

Gaia

R75

Installation and Upgrade Guide

Early Availability

27 October 2011



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Chapter 1

Clean Gaia Installation on an Open Server

This section shows how to do a clean installation of Gaia as a Security Gateway and/or Security Management server.

To do a fresh installation of Gaia using the DVD:

1. Put the Gaia DVD into the drive.
2. Boot the computer from the DVD.
3. When the boot screen shows, press **Enter** to continue.
You must press **Enter** in 90 seconds, or the computer will try to boot from the hard drive.
4. Follow the instructions to install Gaia.

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Chapter 2

Installing Gaia on an IP Appliance

Mount the Gaia ISO image on a Linux-based FTP Server

1. Upload the Gaia ISO file to an FTP server

2. On a Linux-based FTP server, run:

```
mount -o loop -t iso9660 <ISO_filename> <mounting_destination_dir>
```

Do a clean installation of Gaia on an IP Appliance with IPSO.

1. Use ftp to download the Gaia boot manager file `install_gaiabootmgr` to the IP Appliance. Be sure to download from the ftp server as a binary file.

2. Run `chmod +x install_gaiabootmgr`

3. Verify that the boot manager is located in the logical drive `ad0` by running the command `ipsctl -a | grep CF`

The output will be similar to

```
hw:disk:ad:0:location = InternalCF
hw:disk:ad:0:type = CF-INTERNAL-IDE
```

4. Install the boot manager by running

```
./install_gaiabootmgr /dev/ad0
```

The boot manager is installed.

```
Installing bootmgr Version IP-Series-BM-GAIA81_B730174012-2011.08.22-115338
on /dev/ad0
```

```
Warning: Installer will partition and install the bootmanager image on
/dev/ad0
```

```
Do you want to continue? [yes/no]
```

5. Type `y`

```
Installing image...
```

```
Installation of image IP-Series-BM-GAIA81_B730174012-2011.08.22-115338 done.
Please reboot the system to proceed with gaia installation.
```

6. Reboot the IP Appliance.

The appliance boots into the Gaia boot manager. You will see the prompt:

```
BOOTMGR[1]>
```

7. Run the command

```
install
```

8. Supply the IP settings of the IP Appliance

In this example output the FTP server is in the same subnet as the IP Appliance, so there is no default gateway:

```
Enter IP address of this client (): 192.0.2.10
```

```
Enter Netmask length of this client (24):
```

```
Do you want to enter default gateway ? [y/n] () n
```

9. Choose the interface that is connected to the FTP server

```
Choose an interface:
```

```
1) eth1
```

```
2) eth2
```

```
3) eth3
```

```
4) eth4
```

```
Enter a number [1-4]: 1
```

10. Supply the FTP server details

```
Enter IP address of FTP server (): 192.0.2.2
Enter user name (admin): root
Enter password for "root":
Enter Directory on the FTP server (): <mounting_destination_dir>
```

11. Specify the type of IP appliance: Disk-based or diskless:

```
Diskless Install (No):
```

- For a diskless appliance, choose Yes
- For a disk-based appliance, choose No

12. Confirm your selections:

```
Network Interface      = eth1
Client IP address      = 192.0.2.10
Client Netmask length  = 24
FTP Server IP address  = 192.0.2.2
FTP user               = root
FTP Directory          = <mounting_destination_dir>
Diskless Install       = No
Are these values correct ? [y/n] (y)
```

```
##### Network Installation #####
Ensure you have backed-up all required data onto a remote machine.
This process will DESTROY any existing files and data on your disk(s).
#####
Continue? (y/n) [n]y
```

13. When the installation has finished, you will see the Gaia prompt.

14. Connect to the WebUI. Browse to

```
https://<IP Appliance IP Address>
```

15. Run the First Time Configuration Wizard.

Congratulations. Gaia is installed on the IP Appliance.

Chapter 3

Upgrading from SecurePlatform to Gaia

This section explains how to upgrade an open server, an appliance, or a ClusterXL gateway cluster from SecurePlatform to Gaia. The Security Gateway and/or the Security Management server on the appliance is upgraded to R75.

