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System functions configuration in Voyager for IPSO 3.8NET

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1

Selecting DNS servers to resolve for hostnames

Purpose

This procedure describes how to select a DNS server.



Steps

1. Click **Config** on the home page.
2. Click the **DNS** link in the *System Configuration* section.
3. Enter the new domain name in the **Domain Name** edit box.
4. Enter the IP address of the primary DNS in the **Primary Name Server** edit box; then click **Apply**.
5. (Optional) Enter the IP address of the secondary DNS in the **Secondary Name Server** edit box; then click **Apply**.
6. (Optional) Enter the IP address of the tertiary DNS in the **Tertiary Name Server** edit box; then click **Apply**.
7. Click **Save** to make your changes permanent.

Further information

Note

To configure DNS on a general purpose line card (GPLC), you must first select a line card by clicking the *LineCard Configuration* link on the Configuration page, click the name of the line card, and then click the *DNS* link. See *Making configuration changes to general purpose line cards*.

2

Disk mirroring (IP740)

Introduction to Disk Mirroring (RAID Level 1)

The Nokia disk mirroring feature protects against downtime in the event of a hard disk drive failure in your IP740 platform. You must have a second hard disk drive installed on your platform.

Disk mirroring gives you the ability to configure a mirror set comprised of a source hard disk drive and a mirror hard disk drive using Voyager. The hard disk drive in which you have installed IPSO is your source hard disk drive. Once you have configured a mirror set, and the hard disk drives are synchronized (source hard disk drive is fully copied to the mirror hard disk drive), all new data written to your source hard disk drive is also written to your mirror hard disk drive. If your source hard disk drive fails, your mirror hard disk drive will automatically replace your source hard disk drive without interrupting service on your platform.

The source and mirror hard disk drives can be hot swapped on the IP740 platform, which means you can replace a failed hard disk drive without shutting down your platform.

In addition to you being able to configure a mirror set, you can monitor the status of a mirror set, synchronization time and system log entries.

For further information, see *Creating a mirror set* and *Deleting a mirror set*

3

Creating mirror sets

Purpose

This procedure describes how to create a mirror set:



Steps

1. Click **Config** on the home page.
 2. Click the **Disk Mirroring** link in the **System Configuration** section.
 3. Select the **Create** check box in the **Create Mirror Set** table.
-

Note

The source hard disk drive and the mirror hard disk drive should have identical geometries. You can view hard disk drive geometry in the **DRIVERS INFORMATION** table.

4. Click **Apply**.

Expected outcome

You will see text at the top of the Voyager window with a message indicating a mirror set was created, numbers indicating which hard disk drive is the source and which hard disk drive is the mirror, and that mirror syncing is in progress.

Note

The sync percent value in the Mirror Set table indicates the percentage of sync zones that have been copied from the source disk to the mirror disk. A sync zone

is equivalent to contiguous disk sectors. When all sync zones are copied to the mirror disk, the sync percent value will read 100 percent and your platform will be protected from a disk failure. Sync time is approximately 20-30 minutes for a 20 GB disk. No mirror set is created if the sync operation is not successful.

Further information

See *Deleting mirror sets*

4

Deleting mirror sets

Purpose

This procedure describes how to delete a mirror set.

Note

You can only delete a mirror set that is 100 percent synchronized.



Steps

1. **Click Config on the home page.**
2. **Click the *Disk Mirroring* link in the *System Configuration* section.**
3. **Select the Delete check box in the Mirror Sets table.**
4. **Click Apply.**

Further information

See *Creating mirror sets*

5

Mail relay

Mail relay allows you to send e-mail from the router. You can send e-mail interactively or from a script. The mail is relayed to a mail hub that then sends the mail to the final recipient.

