Installing Cisco SPA

This chapter contains the following topics:

About Prerequisites for Installing Cisco SPA

Before you install Cisco SPA, check that the Cisco BTScis package is installed on both the Cisco BTS 10200 EMS primary and secondary servers. Refer to the *Cisco BTS 10200 Softswitch Application Installation*.

You can also check if the CORBA application is running on the Cisco BTS 10200 EMS servers as described in the *Cisco BTS 10200 Softswitch Application Installation*.

About Installing Cisco SPA Packages

The Cisco SPA product consists of these packages that are installed during the installation process:

- CSCOspa—Cisco SPA application base package
- CSCOspaJV—Cisco SPA Java package
- CSCOspaTC—Cisco SPA Tomcat server package
- CSCOspaDB—Cisco SPA database package
- CSCOspaNM—Cisco SPA SNMP package

Installing Cisco SPA

Note Install Cisco SPA on a separate server from that on which the Cisco BTS EMS server software is installed. Cisco Systems does not support the Cisco SPA application installed on the Cisco BTS EMS server or Call Agent server.

Step 1 Log in as the root user.

Step 2 Download the SPA_K9_<*release*>.tar.gz image from Cisco.com.

Step 3 To uncompress and untar the Cisco SPA image, enter:

```
gunzip SPA_K9_<release>.tar.gz
tar -xvf SPA_K9_<release>.tar
```

Step 4 Enter this command:

```
./install.sh
```

The working Cisco SPA image is installed in the /opt/SPA directory.

Note If you already have Cisco SPA installed and are installing the same version again, the following messages appear:

Previous installed 1.x(x) data will be used with this installation.
Continue installation of 1.x(y)? [n] [y,n,?,q]

Where,

n—Terminates the installation (default).
y—Proceeds with the installation.
?—Explains the responses to this query.
q—Terminates the installation.

Step 5 Specify a Cisco SPA user ID and group ID:

```
SPAUSR ID [70001]
SPA GID [70001]
```

The default IDs are shown in brackets; press **Enter** to accept the defaults.

As the installation proceeds, the following status messages may appear:

- Directory in which the package will be installed.
- Package and system processing information.
- Number of package pathnames that are installed.
- Diskspace verification.
- Checking for conflicts with installed packages.

As each package is installed, a completion message appears:

```
Installation of <package name> was successful.
```

When all the packages are installed, a final status message appears:

```
SPA installed successfully.
```

Note After you install Cisco SPA, check that the Cisco BTS EMS host name (as defined on the Cisco BTS EMS host) is also defined in the /etc/hosts file on the Cisco SPA server.

After you have installed Cisco SPA, configure the product as described in Chapter 4, "Operating and Configuring Cisco SPA."

About Uninstalling Cisco SPA Packages

The following packages are uninstalled during the Cisco SPA uninstallation process:

- CSCOspaNM—Cisco SPA SNMP package
- CSCOspaDB—Cisco SPA database package
- CSCOspaTC—Cisco SPA Tomcat server package
- CSCOspaJV—Cisco SPA Java package
- CSCOspa—Cisco SPA application base package

For details, see the "Uninstalling Cisco SPA" section on page 3-3.

Uninstalling Cisco SPA

Step 1 Log in to the Cisco SPA server as spausr (see the "Starting and Stopping Cisco SPA" section on page 4-1).

Step 2 Stop Cisco SPA operation.

Step 3 Log in as the root user.

Step 4 Check that you are in the directory where the uninstall script is located.

Step 5 Run the uninstallation script by entering:

```
./uninstall.sh
```

Step 6 Enter a response to the uninstallation query:

```
Do you want to uninstall Cisco SPA? [n] [y,n,?,q]
```

Where,

n—Terminates the installation (default).
y—Proceeds with the installation.
?—Explains the responses to this query.
q—Terminates the installation.