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Upgrading an Open Server

To upgrade an open server using the DVD:

1. Do these steps to upgrade your product licenses to R75 or higher:
 - a) Upgrade the licenses.
 - b) Attach the licenses to the Security Gateway or standalone Gateway.
2. Connect a DVD drive to the USB port on the computer.
3. On non-Windows platforms, run:

```
patch add cd
```
4. Select the applicable upgrade option.
5. After the upgrade, remove the DVD from the drive.
6. Reboot.
7. Install a policy:
 - a) Using SmartDashboard of the correct version, connect to the Security Management server.
 - b) Open the **General Properties** page of the Gaia Gateway object.
 - c) Click **Get** to update the **Platform** details.
 - d) Install the policy on the Gaia Gateway.

Upgrading an Appliance

To upgrade a SecurePlatform appliance:

1. Do these steps to upgrade your product licenses to R75 or higher:
 - a) Upgrade the licenses.
 - b) Attach the licenses to the Security Gateway or standalone Gateway.
2. Obtain the appliance upgrade package. The package name is (or is similar to) `splatform_upg_gaia_ea2.tgz`

3. Connect to the SecurePlatform appliance from a Web browser to `https://<appliance_ip_address>`.
4. In the login page, enter an administrator username and password.
5. Go to the **Upgrade** page.
6. Upload the appliance upgrade package to the appliance.
7. Ignore any warning messages.
8. Continue according to the on-screen instructions.
After the upgrade is complete, the appliance boots to Gaia.
9. Install a policy:
 - a) Using SmartDashboard of the correct version, connect to the Security Management server.
 - b) Open the **General Properties** page of the Gaia Gateway object.
 - c) Click **Get** to update the **Platform** details.
 - d) Install the policy on the Gaia Gateway.

Upgrading a ClusterXL gateway Cluster

In this procedure, the gateway cluster has an active member (A), and two backup members (B and C). First upgrade B and C, and then upgrade A.

To do a zero down-time upgrade of a ClusterXL gateway cluster:

1. Upgrade the backup members (B and C). See [Upgrading an Open Server from SecurePlatform to Gaia](#) ("[Upgrading an Open Server](#)" on page 7) or [Upgrading an Appliance from SecurePlatform to Gaia](#) ("[Upgrading an Appliance](#)" on page 7).
2. Verify the active member (A) is Active, and the B and C are Ready: On each member, run the command `cphaprob stat`.
3. Transfer traffic to members B and C by stopping traffic on A. On A, run `cphastop`
4. Upgrade member A, as above.
5. Install the policy on A.

Advanced Upgrade of a Standalone Deployment

This section shows the procedure for an advanced upgrade of a standalone deployment from SecurePlatform to Gaia.

Using advanced upgrade, you install R75 on Gaia on a different computer than the one you want to upgrade. This is typically a clean installation, but you can also use another existing server. You then migrate the management databases from the existing (**source**) computer to the new (**target**) computer using the `migrate` command or the installation DVD.

You can do an advanced upgrade on primary and secondary Security Management servers. Advanced upgrade has these advantages:

- Prevents unnecessary down time during the upgrade.
- Lets you test the new version before you use it.
- Lets you move your Security Management server to a different platform.



Important - The source and target computers must have exactly the same products and features installed.

Upgrade Workflow

The Advanced Upgrade workflow is as follows:



Before Upgrading

- Before upgrading your Security Management server, you must install R75 on Gaia on the target computer.
- Make sure that your upgrade path is supported. Refer to the *Gaia Release Notes*.

Getting the Migration Tools

To get the R75 for Gaia migration tool:

- Download the R75 **migration tool** for Gaia from the Support Center (<https://support.checkpoint.com>). This is the best way to make sure that you get the most recent version.

OR

- Copy the `$FWDIR/bin/upgrade_tools` directory from the **target** computer. You need to install R75 for Gaia on the target machine before doing this.

The migration tool files are contained in a compressed package. The files are:

- `migrate`
- `migrate_conf`

- `upgrade_export`
- `upgrade_import`

Procedures on the Source Computer

Preparing the Source For Export

1. Copy the migration tools files to the source computer. Use FTP, SCP or similar.



Note:

- Copy the migration tools to a temporary directory, such as `/var/tmp`.
 - Do not overwrite existing tools.
2. Make sure the files have executable permissions. For example, In the temporary directory, run `chmod 777 *`
 3. Run `fw logswitch` to close the SmartView Tracker log files (optional).
 4. Close all SmartConsole applications on GUI clients. Alternatively, you can run the `cpstop` command on the source computer (Do not do this for standalone deployments).