Features Supported

- Presence of a mail client or messaging user agent (MUA) that can be used interactively or from a script
- Presence of a sendmail-like replacement that relays mail to a mail hub using SMTP
- Ability to specify the default recipient on the mailhub

For further information, see *Configuring mail relay*, *Sending mail* and *Setting system failure notification*

6

Configuring mail relay



Steps

1. Click **Config** on the home page.
2. Click the **Mail Relay** link in the **System Configuration** section.
3. Enter either the IP address or hostname of the mail server that relays outgoing e-mail in the Mail Server edit box.
4. Enter the username on the mail server to which mail addressed to admin or monitor is sent in the Remote User edit box; then click **Apply**.
5. To make your changes permanent, click **Save**.

Further information

See *Setting system failure notification*, *Setting system time* and *Changing hostnames*

7

Sending mail from router

Purpose

This procedure describes how to send mail from the router.



Steps

1. **Log into the router using either your `admin` or `monitor` account.**
2. **At the prompt, type the mail command, followed by a space, and the username of the recipient: `mail username@hostname`**
3. **Type the subject of your message at the subject prompt; then press enter.**
4. **When you finish typing your message, type a period on an empty line; then press enter.**

Expected outcome

Your message is sent.

Further information

See *Configuring mail relay* and *Setting system failure notification*

8

Setting system failure notification

Purpose

This procedure describes how to set your system to send e-mail to one or more people when a system failure occurs. Separate multiple e-mail addresses by spaces.



Steps

1. **Click Config on the home page.**
2. **Click the *System Failure Notification* link in the *System Configuration* section.**
3. **Click the On radio button next to Enable Failure Notification.**
4. **Click Apply.**
5. **Enter the e-mail address of the people who want to be notified in the event of a system failure.**

Examples of a system failure include crashing daemons (snmpd, ipsrd, ifm, xpsd) and a system reboot due to a fatal error.

In a system failure notification, the following information appears:

- System information
- Image information
- Crash information
- Crash trace

6. **Click Apply.**
7. **To make your changes permanent, click Save.**

Further information

See *Configuring mail relay* and *Setting system time*

9

Setting system time

Purpose

The default time is set to GMT. This procedure describes how to set the system time to another time zone:



Steps

1. Click **Config** on the home page.
2. Click the *Local Time Setup* link in the *System Configuration* section.
3. Click the appropriate time zone in the **Time Zone** drop-down list.
4. Enter the hour in the **Hour** edit box, minute(s) in the **Minute** edit box, the second(s) in the **Second** edit box, the month in the **Month** edit box, the day in the **Day** edit box, and the year in the **Year** edit box,
5. Click **Apply**.
6. To make your change permanent, click **Save**.

10 Adding static hosts

Purpose

This procedure describes how to add a static host entry.



Steps

1. Click **Config** on the home page.
2. Click the **Host Address Assignment** link in the **System Configuration** section.
3. Enter the new hostname in the **Add New Hostname** edit box.
4. Click **Apply**.
5. Enter the IP address of the new host in the **IP Address** edit box.
6. Click **Apply**.
7. To make your changes permanent, click **Save**.

Further information

See *Deleting static hosts*

11

Deleting static hosts

Purpose

This procedure describes how to delete a static host.



Steps

1. Click **Config** on the home page.
2. Click the **Host Address Assignment** link in the **System Configuration** section.
3. Click the **Off** radio button next to the host you want to delete.
4. Click **Apply**.
5. To make your changes permanent, click **Save**.

Further information

See *Adding static hosts*

12 Setting system logging

Purpose

This procedure describes how to set the system to accept unfiltered syslog messages from a remote machine.



Steps

1. Click **Config** on the home page.
2. Click the **System Logging** link in the **System Configuration** section.
3. Click the **Yes** radio button to accept syslog messages.
4. To make your changes permanent, click **Save**.

Further information

See *Setting remote system logging*

13 Setting remote system logging

Purpose

This procedure describes how to send a syslog message to a remote machine.



Steps

1. **Click Config on the home page.**
2. **Click the *System Logging* link in the *System Configuration* section.**
3. **Enter the IP address of the host machine to which you are sending syslog messages.**
4. **Click Apply.**
5. **Click the Added Security Level drop down window to select at least one severity level.**

Specifying a particular severity level means that all messages at least that severe are sent to the associated remote host.

