **upgradeIscSchema.sh** script path
- Complete the remaining steps using the default values.

-or-

- b. Install Prime Fulfillment 6.2 in the same directory with a new name.

For example, if you are upgrading from Prime Fulfillment 6.1 to Prime Fulfillment 6.2 and the existing Prime Fulfillment 6.1 installation is under the directory `/opt/isc-6.1`, rename this directory to **`/opt/PrimeFulfillment`** and then install Prime Fulfillment 6.2 in the same directory using the following steps:

- Invoke the Prime F GUI installation using the command:
`./install.sh`
- Choose the installation directory as:
`/opt/PrimeFulfillment`
- Choose the option **Upgrade Existing ISC Repository**
- Choose the **`upgradeIscSchema.sh`** script path
- Complete the remaining steps using the default values.

-or-

- c. Install Prime Fulfillment 6.2 in a new directory.

For example, if you are upgrading from Prime Fulfillment 6.1 to Prime Fulfillment 6.2 and the existing Prime Fulfillment 6.1 installation is under the directory `/opt/isc-6.1`, then install Prime Fulfillment 6.2 in a new directory `/opt/PrimeFulfillment`, using the following steps:

- Invoke the Prime Fulfillment GUI using the command:
`./install.sh`
- Choose the installation directory as:
`/opt/isc-6.1`
- Choose the option **Upgrade Existing ISC Repository**
- Choose the **`upgradeIscSchema.sh`** script path
- Complete the remaining steps using the default values.

-or-

- d. (Using the CLI) Install Prime Fulfillment in a new directory.

For example, if you are upgrading from Fulfillment 6.1 to Prime Fulfillment 6.2 and the existing Fulfillment 6.1 installation is under the directory `/opt/isc-6.1`, then install Prime Fulfillment 6.2 in a new directory `/opt/PrimeFulfillment`, with steps like the following:

- Save the ISC 6.0 installation for possible uninstall purposes, as follows:
`tar cvf isc-6.1.tar /opt/isc-6.1`
- Copy the `/opt/isc-6.1/Repository` to `/opt/PrimeFulfillment` directory.
`cp -R /opt/isc-6.1/Repository /opt/PrimeFulfillment`
- Go to
`<Prime Fulfillment installation directory>/upgradeTool/`
- Execute the command:
`./upgradeIscSchema.sh /opt/PrimeFulfillment`
- Provide the default Prime Fulfillment admin username and password.

Step 9 Click Next.

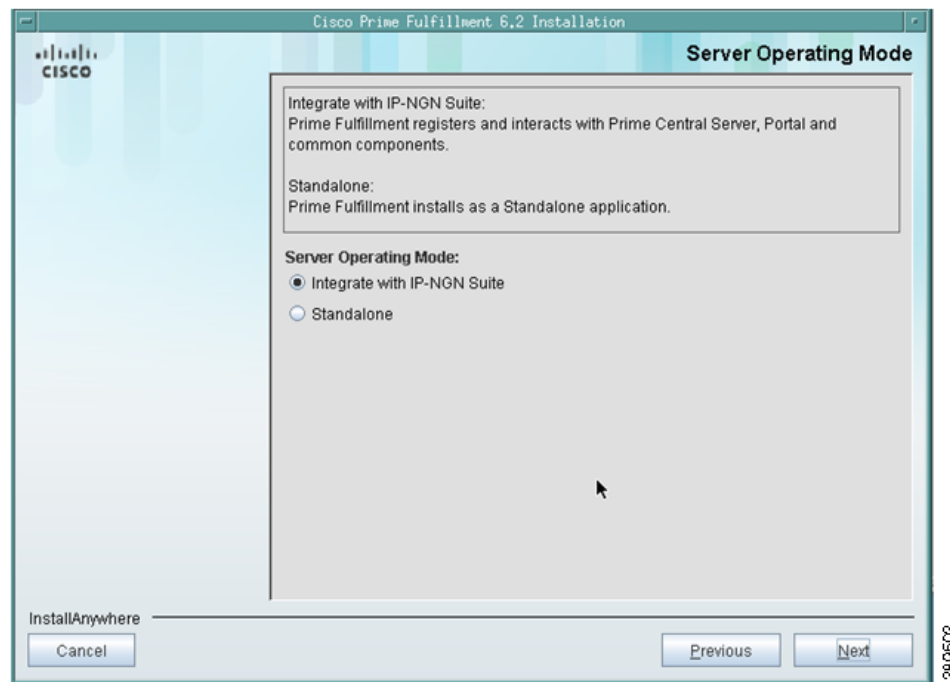
The Choose Installation Type dialog box is displayed.

Step 10 Choose one of the following types of installation and click **Next**.

- **Express**- enables standard set of options.
- **Custom**- enables you to specify various ports and locations, and change the watermark level for available disk space.

The Server Operation Mode dialog box is displayed as shown in [Figure 2-1](#).

Figure 2-1 Server Operating Mode Dialog Box



The following steps assume that you have chosen the Standard installation type. Steps that only appear in the custom installation are marked as (Custom).

Step 11 Choose one of the following operating modes and click **Next**.

- **Integrate with IP-NGN Suite**- Cisco Prime Fulfillment registers and interacts with the Prime Central server, portal, and other common components. You will need to provide Prime Central server details during installation. When installed as part of the suite, you can launch Prime Fulfillment from the Prime Central portal. For more information about Prime Central, see the documentation for [Cisco Prime Central 1.0](#).

After you have integrated Prime Fulfillment with the IP-NGN Suite, you will not be able to modify Prime Fulfillment to work as a Standalone application. However, if you install Prime Fulfillment as a Standalone application, you can later integrate it with the IP-NGN Suite.

- **Standalone**- Cisco Prime Fulfillment installs as a standalone application.