As the uninstallation proceeds, the following status messages may appear:

- Package dependency verification
- Package processing information
- Preremove script execution

- Stopping and restoring agents
- Removing pathnames
- Updating system information

As each package is uninstalled, a completion message appears:

```
Removal of <package name> was successful.
```

When all the packages are uninstalled, a final status message appears:

```
Removing group spagrp

Removing user spausr

SPA uninstalled successfully.
```

About Cisco SPA Upgrades and Downgrades

Note Back up your data before upgrading or downgrading Cisco SPA. Database backup procedures are described in the "Using the Backup and Restore Tab" section on page 4-5.

When you upgrade to a later version of Cisco SPA, two versions of data are saved. The saved versions are the current data and the version that was created immediately before the current one.

The following table shows the various datasets that are preserved through upgrades and downgrades of Cisco SPA. Three versions of software that are shown in the table are 1.x, 1.y, and 1.z; the three sets of data are x, y, and z.

Install	Uninstall	Current Dataset	Previous Dataset
1.x		x	
	1.x	x	
1.y		y	x
	1.y	y	x
1.z		z	y
	1.z	z	y
1.x		x	y
	1.x	x	y
1.y		y	x

Cisco SPA informs you if there is data that can be reused with your upgrade or downgrade.

Upgrading Cisco SPA

This procedure consists of the following tasks:

Note Install Cisco SPA on a separate server from that on which the Cisco BTS EMS Server software is installed. Cisco Systems does not support the Cisco SPA application installed on the Cisco BTS EMS Server or Call Agent server.

Task 1: Downloading the New Cisco SPA Image

Step 1 Log in to the Cisco SPA server as the root user.

Step 2 Download the SPA_K9_<*release*>.tar.gz image from Cisco.com.

Step 3 To uncompress and untar the Cisco SPA image, enter:

```
gunzip SPA_K9_<release>.tar.gz
tar -xvf SPA_K9_<release>.tar
```

Task 2: Stopping Cisco SPA Operation

Step 1 Log in to the Cisco SPA server as spausr (see the "Starting and Stopping Cisco SPA" section on page 4-1).

Step 2 From the Cisco SPA operation and configuration tool, stop Cisco SPA operation.

Task 3: Uninstalling the Old Cisco SPA Image

Step 1 Log in to the Cisco SPA server as the root user.

Step 2 Check that you are in the directory where the uninstall script is located.

Step 3 Run the uninstallation script by entering:

```
./uninstall.sh
```

For details, see the "Uninstalling Cisco SPA" section on page 3-3.

Task 4: Installing the New Cisco SPA Image

Step 1 Install the new image by entering:

```
./install.sh
```

The working Cisco SPA image is installed in the /opt/SPA directory.

Step 2 The following upgrade messages appear:

```
Upgrade Installation from 1.x(x) to 1.y(y).
Previously installed 1.x(x) data will be used or migrated with this installation.
Continue Installation of 1.y(y)? [n] [y,n,?,q]
```

Where,

n—Terminates the installation (default).
y—Proceeds with the installation.
?—Explains the responses to this query.
q—Terminates the installation.

Step 3 Specify a Cisco SPA user ID and group ID:

```
SPAUSR ID [70001]
SPA GID [70001]
```

The default IDs are shown in brackets; press **Enter** to accept the defaults.

As each package is installed, a status message appears:

```
Installation of <package name> was successful.
```

When all the packages are installed, a final status message appears:

```
SPA installed successfully.
```

Task 5: Starting Cisco SPA Operation

Step 1 Log in as spausr (see the"Starting the Cisco SPA Operation and Configuration Tool" section on page 4-2).

Note The spausr is deleted and recreated during a Cisco SPA upgrade. Consequently, you must reset the password.

Step 2 From the Cisco SPA operation and configuration tool, start Cisco SPA operation (see the "Starting and Stopping Cisco SPA" section on page 4-1).