The choices are EMERGENCY, ALERT, CRITICAL, ERROR, WARNING, NOTICE, INFO, DEBUG, ALL.

If you specify more than one severity level, all messages that are least as severe as the lowest severity level you select are sent to the remote host.

Note

You must select at least one severity level for this option to function. The system will not send syslog messages to the remote host if you do not configure at least one severity level.

6. **Click Apply.**

Expected outcome

The name of each severity level appears in LOG AT OR ABOVE SEVERITY field.

7. **To disable any of the severity levels, click the No radio button next to the name of the severity level you want to delete and then click Apply.**
8. **To make your changes permanent, click Save.**

Further information

See *Setting system logging* and *Setting the system configuration auditlog*

14 Setting system configuration auditlog

Purpose

Use this procedure to set the system to log transient and permanent configuration changes. You can view the syslog messages to determine whether authorized users only are making configuration changes to the system.



Steps

1. **Click Config on the home page.**
2. **Click the *System Logging* link in the *System Configuration* section.**
3. **To log transient configuration changes only, click the Logging Of Transient Changes button in the System Configuration Auditlog field.**

Transient changes refer to changes that apply only to the currently running system. Transient changes are equivalent to clicking the **Apply** button only in Voyager. Reboot the system to restore the previous configuration.

4. **Click Apply.**
5. **To log both transient and permanent configuration changes, click the Logging Of Transient And Permanent changes button in the System Configuration Auditlog field.**

Permanent changes remain active after the system is rebooted. These changes are equivalent to clicking the **Save** button in Voyager after you apply a configuration change.

6. **Click Apply.**

Expected outcome

After you set the system configuration auditlog, a **Destination Log Filename** edit box appears. The box contains the name of the file to which syslog messages for this feature are sent. The default is `/var/log/messages`. To change the file, enter the new file name in the **Destination Log Filename** edit box.

Note

You must enter a destination file name to view log messages in the Management Activity Log. The default destination file logs messages in the standard system log file.

7. **Go to the Management Activity Log page.**
 - a. Click **Monitor** on the Home page in Voyager
 - b. Click the *Management Activity Log* link in the *System Logs* section

For more information, see *Monitoring system logs*.

8. **Click Apply.**
9. **To make your changes permanent, click Save.**

Further information

See *Disabling the system configuration auditlog* and *Remote system logging*

15 Disabling system configuration auditlog



Steps

1. Click **Config** on the home page.
2. Click the *System Logging* link in the *System Configuration* section.
3. In the *System Configuration Auditlog* field, click the **Logging Disabled** button to disable the *System Configuration Auditlog* feature.
4. Click **Apply**.
5. To make your changes permanent, click **Save**.

Further information

See *Setting the system configuration auditlog*

16 Changing hostnames

Purpose

This procedure describes how to change the hostname (system name) of the router.

Note

To change the hostname on a general purpose line card (GPLC), you must first select a line card by clicking the *LineCard Configuration* link on the configuration page, click the name of the line card, and then click the *Change Hostname* link. See *Making configuration changes to general purpose line cards*.



Steps

1. **Click Config on the home page.**
 2. **Click the *Change Hostname* link in the *System Configuration* section.**
 3. **Enter the new hostname in the Change It To field.**
 4. **Click Apply.**
 5. **To make your changes permanent, click Save.**
-

Note

Host address assignments must match an IP address.

Further information

See *Adding static hosts*

17 Saving the current configuration as a new configuration set

Purpose

This procedure describes how to save the current configuration into a new configuration database file.



Steps

1. Click **Config** on the home page.
2. Click the **Manage Configuration Sets** link in the **System Configuration** section.
3. Enter the name of the new configuration database file in the field labelled **SAVE CURRENT STATE TO NEW CONFIGURATION DATABASE:**
4. Click **Apply**.

Expected outcome

The current configuration is saved in the new file, and the file will appear in the list of database files on this page. Subsequent configuration changes will be saved in the new file.