The Cisco Prime Fulfillment 6.2 Owner dialog box is displayed.

Step 12 Enter the username you created in [Step 2](#) of the “[Initial Configuration—Creating the Prime Fulfillment Owner](#)” section on [page 2-2](#) and click **Next**.

**Note**

If you leave the field blank the Prime Fulfillment owner will be the user you are using to run the installation. It is not recommended to make the root user the Prime Fulfillment owner.

The Choose Installation Folder dialog box is displayed.

- Step 13** Specify the location of the directory where you want to install Prime Fulfillment, and click **Next**. To find an appropriate directory, click **Choose...**

**Note**

If you are not installing as **root**, you must have write permission for this directory.

**Note**

In the intended install location, you need 1.2 GB free for the binaries plus an extra 250 MB for log file growth and the installation of the Cisco Configuration Engine software.

In the database directory, you need 1 GB free. For large systems, you should have 4 to 5 GB of space. If the directory has less than 1.2 GB free, you can still install Prime Fulfillment, but you might run out of space.

- Step 14** If you chose **Express** installation type (in [Step 10](#)), proceed to the next step.

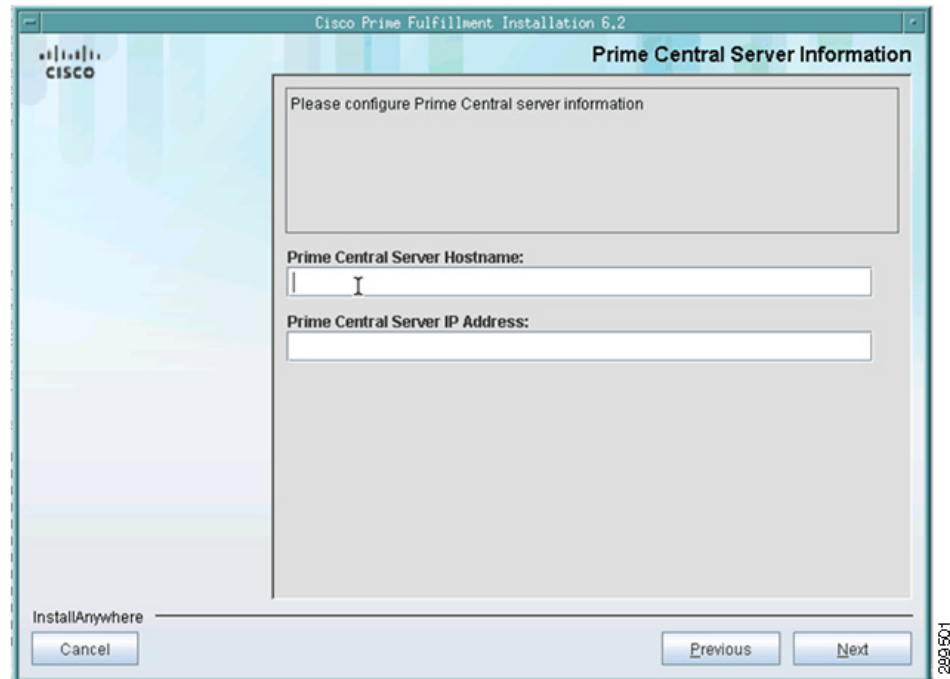
If you chose **Custom** installation type (in [Step 10](#)), proceed to [Step 19](#).

- Step 15** Reset the High and Low watermarks for available disk space if required, and click **Next**.

The default values are 20% and 10% for High and Low respectively. Ensure that the percentage of High watermark is a larger than that of the Low watermark. Every time the High and Low watermarks are reached, you are notified via e-mail (notification is sent to the e-mail address that you specify in [Step 30](#)).

For Standalone installation- The E-mail Notifications dialog box is displayed.
Proceed to [Step 30](#).

For integration with the IP-NGN Suite - The Prime Central Server Information dialog box is displayed as shown in [Figure 2-2](#).
Proceed to the next step.

Figure 2-2 Prime Central Server Information Dialog Box.

Step 16 (For integration with IP-NGN Suite) This step applies only if you selected **Integrate with IP-NGN Suite** as the operating mode for Prime Fulfillment (in [Step 11](#)).

Enter the Prime Central server hostname and IP address, and click **Next**.

The Prime Central server hostname that you enter in this field must match with the certificate generated on Prime Central. To ensure this, use the following steps to obtain the Prime Central server hostname that you can use to generating the right certificate.

- Login to Prime Central and accept all certificates
- If you are using Mozilla Firefox:
 1. Click the icon that looks like a lock and is displayed on the bottom right corner of your browser. A dialog box displays the certificate details.
 2. Click **View Certificate**. A dialog box displays further details about the certificate.
 3. Note down the value specified in the **Common Name (CN)** field.
 4. Using this value as the Prime Central hostname, follow the steps outlined in the procedure in [Integrating Prime Fulfillment \(Standalone\) with Prime Central \(IP-NGN Suite\)](#), page 2-17 to re-register Prime Fulfillment with the Prime Central server
- If you are using IE:
 1. Go to **View > Security Report**.
 2. Click **View Certificates**.
 3. Note down the value specified in the **Issued to** field.
 4. Using this value as the Prime Central hostname, follow the steps outlined in the procedure in [Integrating Prime Fulfillment \(Standalone\) with Prime Central \(IP-NGN Suite\)](#), page 2-17 to re-register Prime Fulfillment with the Prime Central server

The Prime Central Database Information dialog box is displayed as shown in [Figure 2-3](#).

Figure 2-3 Prime Central Database Information Dialog Box.