Important - If you don't close the GUI clients or run `cpstop`, the exported database can become corrupted.

Now, create the database export file.

To create a database export file on the source computer:

1. Run: `./migrate export <new database name>.tgz`.
2. Do the instructions shown on the screen. This creates the `<new database name>.tgz` file.
3. Move the database export `tgz` file to a safe, temporary location on another computer. Use FTP, SCP or similar. If you can move it directly to the target computer, place the database file in a temporary directory on the target.

Procedures on the Target Computer

1. Install R75 Gaia Security Management Server or a standalone deployment on the target computer ("[Clean Gaia Installation on an Open Server](#)" on page 4). Configure as required.
2. Get the R75 migration tool for Gaia. Use the migration tool you downloaded from the Support Center, or use the tools in the `$FWDIR/bin/upgrade_tools` directory of the target computer.
3. Import the `<database file name>.tgz` file from the source computer to the target:
 - a) Connect to the target using a secure console connection, such as `ssh`.
 - b) Authenticate with the administrator username and password.
 - c) Log in to the shell: Run `shell`.
 - d) Move the database `tgz` file from the source computer to a temporary directory on the target computer. You can use `ftp` to move the file.
 - e) Run: `cd <path to temporary directory>`.
 - f) Run: `./migrate import <new database name>.tgz`.
 - g) Do the instructions on the screen to import the databases.

Testing the Target and Connecting to the Network

1. Test the target `<t_gaia>` installation:
 - a) Connect to the Security Management server using the R75 SmartDashboard.
 - b) In SmartDashboard, edit the target object.
 - c) In the **General Properties** page, click **Get**.



Note - The **OS** is shown as **SecurePlatform**. This is correct for Early Availability.

- d) Install a policy.
2. Disconnect the source computer from the network.
3. Connect the target computer to the network.

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Chapter 4

Upgrading from IPSO to Gaia

This chapter explains how to upgrade an IP Appliance from IPSO to Gaia. The Security Gateway and/or the Security Management server on the IP Appliance is upgraded to R75.

This chapter also explains how to do a rollback from Gaia to IPSO.

In This Chapter

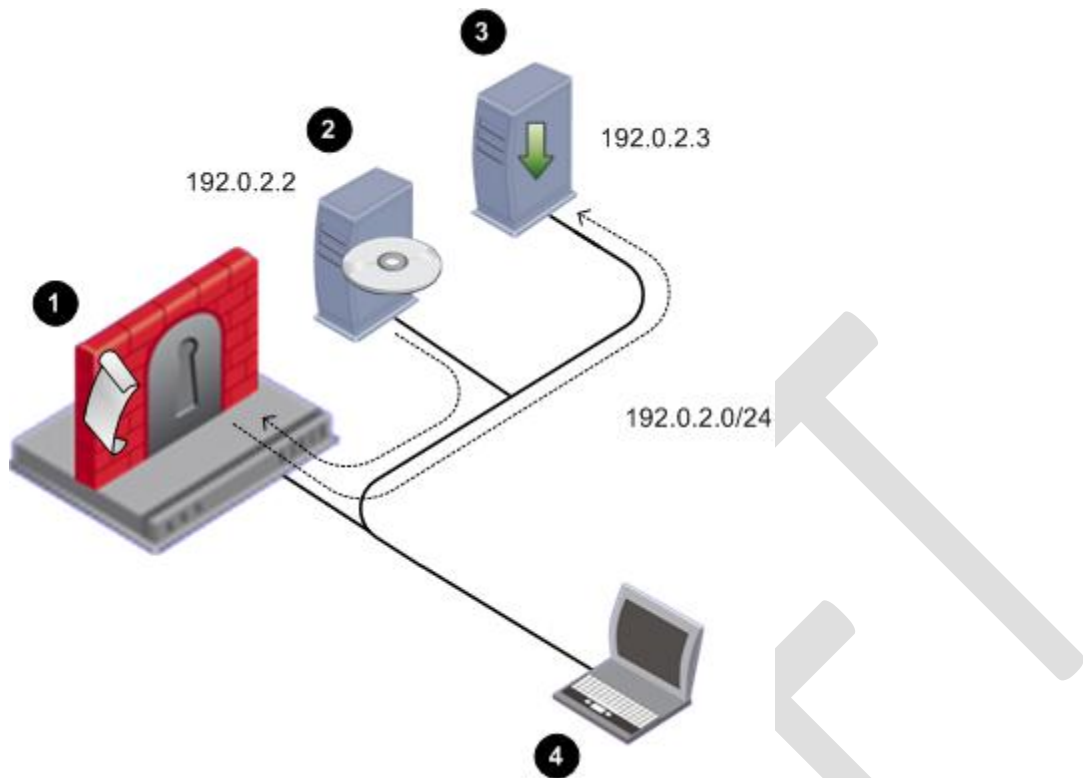
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Supported IPSO to Gaia Upgrade Path