Further information

See *Creating factory default configuration sets*, *Loading configuration sets*, *Deleting configuration sets* and *Backing up and restoring files*

18

Creating factory default configuration sets

Purpose

This procedure describes how to create a new configuration database file that does not contain user configuration information.



Steps

1. **Click Config on the home page.**
2. **Click the *Manage Configuration Sets* link in the *System Configuration* section.**
3. **Enter the name of the factory default configuration database file in the field labelled CREATE A NEW FACTORY DEFAULT CONFIGURATION:**
4. **Click Apply.**

Expected outcome

The new file will appear in the list of database files on this page, but it is not selected as the current configuration database. The factory default configuration has not been loaded.

Note

Loading this configuration set will cause all system configurations to be deleted from the system. You will not be able to configure the system through Voyager until you have configured an IP address through the system console.

Further information

See *Saving the current configuration as a new configuration set*, *Loading configuration sets* and *Deleting configuration sets*

19 Loading configuration sets

Purpose

This procedure describes how to switch a currently active database.



Steps

1. Click **Config** on the home page.
2. Click the **Manage Configuration Sets** link in the **System Configuration** section.
3. Click the radio button in front of the database you want to use.
4. Click **Apply**.
5. To make your changes permanent, click **Save**.

Further information

See *Saving the current configuration as a new configuration set* and *Deleting configuration sets*

20 Deleting configuration sets

Purpose

This procedure describes how to delete unwanted configuration database files.



Steps

1. Click **Config** on the home page.
2. Click the **Manage Configuration Sets** link in the **System Configuration** section.
3. Click the **Delete Configuration Databases** link.
4. For each database file that you want to delete, click its **DELETE** radio button in the table.
5. Click **Apply**.
6. Click **Up** to return to the **Configuration Database Management** page.

21

Backing up and restoring files

You can configure your Nokia appliance to perform manual or regularly scheduled backups. By default, the backup file contains all the configuration (`/config`), cron (`/var/cron`), etc (`/var/etc`), and IPsec files (`/var/etc/ipsec`). (Export versions of IPSO do not include IPsec files.) The Sequoia platform also lets you backup the GPLC configuration files (`/opt/slot`). You can also choose to back up the home directories, which are stored in the `/var/admin` and `/var/monitor` directories and the log files, which are stored in the `/var/logs` directory.

For more information, see *Creating backup files manually*, *Creating regularly scheduled backup files* and *Saving the current configuration as a new configuration set*

22 Creating backup files manually



Steps

1. Click **Config** on the home page.
2. Click the **Backup and Restore** link in the **System Configuration** section.
3. In the **Manual Backup** field, enter a file name for your backup file in the **Backup File Name** edit box.

Note

If you do not enter a name, the backup file is not created.

-
4. (Optional) Click the **Yes** button in the **Backup Home Directories** field to include home directories in the backup file.
 5. (Optional) Click the **Yes** button in the **Backup Log Files** field to include your log files in the backup file.
 6. (Optional) To include package files in your backup file, Click the **Yes** button next to the name of each package you want to back up in the **Always** column.

Note

Nokia recommends that you back up GPLC config files.

-
7. Click **Apply**.
 8. To make your changes permanent, click **Save**.

Further information

See *Creating regularly scheduled backup files*, *Transferring backup files to a remote server* and *Deleting locally stored backup files*

23

Creating regularly scheduled backup files



Steps

1. **Click Config on the home page.**
2. **Click the *Configuration Backup and Restore* link in the *System Configuration* section.**
3. **In the Scheduled Backup field, click the Frequency drop-down window and select DAILY, WEEKLY, or MONTHLY to configure how often to perform a regular backup.**
4. *If you selected MONTHLY in the Frequency drop-down window,*
Then
click the Date drop-down window and select the date on which to schedule the monthly backup.
5. *If you selected WEEKLY in the Frequency drop-down window,*
Then
click the Day drop-down window and select the day on which to schedule the weekly backup.
6. **Click the Hour drop-down window to select the specific time of day for the system to perform a regular backup.**
7. **Click the Minute drop-down window.**

select 00, 15, 30, or 45 to specify the minute of the hour for the system to perform the regular backup.
8. **Enter a name of the backup file in the Backup File Name edit box.**

Note

If you do not enter a name, the backup file is not created.