The screenshot shows a window titled "Cisco Prime Fulfillment Installation 6.2" with a sub-dialog titled "Prime Central Database Information". Inside the dialog, there is a text area with the instruction "Please configure Prime Central database information". Below this are five input fields labeled "Server:", "Sid:", "Port:", "DB User", and "DB Password". At the bottom left of the dialog is a "Cancel" button. At the bottom right are "Previous" and "Next" buttons. The "InstallAnywhere" logo is visible in the bottom left corner of the main window.

Step 17 (For integration with IP-NGN Suite) Enter the following details about the Prime Central database and click **Next**:

- Server IP Address- IP Address of the Prime Central server
- SID- Server instance identifier of the Prime Central server
- Port- Port number of the Prime Central server
- DB User- Database username of the Prime Central server
- DB Password- Database password associated with the above username.

Step 18 Proceed to [Step 30](#) to specify the hostname (SMTP host) and e-mail addresses that Prime Fulfillment can use to send you notifications.

Step 19 (Installation type- Custom) In the Choose a Temporary Folder dialog box, enter the location where you want temporary files stored and click **Next**.

The Choose a Repository Folder dialog box is displayed.



Note

In the intended install location, you need 1.2 GB free for the binaries plus an extra 250 MB for log file growth and the installation of the Cisco Configuration Engine software.

In the database directory, you need 1 GB free. For large systems, you should have 4 to 5 GB of space. If the directory has less than 1.2 GB free, you can still install Prime Fulfillment, but you might run out of space.

Step 20 Enter the location where you want database files to be stored and click **Next**.

The **Select Database** dialog box is displayed.

Step 21 Choose one of the following database types and click **Next**.

- **Embedded Sybase**- You will need to specify the Sybase database server and port.

- **External Oracle-** You will need to specify the Oracle database server, port, SID, DB version (required during integration with IP-NGN Suite), and username and password for this database.
- a. If you chose Embedded Sybase (Sybase ASA, 11.0.1 is embedded):
 - 1. Enter the Database server hostname and port number.
 - 2. Click **Next**.
The Configuring Naming Port dialog box is displayed.
 - 3. Proceed to Step 23.
- b. If you chose External Oracle:
 - 1. Enter the database server hostname, database port number (default value is automatically displayed), SID (Server Instance Identifier), and DB version (required for integration with the IP-NGN Suite).
Your input for the DB Version in this step is only used to display the DB version in Prime Central. There is no validation performed to compare your input with the correct DB version. To obtain the DB version:
 - 1) Login to the server where Oracle is installed.
 - 2) From the SQL prompt, execute the command:
select * from v\$version where banner like 'Oracle%';
 - 3) The output displayed is the DB version. For example,
“Oracle Database 10g Enterprise Edition Release 10.2.0.1.0 - 64bi”. You can use this output in the DB version field.
 - 2. Click **Next**.
 - 3. Set the Oracle database User and Password values.
 - 4. Click **Next**.
The Configuring Naming Port dialog box is displayed.

Testing of Prime Fulfillment 6.2 has been done with Oracle Database 11g, Enterprise Edition Release 11.2.0.1.0 - 64 bit Production.) If you would like to use another version of Oracle 10g, see Oracle's compatibility information.

**Note**

The embedded Sybase database is used for service-level agreement (SLA), independent of whether you are using Oracle as your database.

**Note**

If you want to use the same Sybase repository from an original server on this new server you are now installing, see the [“Restoring Your Sybase Repository to a New Server”](#) section on page 2-20

**Note**

If you are upgrading from a version of ISC before Prime Fulfillment 6.0, make sure your Prime Fulfillment Repository has been imported to the Oracle Database 11g, Enterprise Edition Release 11.2.0.1.0 - 64 bit Production, as indicated in the [“Initial Configuration—Creating the Prime Fulfillment Owner”](#) section on page 2-2.

Step 22 Specify the port used by the Naming Server and click **Next**.

The Configure Http Port dialog box is displayed.

If you change the default port value (1030) of the naming server, ensure that you specify the same port for all servers in your system.

**Note**

We do not recommend to use ports under 1024. Ports under 1024 are accessed only by the root user, and we do not recommend that the root user be the Prime Fulfillment owner.

Step 23 Specify the port used by the HTTP server and click **Next**.

The Configure Https Port dialog box is displayed.

Step 24 (For Standalone installation only) Specify the port used by the HTTP Over Secure Socket Layer (SSL) (HTTPS) server and click **Next**.

The Configure RVA Ports dialog box is displayed.

**Note**

To configure the web access to Prime Fulfillment, you must set up the HTTPS port as explained in [Step 37](#) and the “[Configuring HTTPS](#)” section on page 2-21.

Step 25 Specify the port used by the Rendezvous™ Agent (RVA) and click **Next**.

You must specify the RVA HTTP Port server, a TIBCO™ bus port used by Prime Fulfillment processes to communicate with each other. You must also specify the RVA Client Port.

The Configure Tibco Port dialog box is displayed.

**Note**

If you enter an RVA HTTP Port or RVA Client Port value less than 1024, the owner of the installation must be **root**. The owner of the installation is the user identified in [Step 2](#).

Step 26 Specify the port used by TIBCO and click **Next**.

The Hi/Low Watermark dialog box is displayed.

When you click **Next**, the system checks whether any of the ports entered are duplicate port numbers. If duplicate port numbers are found, an error message indicates the two ports that have duplicate entries.

Step 27 Reset the High and Low watermarks for available disk space if required, and click **Next**.

The default values are 20% and 10% for High and Low respectively. Ensure that the percentage of High watermark is a larger than that of the Low watermark. Every time the High and Low watermarks are reached, you are notified via e-mail (notification is sent to the e-mail address you specify in [Step 30](#)).

Step 28 (For integration with IP-NGN Suite) This step applies only if you selected **Integrate with IP-NGN Suite** as the operating mode for Prime Fulfillment (in [Step 11](#)).