Upgrade to Gaia with R75 is supported from IPSO 6.2 with version R70 and higher.

Preparing for the Upgrade

Set up the upgrade environment.



| Key | |
|-----|---|
| 1 | IP Appliance with <ul style="list-style-type: none">• IPSO with a Security Gateway and/or the Security Management server• IPSO to Gaia upgrade package. |
| 2 | FTP Server with a Gaia ISO image mounted. The ISO is copied to the IP Appliance as part of the upgrade process. In this example, the FTP Server is at 192.0.2.2. |
| 3 | FTP Server used as a location for <ul style="list-style-type: none">• Backup of IPSO and the Security Gateway configuration. (Optional, recommended)• Special upgrade package that can be used by SmartUpdate to upgrade multiple Security Gateways. This package is created using the answers supplied when running the upgrade package. (Optional) You can use the same FTP server as for the Gaia ISO, or a different one. In this example, the FTP Server is at 192.0.2.3. |
| 4 | Computer with console access to the IP appliance and to the FTP server(s). Console access is recommended because it allows you to keep the connection to the IP Appliance throughout the upgrade. If you connect via ssh you lose the connection after the IP Appliance does a reboot, and you will not be able to track the upgrade progress. |

IPSO to Gaia Upgrade Procedure Overview



Important - Read this section carefully. It explains the upgrade procedure.

Step 1: Get the IPSO to Gaia upgrade package and the Gaia ISO image.

Step 2: Mount the Gaia ISO on an FTP server

Step 3: Install the upgrade package on the IP Appliance using Network Voyager or `clish`.

Step 4: Run the upgrade package script, and supply information about the location of the Gaia ISO image.

Step 5: Optional, but recommended: Supply information about an FTP server to be used as a backup location for the IPSO system and configuration. You can use the backup to revert to the pre-upgrade configuration. The backup results in two tgz files, for:

- IPSO. A Security Management server backup includes the:
 - Configuration database.
 - Configuration files.
 - User directories.
 - Log files.
- Check Point Security Gateway and/or Security Management server.

Step 6: Optional: Supply information about creating a customized IPSO to Gaia upgrade package which can be used to upgrade multiple Security Gateways or Security Management servers without having to answer any questions. You can also use the special upgrade package as a SmartUpdate upgrade package for gateways. The procedure is:

- Upgrade one Security Gateway using the standard IPSO to Gaia upgrade package. Supply the required information to create the special upgrade package.
- Upgrade all your other Security Gateways simultaneously using the special upgrade package, without supplying any information. All IP Appliances must be able to access the same ftp servers as the first Security Gateway.

Step 7: Confirm your selections

Step 8: The upgrade package script now operates automatically:

- a) If you chose to make a backup package: Copies the backup tarballs from the IP Appliance to the FTP server.
- b) If you chose to make a customized upgrade package: Copies the package from the IP Appliance to the FTP server.
- c) Copies the Gaia image from the FTP server to the IP Appliance.
- d) Installs the Gaia image.
- e) Installs the Gaia boot manager.
- f) Reboots the IP Appliance.

At this point you will see the Gaia prompt on the IP Appliance

Step 9: Make sure that the upgrade succeeded.

Step 1: Getting the Upgrade Package and the Gaia Image

1. Download the Gaia installation package for IP Appliance from the Check Point Support Center (<http://supportcenter.checkpoint.com>).