9. **(Optional) Click the Yes button in the Backup Home Directories field to include home directories in the backup file.**
 10. **(Optional) Click the Yes button in the Backup Log Files field to include your log files in the backup file.**
 11. **(Optional) To include package files in your backup file, Click the Yes button next to the name of each package you want to back up in the Backup/Opt fields.**
-

Note

Nokia recommends that you back up GPLC config files.

12. **Click Apply.**
13. **To make your changes permanent, click Save.**

Further information

See *Creating backup files manually*, *Transferring backup files to a remote server*, *Deleting locally stored backup files* and *Configuring scheduled jobs*

24 Transferring backup files to a remote server



Steps

1. Click **Config** on the home page.
2. Click the **Configuration Backup and Restore** link in the **System Configuration** section.
3. In the **Remote Transfer Archive File** field, enter the IP address of the FTP server in the **FTP Site** edit box.
4. In the **Remote Transfer Archive File** field, enter the path to the directory on which to save the backup files in the **FTP DIR** edit box.
5. In the **Remote Transfer Archive File** field, enter the name of the user account for connecting to the FTP server in the **FTP User** edit box.
6. In the **Remote Transfer Archive File** field, enter the name of the password to use when connecting to the FTP server in the **FTP Password** edit box.

Note

You must change the password if you change the FTP server, FTP directory, or FTP user.

Note

The password is not stored in the database. Enter the password each time you want to transfer files to remote server even if you are using the same FTP server.

7. **(Optional) Click the Yes button in the Backup Home Directories field to include home directories in the backup file.**
8. **(Optional) Click the Yes button in the Backup Log Files field to include your log files in the backup file.**
9. **(Optional) To include package files in your backup file, Click the Yes button next to the name of each package you want to back up in the Backup/Opt field.**
10. **Click either the Manual Backup File drop-down window or the Scheduled Backup File drop-down window to select the backup files you want to transfer to the FTP server.**
11. **Click Apply.**
12. **To make your changes permanent, click Save.**

Further information

See Restoring files from backup files stored on a remote server

25 Restoring files from locally stored backup files

Purpose

This procedure describes how to restore your files to the system from locally stored backup files. You must first create backup files. See *Creating backup files manually* or *Creating regularly scheduled backup files*. You can restore files either from locally stored backup files or from files stored on a remote server. To store backup files on a remote server, see *Transferring backup files to a remote server*.



Steps

1. Click **Config** on the home page.
2. Click the **Backup and Restore Configuration** link in the **System Configuration** section.



Warning

Restoring from a backup file overwrites your existing files.

Note

The system must be running the same version of the operating system and the same packages as those of the backup file(s) from which you restore file(s).

**Warning**

Make sure that you have enough disk space available on your Nokia appliance before restoring files. If you try to restore files and you do not have enough disk space, you risk damaging the operating system.

- 3. In the Restore From Local field, click either the Manual Backup File drop-down window or the Scheduled Backup File window to select the name of the backup file from which to restore.**

Manually backed-up files are in the `/var/backup` directory, and scheduled backup files are in the `/var/backup/sched` directory.

The drop-down windows contain lists of all the files in the `var/backup` or `bar/backup/sched` directory but some of the files might not be backup files.

- 4. Click Apply.**

Repeat the previous two steps for each file you want to restore.

- 5. To make your changes permanent, click Save.**

- 6. Click the *Reboot* link near the bottom of the page and wait for the system to reboot.**

Note

You must reboot your system after restoring from backup files.

Further information

See *Restoring files from backup files stored on a remote server* and *Deleting locally stored backup files*

26 Restoring files from backup files stored on a remote server

Purpose

This procedure describes how to restore your files to the system from backup files stored on a remote server. You must first create backup files and then transfer the files to a remote server. See *Creating backup files manually* or *Creating regularly scheduled backup files*. To store backup files on a remote server, see *Transferring backup files to a remote server*.