Enter the Prime Central server hostname and IP address, and click **Next**.

The Prime Central server hostname that you enter in this field must match with the certificate generated on Prime Central. To ensure this, use the following steps to obtain the Prime Central server hostname that you can use to generating the right certificate.

- Login to Prime Central and accept all certificates
- If you are using Mozilla Firefox:
 1. Click the icon that looks like a lock and is displayed on the bottom right corner of your browser. A dialog box displays the certificate details.
 2. Click **View Certificate**. A dialog box displays further details about the certificate.
 3. Note down the value specified in the **Common Name (CN)** field.
 4. Using this value as the Prime Central hostname, follow the steps outlined in the procedure in [Integrating Prime Fulfillment \(Standalone\) with Prime Central \(IP-NGN Suite\)](#), page 2-17 to re-register Prime Fulfillment with the Prime Central server

- If you are using IE:
 1. Go to **View > Security Report**.
 2. Click **View Certificates**.
 3. Note down the value specified in the **Issued to** field.
 4. Using this value as the Prime Central hostname, follow the steps outlined in the procedure in [Integrating Prime Fulfillment \(Standalone\) with Prime Central \(IP-NGN Suite\)](#), page 2-17 to re-register Prime Fulfillment with the Prime Central server

The Prime Central Database Information dialog box is displayed.

Step 29 (For integration with IP-NGN Suite) Enter the following details about the Prime Central database and click **Next**:

- Server IP Address- IP Address of the Prime Central server
- SID- Server instance identifier of the Prime Central server
- Port- Port number of the Prime Central server
- DB User- Database username of the Prime Central server
- DB Password- Database password associated with the above username.

The E-mail Notifications dialog box is displayed.

Step 30 Enter the following information to receive e-mail notifications from Prime Fulfillment every time the server restarts, and hi/low disk usage watermarks are reached.

- Hostname of the Simple Mail Transfer Protocol (SMTP) host.
- Username to display in the "From" field of the e-mail.
- E-mail address to be notified when High and Low watermarks are reached (indicates that the specified disk space availability has been reached).
- E-mail address to be notified when the Prime Fulfillment server restarts.

Step 31 Click **Next**.

The Pre-Installation Summary dialog box displays the product name, installation folder, and the required/available disk space information.

Step 32 Click **Install**.

The Installing Cisco Prime Fulfillment 6.2 dialog box displays the sequence of processes that are run and the status of installation.

Cisco Prime Fulfillment 6.2 is installed in the folder you specified in [Step 13](#).

Step 33 If the installation failed, you receive a failed message.

To review the log message, click **Back**.

Step 34 If the installation was successful, you receive an Install Complete message. Even if you have a successful install, click **Back** to review the log to be sure there were no exceptions or failures.

Step 35 The Prime Fulfillment server is started automatically after the installation is successful.

Step 36 Verify that Prime Fulfillment is properly installed, as follows:

- a. Before logging in, repeat the following command until the servers are in the **started** mode. If any server is reported as **disabled**, Prime Fulfillment is not installed or configured correctly:

./prime.sh status

For more information about WatchDog commands, see the [Cisco Prime Fulfillment User Guide 6.2](#).

- Step 37** If you want to set up secure web access by using HTTPS, see the “[Configuring HTTPS](#)” section on [page 2-21](#).
- Step 38** If you are logging in for the first time, proceed to the “[Logging In for the First Time](#)” section on [page 2-22](#).”
- Step 39** Before you can use any of the licensed services, proceed to the “[Installing License Keys](#)” section on [page 2-22](#).
- Step 40** If you have an Prime Fulfillment repository, you *must* upgrade your repository to have access to it, as explained in the “[Upgrading an Existing Installation to Prime Fulfillment 6.2](#)” section on [page 2-18](#).

**Note**

If you have an existing repository prior to ISC 6.0, see the references to the upgrade instructions for your version at [Installing Prime Fulfillment, page 2-2](#).

- Step 41** If you want to eventually use the Inventory Manager or the Topology Tool, your client machine *must* be set up properly. Proceed to the “[Launching Topology Tool](#)” section on [page 2-23](#). This section explains what occurs and leads you to the launching explanations in the [Cisco Prime Fulfillment User Guide 6.2](#).

**Note**

To determine if servers are installed correctly, use the WatchDog commands explained in the [Cisco Prime Fulfillment User Guide 6.2](#).

Installing Prime Fulfillment Using the Command Line Installer

**Note**

It is not possible to install Prime Fulfillment for use with an Oracle database using the Command Line Installer. Therefore, if you will be using Oracle, be sure to use the GUI installation method, explained in the “[Installing Prime Fulfillment Using the Graphical User Interface](#)” section on [page 2-3](#).

After reviewing the information in the “[Installing Prime Fulfillment](#)” section on [page 2-2](#), you can follow these steps to install the Prime Fulfillment software using the Command Line Installer:

**Note**

The command line installer only allows you to configure the installation directory and Prime Fulfillment owner. All other configuration options use default values. For more configuration options, use the GUI installer, explained in the “[Installing Prime Fulfillment Using the Graphical User Interface](#)” section on [page 2-3](#).

- Step 1** Insert the Prime Fulfillment product CD-ROM.

**Note**

When you insert the CD-ROM, the File Manager is automatically invoked. Do *not* use the File Manager to install the Prime Fulfillment product. Run the installation script from a terminal window.

- Step 2** Open a terminal window and log in as the identified UNIX user.

- Step 3** Change to the CD-ROM directory, as follows:

```
$ cd /cdrom/cdrom0
```

Step 4 If you are upgrading Prime Fulfillment from an existing version, use the **`./prime.sh stop`** command to be sure the existing Prime Fulfillment is shut down completely. See the [Cisco Prime Fulfillment User Guide 6.2](#) for information about all WatchDog commands.