You will see two packages:

- Gaia ISO image
- IPSO to Gaia upgrade package. The file name is `<upgrade_package_name>.tgz`.
For example `CP-IPSO2GaiaUpgrade-1.4-1.tgz`

2. Prepare the upgrade package:

EITHER: Copy the upgrade package to an FTP server, in a directory of your choice.

OR: Transfer the upgrade package by FTP to the home directory on the IP Appliance, or to some other location.

Step 2: Mounting Gaia ISO on an FTP Server

Mount Gaia ISO Image on a Linux-based FTP server:

1. Upload the Gaia ISO file to the FTP server
2. On a Linux-based FTP server, run:

```
mount -o loop -t iso9660 <ISO_filename> <mounting_destination_dir>
```

Step 3: Installing the Upgrade Package on the IP Appliance

1. Log in to the IP Appliance using a console
2. Enter clish. Run `clish`
3. Install the I2G package on the IPSO appliance. Do this using Network Voyager (http://supportcontent.checkpoint.com/documentation_download?ID=10293), or using `clish`:
 - If the I2G package is on an FTP server, run:

```
add package media ftp addr <FTP_IP> user <uname> password <pass> name <full_path>/<upgrade_package_name>.tgz
```
 - If the file is locally on the IP Appliance, go to the directory where the package is located, and run:

```
add package media local name ./<upgrade_package_name>.tgz
```

The upgrade package is installed.

```
Trying to install package: ./<upgrade_package_name>.tgz

Package Information --
Name       : IPSO to Gaia Upgrade
Version    : <version>
Release    : <Release>
Description: IPSO to Gaia Upgrade Package (<upgrade_package_version>)

Package will be installed under: /opt
Package installed and activated successfully.
End of package installation.
```

The installation success message is Package installed and activated successfully.

The package is reported to be activated, however, there are no background processes running.

4. Show the active packages. Run
`show package active`

```
Name                               Ver  Rel  Dir                               Desc
{Check Point CPinfo }              10   00   /opt/CPinfo-10                    {Check Point CPinfo}
{Check Point R70}                  R70  00   /opt/CPsuite-R70                   {Check Point R70}
{IPSO to Gaia Upgrade} <ver> <rel> /opt/<upgrade_package_name>         {IPSO to
Gaia Upgrade Package (<upgrade_package_version>)}
```

5. Exit clish. Run `exit`

Step 4: Running the Upgrade Script

1. Run `cpstop`
2. Enable IP forwarding on IPSO.

```
ipsofwd on <administrator username>
```
3. Go to the location of the package

```
cd /opt/<upgrade_package_name>/
```
4. Run the upgrade to Gaia script.

```
./run-upgrade-to-Gaia
```

If you are running a special upgrade package, the upgrade runs automatically. Continue with *Step 8: Upgrade Runs Automatically* (on page 17).

The script runs.

```
Welcome to the IPSO to Gaia Upgrade procedure.

Checking platform...OK
Checking IPSO OS version ...OK

The following types of information are needed to prepare
your IPSO appliance for the upgrade:

- info about downloading the Gaia image.
- info about transferring an IPSO backup (optional).
- info about transferring a special copy of this package (optional).

Answer the prompts for this info and then the upgrade is performed.

Hit 'Enter' to continue or Ctrl-C to exit

Details for download of the Gaia image:
IP address of FTP server []: 192.0.2.2
User name []: fred
Password []: *****
Directory []: /image

Checking FTP access to 192.0.2.2 (it may take a minute) ... done
```

5. Supply the information for downloading the Gaia image



Note - If you have run the upgrade script before, the previously entered values are shown in square brackets []. Press **Enter** to accept the values, or type in the new values and press **Enter**.