Steps

1. Click **Config** on the home page.
2. Click the **Backup and Restore Configuration** link in the **System Configuration** section.



Warning

Restoring from a backup file overwrites your existing files.

Note

The system must be running the same version of the operating system and the same packages as those of the backup file(s) from which you restore file(s).



Warning

Make sure that you have enough disk space available on your Nokia appliance before restoring files. If you try to restore files and you do not have enough disk space, you risk damaging the operating system.

3. **In the Restore From Remote Field, enter the IP address of the FTP server on which the backup files are stored in the FTP Site edit box.**
4. **In the Restore From Remote Field field, enter the path to the directory on which the backup files are stored in the FTP DIR edit box.**
5. **In the Restore From Remote Field field, enter the user name for connecting to the FTP server in the FTP User edit box.**
6. **In the Restore From Remote Field field, enter the password for connecting to the FTP server in the FTP Password edit box.**
7. **Click Apply.**

Expected outcome

A list of available files in the directory you specify appears.

8. **Select the backup files you want to restore.**
9. **Click Apply.**
10. **To make your changes permanent, click Save.**
11. **Click the *Reboot* link at the bottom of the page and wait for the system to reboot.**

Note

You must reboot your system after restoring from backup files.

Further information

See *Restoring files from locally stored backup files*

27 Deleting locally stored backup files



Steps

1. Click **Config** on the home page.
2. Click the *Backup and Restore Configuration* link in the *System Configuration* section.
3. In the **Delete Backup Files** field, click **Delete** button next to the name of each backup file that you want to delete.
4. Click **Apply**.
5. To make your changes permanent, click **Save**.

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Configuring scheduled jobs

Purpose

This procedure describes how to use Voyager to access the crontab file and schedule regular jobs. The cron daemon executes jobs at dates and times you specify through this procedure.



Steps

1. **Click Config on the home page.**
2. **Click the *Job Scheduler* link the *System Configuration* section.**
3. **Enter a name for a job you want the cron daemon to execute in the Job Name edit box.**

Use alphanumeric characters only, and do not include spaces.

4. **Enter the name of the command you want the cron daemon to execute in the Command name edit box.**

The command can be any Unix command.

5. **To configure how often to execute the job, click the Repeat drop-down window and select DAILY, WEEKLY, or MONTHLY.**

6. *If you selected to execute the job monthly,*

Then

click the Date drop-down window and select the date of the month to execute the job.

7. *If you selected to execute the job weekly,*

Then

click the Day drop-down window and select the day of the week to execute the job.

8. **Click the Hour drop-down window to select the hour of the day to execute the job.**

9. **Click the Minute drop-down window.**

select, 00, 15, 30, or 45 to select the minute of the day to execute the job.

10. **Click Apply.**

Expected outcome

The job appears in the **Scheduled Jobs** table.

11. **To make your changes permanent, click Save.**

12. **To receive mail addressed to the admin or monitor regarding your scheduled jobs, enter your email address in the Email Address edit box.**

13. **Click Apply.**

14. **To make your changes permanent, click Save.**

Further information

Repeat steps 1 through 11 to add new scheduled jobs.

For more information, see *Deleting scheduled jobs* and *Creating regularly scheduled backup files*

29

Deleting scheduled jobs



Steps

1. Click **Config** on the home page.
2. Click the *Job Scheduler* link in the **SYSTEM CONFIGURATION** section.
3. In the **Scheduled Jobs** table, click the **Delete** button next to the name of each job you want to delete.
4. Click **Apply**, and then click **Save** to make your changes permanent.

Further information

See *Configuring scheduled jobs*

30

Selecting IPSO images

Purpose

This procedure describes how to select an IPSO image.



Steps

1. **Click Config on the home page.**
2. **Click the *Manage IPSO Images* link in the *System Configuration* section.**
3. **Click the *IpsO Image* radio button in front of the image you want to select.**
4. **Click Reboot to activate the new image.**

The system will take a few minutes to reboot.