Step 5 If you have an existing Prime Fulfillment installation with a database, you *must* back up your current database. See the instructions to back up and restore an Prime Fulfillment repository or create a standby system, as explained in [Appendix D, “Backup and Restore of Prime Fulfillment Repository and Standby System.”](#)

**Caution**

If you use the command line installer to install Prime Fulfillment in a directory containing an existing installation of Prime Fulfillment, the installer replaces the existing repository with a new empty repository. You are not asked to confirm this operation and no alternative option is given. The directory containing the existing repository is renamed to **Repository.save.<timestamp>**.

Step 6 Change to the path in the cdrom where the Solaris and Linux installation files are available, as follows:

```
cdrom> cd <path name>
```

where:

<path name> Specify the location of the directory where the Solaris and Linux installation files are available.

Path for the Solaris installation files in cdrom is: **`/prime_fulfillment_6_2_FCS/Solaris`**

Path for the Linux installation files in cdrom is:

`/prime_fulfillment_6_2_FCS/Linux`

Step 7 Execute the Prime Fulfillment product installation script as follows

```
./install.sh <directory> <user>
```

where:

<directory> Specify the location of the directory where you want to install Prime Fulfillment. If you are upgrading an existing Prime Fulfillment installation, see the options in this step.

<user> Enter the username you created in [Step 2](#) of the “Initial Configuration—Creating the Prime Fulfillment Owner” section on page 2-2.

For example, `./install.sh /opt/PrimeFulfillment-6-2-cli pkarkera`

You are asked to choose one of the following:

- **Integrate Prime Fulfillment with the IP-NGN Suite-** Prime Fulfillment registers and interacts with the Prime Central server, portal, and other common components.
You will need to provide Prime Central server details during installation.
- **Install Prime Fulfillment as a Standalone application-** Prime Fulfillment installs as a standalone application.

Step 8 If you are upgrading an existing Prime Fulfillment installation, use *one* of the following options to specify the target directory:

- a. (Using GUI) Install this version of Prime Fulfillment into the same directory as the existing Prime Fulfillment product.

For example, if you are upgrading from Prime Fulfillment 6.1 to Prime Fulfillment 6.2 and the existing Prime Fulfillment 6.1 installation is under the directory `/opt/isc-6.1`, then install Prime Fulfillment 6.2 in the same directory using the following steps:

- Invoke the Prime Fulfillment GUI using the command:
./install.sh
- Choose the installation directory as:
/opt/isc-6.1
- Choose the option **Upgrade Existing ISC Repository**
- Choose the **upgradeIscSchema.sh** script path
- Complete the remaining steps using the default values.

-or-

- b. (Using GUI) Install Prime Fulfillment 6.2 in the same directory with a new name.

For example, if you are upgrading from Prime Fulfillment 6.1 to Prime Fulfillment 6.2 and the existing Prime Fulfillment 6.1 installation is under the directory `/opt/isc-6.1`, rename this directory to **/opt/PrimeFulfillment** and then install Prime Fulfillment 6.2 in the same directory using the following steps:

- Invoke the Prime F GUI installation using the command:
./install.sh
- Choose the installation directory as:
/opt/PrimeFulfillment
- Choose the option **Upgrade Existing ISC Repository**
- Choose the **upgradeIscSchema.sh** script path
- Complete the remaining steps using the default values.

-or-

- c. (Using GUI) Install Prime Fulfillment 6.2 in a new directory.

For example, if you are upgrading from Prime Fulfillment 6.1 to Prime Fulfillment 6.2 and the existing Prime Fulfillment 6.1 installation is under the directory `/opt/isc-6.1`, then install Prime Fulfillment 6.2 in a new directory `/opt/PrimeFulfillment`, using the following steps:

- Invoke the Prime Fulfillment GUI using the command:
./install.sh
- Choose the installation directory as:
/opt/isc-6.1
- Choose the option **Upgrade Existing ISC Repository**
- Choose the **upgradeIscSchema.sh** script path
- Complete the remaining steps using the default values.

-or-

- d. (Using the CLI) Install Prime Fulfillment in a new directory.

For example, if you are upgrading from Fulfillment 6.1 to Prime Fulfillment 6.2 and the existing Fulfillment 6.1 installation is under the directory `/opt/isc-6.1`, then install Prime Fulfillment 6.2 in a new directory `/opt/PrimeFulfillment`, with steps like the following:

- Save the Prime Fulfillment 6.1 installation for possible uninstall purposes, as follows:
tar cvf isc-6.1.tar /opt/isc-6.1

- Copy the /opt/isc-6.1/Repository to /opt/PrimeFulfillment directory.
cp -R /opt/isc-6.1/Repository /opt/PrimeFulfillment
- Go to
<Prime Fulfillment installation directory>/upgradeTool/
- Execute the command:
./upgradeIscSchema.sh /opt/PrimeFulfillment
- Provide the default Prime Fulfillment admin username and password.

Step 9 To integrate with the IP-NGN Suite, enter **yes** and press **Enter**.

To install Prime Fulfillment as a standalone application, enter **no** and press **Enter**.

The Prime Fulfillment installation process is initiated

Step 10 (For integration with IP-NGN Suite) Enter each of the following information and press **Enter**:

- Prime Portal Hostname- Hostname of the Prime Central server
- Prime Portal IP Address- IP Address of the Prime Central server
- Prime Suite DB Server IP Address- IP Address of the database server for Prime Central
- Database Username- Database username of the Prime Central server
- Database Password- Database password associated with the above username.
- SID- Server instance identifier of the Prime Central server

Port- Port number of the Prime Central server

The Prime Central server hostname that you enter in this field must match with the certificate generated on Prime Central. To ensure this, use the following steps to obtain the Prime Central server hostname that you can use to generating the right certificate.