Step 5 (Optional, Recommended): Supplying Backup Server Information

Supply details of the location of the backup FTP server.

```
A complete backup of the IPSO system can performed
including system configuration, user home directories,
log files and files from packages.

Do you want to perform this backup ? [y]

Use IP address '192.0.2.2' and user 'root' for the backup? [n]

Details for transferring the IPSO Backup:
IP address of FTP server []: 192.0.2.3
User name []: ftp
Password []: ***
Directory []: /backupdir

Checking FTP access to 192.0.2.3 (it may take a minute) ... done
```

Step 6: (Optional): Supplying Special Upgrade Package Server Information

Supply details of the location of the destination FTP server for the special upgrade package.


```
A package with your answers to the previous prompts can be created.
This package can be used on other IPSO gateways for
unattended conversion to Gaia.
```

```
Do you want to create such a package? [y]
```

```
Details for transferring the package with your answers:
```

```
IP address of FTP server [192.0.2.3]:
```

```
User name [ftp]:
```

```
Password [***]:
```

```
Directory [packagedir]:
```

```
Checking FTP access to 192.0.2.3 (it may take a minute) ... done
```

Step 7: Confirming Your Selections

You see a summary of all your answers.

```
Information for download of the Gaia image:
```

```
FTP Server IP Address = 192.0.2.2
```

```
FTP Server user name = root
```

```
Directory on FTP Server = /imagedir
```

```
Information for transferring the IPSO Backup:
```

```
FTP Server IP Address = 192.0.2.3
```

```
FTP Server user name = ftp
```

```
Directory on FTP Server = /backupdir
```

```
Information for transferring the package with your answers:
```

```
FTP Server IP Address = 192.0.2.3
```

```
FTP Server user name = ftp
```

```
Directory on FTP Server = /packagedir
```

```
Are these values correct? [y]
```

1. Click **n** to change the selections you made before, or type **y** to start the upgrade.

The backup file and the special upgrade package file, if you chose to create them, are created.

```
Writing values to file
Performing IPSO backup (file <ipso_backup_file_name>.tgz) ... done
Performing Check Point Security Gateway backup (file <Security
Gateway backup file name>.tgz) ... done
Transferring IPSO and Check Point Security Gateway backup files ... done
Creating a package with your answers (<upgrade_package_name>_AUTO.tgz)
... done
Transferring package with your answers ... done
Installing Gaia Boot Manager ... done
```

2. You have 30 seconds to abort. To stop the upgrade, press **Enter**.

```
IP appliance reboots in 30 seconds to complete the upgrade.
Hit 'Enter' to abort.
```



Important - If you want to make changes, press **Enter** now.

This stops the upgrade to Gaia. To complete the upgrade to Gaia, reboot the IP Appliance.

Step 8: Upgrade Runs Automatically

The Upgrade occurs unattended. This takes at least 15 minutes.

- The IP Appliance reboots.

If you are connected to the IP Appliance using SSH the connection to the appliance will close. You can only reconnect after the upgrade has completed.

- Boot manager runs.
- Gaia image is installed.

```
+AAAAAAAAAAAAAAAA+ Package Installation +AAAAAAAAAAAAAAAA+
|
|                               0%
|
|           Core Operating System
|
+AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA+

```

During the installation:

- The IPSO configuration is imported into Gaia
 - SIC trust settings are imported.
 - R75 is installed and the configuration is imported.
 - For a Security Management server, the management database is imported.
- You now see the Gaia prompt .

Congratulations. Gaia and R75 are installed on the IP Appliance.

Step 9: Making Sure the Upgrade Succeeded

If the IP Appliance is a standalone deployment (a locally managed gateway), do the procedures for a Security Gateway and for a Security Management server.

If the IP Appliance is a Security Gateway:

1. At the Gaia prompt, log in with your IPSO credentials.
2. Run `fw ver` to see the Security Gateway version information
3. Run `fw stat` to confirm that the default policy is enforced.
4. Launch R75 SmartDashboard
5. In the Security Gateway object:
 - a) Click **Test SIC status**. SIC status should be **Trust Established**.
 - b) Change the version to R75
6. Install a policy on the Security Gateway.

If the IP Appliance is a Security Management server:

1. At the Gaia prompt, log in with your IPSO credentials.
2. Run `fwm ver` to see the Security Management server version information
3. Install an R75 SmartDashboard on your GUI client computer or on the Security Management server.
4. Connect from SmartDashboard to the Security Management server using your unchanged, pre-upgrade credentials.
5. In SmartDashboard, in one or more Security Gateway objects, click **Test SIC status**. SIC status should be **Trust Established**.
6. Install a policy on the Security Gateways.

Rollback from Gaia to IPSO

You can do a rollback from Gaia to IPSO 6.2. You can also restore the Check Point Security Gateway and/or Security Management server configuration.