Further information

See *Upgrading IPSO images*, *Testing IPSO images* and *Deleting IPSO images*

31 Testing IPSO images

Purpose

This procedure describes how to test an IPSO image before permanently activating the image:



Steps

1. Click **Config** on the home page.
2. Click the **Manage IPSO Images** link in the **System Configuration** section.
3. Click the **IpsO Image** radio button in front of the image you want to select.
4. Click the **Test Boot** button activate the new image.

The system takes a few minutes to reboot.

Note

The test image will run for five minutes and then revert to the original image if you do not complete this procedure.

5. Click **Top**.
6. Click the **Manage IPSO Images** link in the **System Configuration** section.
7. (Optional) Click the **Commit Testboot** radio button to use the image you are testing.
8. (Optional) Click the **Revert To Previous Image And Reboot** radio button to use the original image.

9. **Click Apply.**
10. **To make your changes permanent, click Save.**

Further information

See *Upgrading IPSO images*, *Selecting IPSO images* and *Deleting IPSO images*

32 Deleting IPSO images

Purpose

This procedure describes how to delete an IPSO image.



Steps

1. Click **Config** on the home page.
2. Click the **Manage IPSO Images** link in the **System Configuration** section.
3. Click the **Delete IPSO images** link.
4. Click the **Delete** radio button next to the image you want to delete.
5. Click **Apply**.
6. To make your changes permanent, click **Save**.

Further information

See *Upgrading IPSO images*

33 Upgrading IPSO images

Purpose

This procedure describes how to use Voyager to upgrade the IPSO image. You can also upgrade the image from the command line. See the latest version of IPSO Release Notes, which is available on the Nokia customer support site: <https://support.nokia.com> for more information. To upgrade the image from Voyager, you must first install the image that is on the Nokia CD on an http server, FTP server, or file server.



Steps

1. **Click Config on the home page.**
2. **Click the *Install New IPSO Image* link in the *System Configuration* section.**
3. **Enter the universal resource location (URL) of the ftp, http, or file server on which the IPSO image is installed in the Enter URL To The Image Location edit box.**

Note

For an FTP site only, if you enter the absolute path to the image location, you must type a double slash, //, after the domain name. For example: `ftp://test.acme.com/tmp/ipso.tgz` If you enter the path to the image location relative to the user's home directory, use the standard URL format. For example: `ftp://test.acme.com/tmp/ipso.tgz`.

-
4. *If the HTTP site on which the IPSO image is stored requires authentication,*

Then

enter the HTTP realm to which authentication is needed in the Enter HTTP Realm (For HTTP URLs Only) edit box.

5. *If the server on which the IPSO image is stored requires authentication,*
Then
enter the user name in the Enter User Name edit box.
 6. *If the server on which the IPSO image is stored requires authentication,*
Then
enter the password in Enter Password edit box.
 7. **Choose an image with which to reboot after the image is installed.**
-

Note

You must choose an image with which to reboot after the image is installed. You can choose to reboot with the currently running image or with the new image, or you can choose to test the new image.

8. **Select one of the three following options for rebooting the system.**
 - a. If you do not want to reboot with the newly installed image, in the **Select Image For Next Boot** field, click the **Existing Image** button, and then click **Apply**. Wait for the system to download the new image.
 - b. To reboot with the newly installed image, in the **Select Image For Next Boot** field, click the **New Image** button, and then click **Apply**. Wait for the system to reboot
 - c. To test boot the new image, in the **Select Image For Next Boot** field, click the **Test Boot New Image** button, and then click **Apply**.
-

Note

When you select test boot, the system tests the new image for 5 minutes. Click the *Manage IPSO Images* (including Reboot) link, which takes you to the IPSO Image Management page. During the 5-minute test period, you can click the **Testboot Commit** button to configure the new image as the default image. You do not have to reboot the system.