- Login to Prime Central and accept all certificates
- If you are using Mozilla Firefox:
 1. Click the icon that looks like a lock and is displayed on the bottom right corner of your browser. A dialog box displays the certificate details.
 2. Click **View Certificate**. A dialog box displays further details about the certificate.
 3. Note down the value specified in the **Common Name (CN)** filed.
 4. Using this value as the Prime Central hostname, follow the steps outlined in the procedure in [Integrating Prime Fulfillment \(Standalone\) with Prime Central \(IP-NGN Suite\)](#), page 2-17 to re-register Prime Fulfillment with the Prime Central server
- If you are using IE:
 1. Go to **View > Security Report**.
 2. Click **View Certificates**.
 3. Note down the value specified in the **Issued to** field.
 4. Using this value as the Prime Central hostname, follow the steps outlined in the procedure in [Integrating Prime Fulfillment \(Standalone\) with Prime Central \(IP-NGN Suite\)](#), page 2-17 to re-register Prime Fulfillment with the Prime Central server

- Step 11** If you upgraded from an existing Prime Fulfillment installation and want to retain the database from that installation, manually copy the database directory to the new installation before running the upgrade tool.
- The directory in which you installed this release contains a directory named Repository that contains an empty repository. Temporarily rename this directory before copying the old repository. For example, you might wish to rename this directory to **Repository.empty**, as follows:

```
mv $PRIMEF_HOME/Repository $PRIMEF_HOME/Repository.empty
```
 - If you installed Prime Fulfillment in a directory that contains an existing version of Prime Fulfillment by following either option [a.](#) or [b.](#) in [Step 7](#), then the existing repository has been renamed to **\$PRIMEF_HOME/Repository.save.<timestamp>**. To restore the original database, enter the following:

```
mv $PRIMEF_HOME/Repository.save.<timestamp> $PRIMEF_HOME.Repository
```
 - If you installed Prime Fulfillment in a new directory, as explained in option [c.](#) of [Step 7](#), copy the Repository directory and its contents from the old Prime Fulfillment installation directory to the new Prime Fulfillment installation directory. For example, if you are upgrading from Prime Fulfillment 6.1 to Prime Fulfillment 6.2, where the old installation directory is **/opt/isc-6.1** and the new installation directory is **/opt/PrimeFulfillment**, enter the following:

```
cp -R /opt/isc-6.1/Repository /opt/PrimeFulfillment/Repository
```
- Step 12** If you have upgraded a previous Prime Fulfillment installation and want to retain the database from this installation, you *must* run the upgrade tool. Run the upgrade tool as explained in the [“Upgrading an Existing Installation to Prime Fulfillment 6.2”](#) section on [page 2-18](#).

Integrating Prime Fulfillment (Standalone) with Prime Central (IP-NGN Suite)

To integrate Prime Fulfillment (standalone installation) with Prime Central (IP-NGN Suite):

- Step 1** Stop Prime Fulfillment.

```
./prime.sh stop
```
- Step 2** Copy the DMIntegrator.sh and DMIntegrator.tar files from **/cdrom/cdrom0/** to the **<Prime Fulfillment installation directory>/prime_integrator** folder on the server. Please ensure that you have executable permissions.
- Step 3** (Optional) If you are logged in as the installation owner, to ensure that the script has executable permissions, you can execute the following commands:
 - `chmod +x DMIntegrator.sh`
 - `chmod 755 DMIntegrator.tar`
- Step 4** Update the **runtime.properties** file with the following values:
 - `suite_mode=1`
 - `portal_hostname=isc-ucs-rhel5-vm01` (use the Prime Central Portal server hostname to which the current Prime Fulfillment installation is being connected).
 - `portal_ipaddress=10.81.81.101` (use the Prime Central Portal server IP Address to which the current Prime Fulfillment installation is being connected).

To locate the Prime Central server hostname (`portal_hostname`) required in this step:

- If you are using Mozilla Firefox:
 1. Click the icon that looks like a lock and is displayed on the bottom right corner of your browser. A dialog box displays the certificate details.
 2. Click **View Certificate**. A dialog box displays further details about the certificate.
 3. Note down the value specified in the **Common Name (CN)** filed.
 4. Using this value in the **portal_hostname** field required in this step.
- If you are using IE:
 1. Go to **View > Security Report**.
 2. Click **View Certificates**.
 3. Note down the value specified in the **Issued to** field.
 4. Using this value in the **portal_hostname** field required in this step.

Step 5 Execute the **DMIntegrator.sh** script in one of the following modes:

- **For Non-Interactive Mode**
`/DMIntegrator.sh [-] <prop_file> <server> <sid> <dbuser> <dbpassword> <port>`
- **For Interactive Mode**
`./DMIntegrator.sh [-i] <prop_file>`
 In this mode, you will be prompted for the above inputs in a sequential manner.

Table 2-1 describes the inputs required when you execute the DMIntegrator.sh script.

Table 2-1 *DMIntegrator.sh Script Argument Descriptions*

Argument	Definition	Sample Input
<prop_file>	Location of the DMIntegrator.prop file. On the Prime Fulfillment server this file will be present in INSTALL_DIR/prime_integrator	INSTALL_DIR/prime_integrator/DMIntegrator.prop
<server>	Hostname of the Prime Central database server.	centralserver.mydomain.com
<sid>	System ID of the Prime Central database server.	orcl
<dbuser>	Username of the Prime Central database server.	primedba
<dbpassword>	Password of the Prime Central database server.	N/A
<dbport>	Port number of the Prime Central database server.	1521

Upgrading an Existing Installation to Prime Fulfillment 6.2

If you want to migrate from an existing installation to Prime Fulfillment 6.2, your upgrade path depends on which release you are upgrading from. This process is described in the following.