Before doing a rollback from Gaia to IPSO

Make sure that:

1. The IPSO boot manager installer (`install_ipsobootmgr`) is available. You can find it on an IPSO computer.
2. An IPSO image is available. Put the IPSO image on an FTP server, and make sure that the FTP server is accessible from the Gaia computer.
3. A backup of the Check Point Security Gateway and/or Security Management server on the Gaia computer is available. Put the backup tarfile on an FTP server, and make sure the FTP server is accessible from the Gaia computer.
4. *On a standalone Check Point gateway:* Export the Security Management server database using the `migrate_export` migration tool ("[Advanced Upgrade of a Standalone Deployment](#)" on page 9).

To do a rollback from Gaia to IPSO.

1. At the Gaia command line prompt, login as the administrator.
2. Enter the Gaia shell. Type `shell`.
3. Copy the IPSO boot manager installer (`install_ipsobootmgr`) from an IPSO computer to a location of your choice on the Gaia system. For example, to `/var/tmp`.
4. Change file attributes to give executable permissions. Run
`chmod 777 install_ipsobootmgr`
5. Install the IPSO boot manager. At the command prompt run
`./install_ipsobootmgr /dev/hda`
The script asks if you want to roll back to
 1. IPSO 4.2
 2. IPSO 6.2
6. Choose 2
7. Type `reboot`
After the reboot, the system is running the IPSO boot manager.
8. At the shell prompt, install the IPSO image. Run
`install`
9. Provide the following information:
 - IP address of the computer.
 - Default gateway of the computer.
 - IP address of the FTP server with the IPSO image.
 - User credentials.
 - Directory path.The system automatically reboots into IPSO.
10. Configure the computer using the First Time Configuration Wizard. Provide the following information:
 - Hostname
 - New password for `admin`
 - Enable the management port physical interface
 - IP address for the management interface
 - Default gateway

To restore the Check Point Security Gateway and/or Security Management server configuration

1. Log in to the newly installed and configured IPSO computer as `admin`

2. Use FTP to transfer the the backup archive file containing the Check Point Security Gateway and/or Security Management server to the computer, and then uncompress the archive. In the following example,

- The name of the backup archive is CP_archive_nms71_20101124.tgz
- The IP address of the FTP server containing the backup archive is 192.0.2.3.

```
cd /tmp
ftp ftp://192.0.2.3>/pub/CP_archive_nms71_20101124.tgz
tar xzf /tmp/CP_archive_nms71_20101124.tgz
```

3. *On a standalone Check Point gateway only:*

Import the Security Management server database that was exported from the Gaia gateway using the `migrate_import` migration tool ("[Advanced Upgrade of a Standalone Deployment](#)" on page 9).

4. Restore the IPSO backup file using the `set restore` CLI commands. In the following example,
 - The IP address of the FTP server containing the IPSO backup file is 192.0.2.2
 - The IPSO backup file is in the `pub` directory.

```
clish
set restore remote ftp-site ftp://192.0.2.2
set restore remote ftp-user <username e.g. anonymous>
set restore remote ftp-pass <password>
set restore remote ftp-dir pub
set restore remote filename i2g_backup_<hostname and timestamp>.tgz
```

IPSO automatically reboots.

5. Log out.
6. Log in as `admin`.
7. Verify the configuration has been restored.

Chapter 5

Initial Configuration

This chapter shows how to do the initial system configuration using the **First Time Wizard**.

Content TBD

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Chapter 6

Running Gaia on a 64 Bit Computer

By default, Gaia automatically boots to the 32 bit edition, even when installed on a 64 bit computer. You can configure Gaia to automatically boot to the 64 bit edition.

To configure Gaia to boot in the 64 bit edition.

1. Log out from the WebUI.
2. Connect to the Gaia computer using an SSL terminal emulation utility.
3. Go to the expert mode.
4. Open the `/etc/grub.conf` file in a plain text editor, such as `vi`.
5. Change the `default=x` line to `default=5`.
6. Reboot the computer.

When the computer reboots, make sure that the edition is 64 bit. To see which edition is running:

- Go to the WebUI **System Overview** pane. The edition shows in the **System Overview** widget.
or
- Run the `show version os edition` command.

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