If you click the **Revert To Previous Image And Reboot** button during the 5-minute test period, the system reboots and reverts to the previously running image.

If you let the 5-minute test period run completely, the system automatically reboots and reverts to the previously running image.

9. Click Apply.

It might take from 3 minutes to 20 minutes or more to upgrade IPSO, depending of the type of platform.

Further information

See *Testing IPSO images*, *Selecting IPSO images*, *Backing up and restoring files in Voyager* and *Installing packages*

34 Installing packages

Purpose

This procedure describes how to install a package.

Note

To install packages on a general purpose line card (GPLC), you must first select a line card by clicking the *LineCard Configuration* link on the configuration page, click the name of the line card, and then click the *Manage Installed Packages* link. See *Making configuration changes to general purpose line cards*.



Steps

1. **Click Config on the home page.**
2. **Click the *Manage Installed Packages* link in the *System Configuration* section.**
3. **Click the *FTP and Install Packages* link.**
4. **Enter the hostname or IP address of the FTP site where the packages are located.**
5. **Enter the FTP directory where the packages reside at the FTP site.**
6. **(Optional) Enter the user account and password to use when connecting to the FTP site.**

If you leave these fields empty, the "anonymous" account will be used.

Note

If you specify a user account and password, you must re-enter the password whenever you change the FTP site, FTP directory, or FTP user on future requests.

7. Click Apply.**Expected outcome**

A list of files ending with extensions .tgz, .Z, and .gz in the specified FTP directory appears in the SITE LISTING field.

8. Select a package to download from the Site Listing field.**9. Click Apply.****Expected outcome**

The selected package is downloaded to the local IPSO system. After the download has completed, the package appears in the **Unpack New Packages** field.

Note

To enable packages on a general purpose line card (GPLC), you must first select a line card by clicking the *LineCard Configuration* link on the Configuration page, click the name of the line card, and then click the *Manage Installed Packages* link. See *Making configuration changes to general purpose line cards*.

10. Select the package in the Unpack New Packages field.**11. Click Apply.****Expected outcome**

The package is unpacked into the local file system.

12. Click the *Click here to install/upgrade [file name]* link.**13. (Optional) Click the Yes radio button next to Display all packages; then click Apply if you want to display all of your installed packages.**

14. **(Optional) Click the Yes radio button next to Install; then click Apply if you want to perform a first-time installation.**
15. **(Optional) Click the Yes radio button next to UPGRADE.**
16. **(Optional) Click the radio button of the package from which you want to upgrade under *Choose one of the following packages to upgrade from*.**
17. **Click Apply.**
18. **Click Save to make your changes permanent.**

Further information

See *Enabling and disabling packages* and *Deleting packages*

35 Enabling / disabling packages

Purpose

This procedure describes how to enable and disable packages.

Before you start

Note

To disable packages on a general purpose line card (GPLC), you must first select a line card by clicking the *LineCard Configuration* link on the Configuration page, click the name of the line card, and then click the *Manage Installed Packages* link. See *Making configuration changes to general purpose line cards*.



Steps

1. **Click Config on the home page.**
2. **Click the *Manage Installed Packages* link in the *System Configuration* section.**
3. **Click the On / Off radio button in front of the package you want to enable / disable.**
4. **Click Apply.**
5. **To make your changes permanent, click Save.**

Further information

See *Installing packages* and *Deleting packages*

36 Deleting packages

Purpose

This procedure describes how to delete a package.

Note

To delete packages on a general purpose line card (GPLC), you must first select a line card by clicking the *LineCard Configuration* link on the Configuration page, click the name of the line card, and then click the *Manage Installed Packages* link. Packages have to be disabled before they can be deleted. See *Making configuration changes to general purpose line cards*.



Steps

1. Click **Config** on the home page.
2. Click the **Manage Installed Packages** link in the **System Configuration** section.
3. Click the **Delete Packages** link.
4. Click the **Delete** radio button in front of the package you want to delete.
5. Click **Apply**.
6. To make your changes permanent, click **Save**.

Further information

See *Enabling and disabling packages*