This section contains the following:

- [Table 2-1 Upgrade Matrix, page 2-19](#)
- [Locating the Cisco Prime Fulfillment 6.2 Upgrade Tool, page 2-19](#)
- [Using the Repository Upgrade Tool, page 2-20](#)

Upgrade Matrix

The various possible upgrade paths are described in [Table 2-2](#).

Table 2-2 Upgrade Path to Prime Fulfillment 6.2

Procedure	Current ISC Version	Steps to Upgrade to Prime Fulfillment 6.2 (run in order stated)	Supported Oracle Database	Supported OS
—	Prior to 4.2.5	E-mail isc-mktg@cisco.com for upgrade instructions	—	—
Direct	4.2.5	<Prime Fulfillment installation directory>/upgradeTool	Enterprise Oracle 11G 11.2.0.1.0	Solaris 10 and Linux (Red Hat)
Direct	5.0.1	<Prime Fulfillment installation directory>/upgradeTool	Enterprise Oracle 11G 11.2.0.1.0	Solaris 10 and Linux (Red Hat)
Direct	5.1.1	<Prime Fulfillment installation directory>/upgradeTool	Enterprise Oracle 11G 11.2.0.1.0	Solaris 10 and Linux (Red Hat)
Direct	5.2.2	<Prime Fulfillment installation directory>/upgradeTool	Enterprise Oracle 11G 11.2.0.1.0	Solaris 10 and Linux (Red Hat)
Direct	6.0.1	<Prime Fulfillment installation directory>/upgradeTool	Enterprise Oracle 11G 11.2.0.1.0	Solaris 10 and Linux (Red Hat)
Direct	6.1.1	<Prime Fulfillment installation directory>/upgradeTool	Enterprise Oracle 11G 11.2.0.1.0	Solaris 10 and Linux (Red Hat)

If you have an existing ISC repository, you *must* upgrade it to be able to use it with Prime Fulfillment 6.2, using the upgrade tool as stated in [Table 2-2](#).



Note

Understand that the only Sybase version to which you can upgrade is the embedded Sybase ASA, 11.0.1. Also, understand that Oracle testing of Prime Fulfillment 6.2 has been done with Oracle Database 11g, Enterprise Edition Release 11.2.0.1.0 - 64 bit Production. If you would like to use another version of Oracle 11g, see Oracle's compatibility information.

Locating the Cisco Prime Fulfillment 6.2 Upgrade Tool

The location for Cisco Prime Fulfillment 6.2 upgrade tool can be accessed from the directory structure <Prime Fulfillment installer directory>/upgradetool after the successful installation of Prime Fulfillment 6.1 (Prime Fulfillment 6.1 Upgrade Tool used as an example):

/cdrom/cdrom0/<Prime Installation directory>/upgradeTool

Using the Repository Upgrade Tool

The upgrade procedure steps for the repository from earlier version to Prime Fulfillment 6.2 remains the same for both Sybase and Oracle repositories.



Note

Before you upgrade your repository, you *must* have followed the steps in the “[Installing Prime Fulfillment](#)” section on page 2-2. You *must* have backed up your database, as explained in [Step 5](#), and you *must* have followed all the steps and reached this section from [Step 40](#). A repository can be upgraded only once. If there is any problem during upgrade, a new copy of the backed up repository is needed for subsequent upgrade attempts.



Note

See [Appendix D, “Backup and Restore of Prime Fulfillment Repository and Standby System,”](#) before upgrading your repository.

Upgrade your repository as follows (using the Prime Fulfillment 6.2 Upgrade Tool as an example):

-
- Step 1** Get the upgrade package `<Prime Installation directory>/upgradeTool` from your CD-ROM: `/cdrom/cdrom0/<Prime Installation directory>/upgradeTool` and place it on the Prime Fulfillment Master machine in a directory where you can access the Prime Fulfillment environment.
- Step 2** Stop Prime Fulfillment.
`./prime.sh stop`
- Step 3** Run the upgrade script.
`cd upgradeTool`
`./upgradeISCSchema.sh <Prime Fulfillment home>`
where: `<Prime Fulfillment home>` is the full pathname of the Prime Fulfillment home directory.
- Step 4** Check for a success or error message.



Note

After upgrading between Prime Fulfillment versions, you should ensure that the cache of the Prime Fulfillment client browser has been cleared or that your browser does not use the cache. This will ensure the latest Prime Fulfillment images and pages are returned.

-
- Step 5** Proceed to [Step 41](#) in the “[Installing Prime Fulfillment Using the Graphical User Interface](#)” section.
-

Restoring Your Sybase Repository to a New Server

If you are restoring your Sybase repository from your original server to a new server, you must first do the following:

-
- Step 1** Run the Prime Fulfillment command `./prime.sh stop`
- Step 2** `cd /var/tmp` and remove (or save, if needed) all the files under these directories.

- Step 3** Back up the `$PRIMEF_HOME/Repository` on the new server, using the command:
`mv Repository Repository.bkp`
- Step 4** Run the Prime Fulfillment command **`./prime.sh stop`**.
- Step 5** **`cd $PRIMEF_HOME/Repository`**
- Step 6** Copy the Repository directory from the original server onto the Prime Fulfillment repository on the new server. You can tar up the full Repository directory and untar in the same location on the new server.
- Step 7** On the new server, run the Prime Fulfillment command **`./prime.sh startdb`** as the Prime Fulfillment installation owner.
- Step 8** Run the Prime Fulfillment command **`./prime.sh initdb.sh`** as the Prime Fulfillment installation owner.
- Step 9** Run the Prime Fulfillment command **`./prime.sh startwd`** as the Prime Fulfillment installation owner.