Note After you install Cisco SPA, check that the Cisco BTS EMS host name (as defined on the Cisco BTS EMS host) is also defined in the /etc/hosts file on the Cisco SPA server.

After you have installed Cisco SPA, configure the product as described in Chapter 4, "Operating and Configuring Cisco SPA."

Downgrading Cisco SPA

This procedure consists of the following tasks:

- Task 1: Downloading a Previous Cisco SPA Image, page 3-7
- Task 2: Stopping Cisco SPA Operation, page 3-7
- Task 3: Uninstalling the Current Cisco SPA Image, page 3-7
- Task 4: Installing the Downloaded Cisco SPA Image, page 3-8
- Task 5: Starting Cisco SPA Operation, page 3-8

Note Install Cisco SPA on a separate server from that on which the Cisco BTS EMS Server software is installed. Cisco Systems does not support the Cisco SPA application installed on the Cisco BTS EMS Server or Call Agent server.

Task 1: Downloading a Previous Cisco SPA Image

Step 1 Log in to the Cisco SPA server as the root user.

Step 2 Download the SPA_K9_<*release*>.tar.gz image from Cisco.com.

Step 3 To uncompress and untar the Cisco SPA image, enter:

```
gunzip SPA_K9_<release>.tar.gz
tar -xvf SPA_K9_<release>.tar
```

Task 2: Stopping Cisco SPA Operation

Step 1 Log in to the Cisco SPA server as spausr (see the "Starting and Stopping Cisco SPA" section on page 4-1).

Step 2 From the Cisco SPA operation and configuration tool, stop Cisco SPA operation.

Task 3: Uninstalling the Current Cisco SPA Image

Step 1 Log in to the Cisco SPA server as the root user.

Step 2 Check that you are in the directory where the uninstall script is located.

Step 3 Run the uninstallation script by entering:

```
./uninstall.sh
```

For details, see the "Uninstalling Cisco SPA" section on page 3-3.

Task 4: Installing the Downloaded Cisco SPA Image

Step 1 Install the downloaded image by entering:

```
./install.sh
```

The working Cisco SPA image is installed in the /opt/SPA directory.

Step 2 If Cisco SPA has saved data that can be used with the downgrade, these messages appear:

```
Downgrade Installation from 1.y(y) to 1.x(x).
Previously installed 1.x(x) data will be used or migrated with this installation.
Version 1.y(y) data will be lost with this installation.
Continue Installation of 1.y(y)? [n] [y,n,?,q]
```

If Cisco SPA has not saved data that can be used with the downgrade, these messages appear:

```
Downgrade Installation from 1.z(z) to 1.x(x).
Version 1.z(z) data will be lost with this installation.
Continue Installation of 1.x(x)? [n] [y,n,?,q]
```

Where,

n—Terminates the installation (default).
y—Proceeds with the installation.
?—Explains the responses to this query.
q—Terminates the installation.

Step 3 Specify a Cisco SPA user ID and group ID:

```
SPAUSR ID [70001]
SPA GID [70001]
```

The default IDs are shown in brackets; press **Enter** to accept the defaults.

As each package is installed, a status message appears:

```
Installation of <package name> was successful.
```

When all the packages are installed, a final status message appears:

```
SPA installed successfully.
```

Task 5: Starting Cisco SPA Operation

Step 1 Log in as spausr (see the"Starting the Cisco SPA Operation and Configuration Tool" section on page 4-2).

Note The spausr is deleted and recreated during a Cisco SPA downgrade. Consequently, you must reset the password.

Step 2 From the Cisco SPA operation and configuration tool, start Cisco SPA operation (see the "Starting and Stopping Cisco SPA" section on page 4-1).

Note After you install Cisco SPA, check that the Cisco BTS EMS host name (as defined on the Cisco BTS EMS host) is also defined in the /etc/hosts file on the Cisco SPA server.

After you have installed Cisco SPA, configure the product as described in Chapter 4, "Operating and Configuring Cisco SPA."