Configuring HTTPS

To configure the secure web access to Prime Fulfillment, set up the Hypertext Transfer Protocol (HTTP) Over Secure Socket Layer (SSL) (HTTPS) port, as follows:



Note

If you configure HTTPS, it does not disable HTTP. If you want to only allow HTTPS, then you need to block HTTP (default port: 8030) by a firewall.

- Step 1** Run the command: **`configSecurePort.sh <PRIMEF_home> <https_port> <hostname>`**
where:
`<PRIMEF_home>` is the home directory for Prime Fulfillment, for example: **`/opt/PrimeFulfillment`**
`<https_port>` is the secure HTTPS port you want to use, for example: **8443**.
`<hostname>` is the name of the machine that Prime Fulfillment is installed on, for example:
`machinename.cisco.com`
- Step 2** If this is the first time you are logging into Prime Fulfillment, you will need to accept the self-signed, untrusted security certificates.
- Step 3** If you are using Internet Explorer, accepting the security certificates is not sufficient. You need to place them in the Trusted Certificate store to ensure that the security notifications do not pop up during every login.
- Step 4** To place certificates in the Trusted Certificate store:
- Enter the Prime Fulfillment URL in your browser. A security warning is displayed with the message "There is a problem with this website's security certificate, choose Continue to this website (not recommended)."
 - Click **Continue**. This redirects you to the Prime Fulfillment Login page
 - Click **Certificate Error** displayed next to the address bar.
 - Click **View certificates**.
 - Click **Install Certificate**.
 - Click **Next** in the Certificate Import Wizard.
 - Select **Place all certificates in the following store**.

- h. Click **Browse** and then click **Trusted Root Certification Authorities**, and click **OK**.
- i. Click **Next** in this wizard until you reach the last screen.
- j. Click **Finish**.
- k. If you get another Security Warning message box, click **Yes**.
- l. Click **OK**.

**Note**

If you specify an IP address instead of a hostname, you must then use this IP address for all HTTPS sessions. If you attempt to use the hostname after configuring with an IP address, you will receive hostname mismatch warnings and might see unexpected behavior while using Prime Fulfillment.

Logging In for the First Time

To log into Prime Fulfillment for the first time, follow these steps:

- Step 1** In the browser, enter the following URL:

`http://server:port/isc/`

**Note**

If you are using HTTP, the default for *server:port* is **<HOSTNAME>:8030**.

If you are using secure HTTPS access, as explained in the [“Configuring HTTPS” section on page 2-21](#), enter `https://server:port/isc/` instead. The default for *server:port* in this case is **<HOSTNAME>:8443**.

In both of the above cases: **<HOSTNAME>** is the UNIX workstation name (or IP address) of the server to which you installed Prime Fulfillment.

See the [“Installing Prime Fulfillment” section on page 2-2](#) for information about the installation log.

- Step 2** Enter the default administrative login name, **admin**, and password, **cisco**, then click **Login**.

This default user provides administrative access to Prime Fulfillment. You cannot delete this user.

- Step 3** We highly recommend you change the password for **admin** from **cisco** to something secure for you. To do this, click the **Administration** tab, then click **Security**, then click **Users**. Select the **admin** check box and then click **Edit**.

The window appears which allows you to change the password and other details.

- Step 4** Enter the **Security** and **Personal Information**, then click **Save**.

Installing License Keys

To install license keys, do the following:

**Note**

For detailed instructions, see the Licensing section in the [Cisco Prime Fulfillment User Guide 6.2](#).

-
- Step 1** From the **Home** page of the installed Prime Fulfillment product, navigate as follows: **Administration > Control Center > Licensing**.
- Step 2** From the **Installed Licenses** table, click **Install**.
- Step 3** In the resulting window, enter a **License Key** that you received on your *Right to Use* paperwork with your product.
- Step 4** Click **Save**. Your newly installed license appears in an updated version of the Installed Licenses table.
- Step 5** Repeat [Step 2](#), [Step 3](#), and [Step 4](#) for each of the *Right to Use* documents shipped with your product.
-

Launching Topology Tool

Prime Fulfillment provides a downloadable version of Version 1.6.0_07 of Java Runtime Environment (JRE) for various operating systems when you launch the Topology Tool. Ensure that your client machine is configured to use this version of the JRE for launching Java applications and Applets. This can be done via Java's Control Panel.

Specific instructions to launch the Topology Tool are explained in the [Cisco Prime Fulfillment User Guide 6.2](#).

Uninstalling Prime Fulfillment

**Note**

It is advised to uninstall using the same user who performed the installation of Prime Fulfillment.

If you attempt to uninstall Prime Fulfillment as **root**, but **root** is not the Prime Fulfillment owner, if you attempt to use the **./prime.sh stop** command to halt all Prime Fulfillment processes, the processes will remain running. If you did not install as **root**, use the **./prime.sh stop** command before following the next steps, but be sure to execute **./prime.sh stop** *only* as the Prime Fulfillment owner.

If you installed as **root**, files were created to automatically restart Prime Fulfillment when rebooting the server. To remove these files, uninstall Prime Fulfillment as **root**.

Next, uninstall the server, as follows:

-
- Step 1** Log into the server.
- Step 2** At the Solaris prompt, log in as the identified UNIX user.
- Step 3** Go to the Prime Fulfillment installation directory.
- Step 4** Remove Prime Fulfillment by entering the following command from a location outside the *<PRIMEF_HOME directory>*:
- ```
<PRIMEF_HOME directory>/bin/uninstall.sh
```

This command removes all files from the installation directory. This command also removes the database and its contents. Database backups are not removed if they reside in a different directory from the installation directory.

---