Intel® NetStructure™ Host Media Processing Software Release 1.2 for Linux

Installation Guide

September 2004

05-2354-001

Publication Date: September 2004

Document Number: 05-2354-001

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Revision History

This revision history summarizes the changes made in each published version of this document.

Document No.	Publication Date	Description of Revisions
05-2354-001	September 2004	Initial version of document.

About This Publication

This preface provides information about the purpose, audience, and overall structure of this publication and well as listing related information. This information is contained in the following sections:

Purpose

This publication describes how to install Intel® NetStructure™ Host Media Processing Software Release 1.2 for Linux. Information about running a demo to confirm proper installation, troubleshooting the installation, and uninstalling the software is also included.

Intended Audience

This publication is intended for:

- System Integrators
- Toolkit Developers
- Independent Software Vendors (ISVs)
- Original Equipment Manufacturers (OEMs)

How to Use This Publication

Following are some guidelines for using this publication:

- To get an overall understanding of the install process, refer to Chapter 1, “Installation Overview”.
- The complete installation procedure, including prerequisites, system configuration procedures, and instructions for running the verification demo, is provided in Chapter 2, “Installing the Software”.
- If you need to uninstall the HMP Software, refer to Chapter 3, “Uninstalling the Software”.
- If you have problems while installing the HMP Software, refer to Chapter 4, “Troubleshooting”.
- For a definition of some key terms, refer to the Glossary.

- To navigate through all the information, use the Contents, Index, and internal links.

Related Information

The following documents and web sites provide more information:

- *Intel® NetStructure™ Host Media Processing Software Release 1.2 for Linux License Manager Administration Guide* - This publication describes how to perform the various tasks related to obtaining, activating, and otherwise working with HMP Software license files and also how to manually stop and start HMP services.
- *Intel® NetStructure™ Host Media Processing Software Release 1.2 for Linux Release Guide* - This document provides information about the release such as product features, system requirements, and user documentation.
- *Intel® NetStructure™ Host Media Processing Software Release 1.2 for Linux Release Update* - This document addresses release issues such as known problems and documentation updates.
- For technical support, go to *http://developer.intel.com/design/telecom/support/*.
- For information about Intel NetStructure Host Media Processing products, go to *http://www.intel.com/design/network/products/telecom/software/index.htm#hmp*
- For information about Intel® telecom products, go to *http://www.intel.com/design/network/products/telecom/index.htm*.

Installation Overview 1

This chapter provides the following information about installing HMP Software.

1.1 Major Installation Steps

Following are the major installation steps:

1. Before installing the HMP Software, make sure that the system meets the hardware and software "System Requirements" as described the HMP Software *Release Guide*.
2. To install the software, you must have local administrative privileges. Contact your network administrator to set up administrative privileges as required.
3. Uninstall any existing Intel® Dialogic® system release.
4. Obtain an HMP Software license. You can do this before or after you install the HMP Software. A verification license supplied with the software will allow you to run the verification demo (IP Media Server demo) to confirm that you have installed the HMP Software properly. However, its features are limited and you may want to obtain another license. Refer to Section 1.2, "HMP Licenses", on page 9 for more information. Complete information and procedures for obtaining and working with licenses is provided in the *Intel® NetStructure™ Host Media Processing Software Release for Linux Administration Guide*.
5. Install the HMP 1.2 software. Refer to Section 2.3, "Installing the HMP Software", on page 12.
6. Activate an HMP Software license. This is considered a configuration activity and can be done immediately after installing the software or later if you manually run `config.sh`. Refer to Section 2.4, "Configuring the System (Activating a License)", on page 14.
7. Start the HMP services.
8. Optionally run the IP Media Server demo to verify proper installation of the HMP Software. Refer to Section 2.5, "Running the IP Media Server Demo", on page 17.

1.2 HMP Licenses

Before you use the HMP Software, you must obtain a license file containing HMP license data. An HMP license is a file containing authorizations for a combination of call control and media processing channels. You can obtain a license file[1] either before or after you install the HMP

1. A verification license is installed with the HMP Software, activated and ready to use, but this license is only intended to be used for verifying that the HMP Software installation was successful (see Section 2.6, "Verifying the Installation Using the IP Media Server Demo", on page 24).

Software, but you need to obtain a license file before you can proceed with using the HMP Software.

Once you have installed the HMP Software and downloaded a license file to your computer, you must activate the license on the target system using the License Manager. The License Manager offers both a menu interface (and a command line interface (CLI). The *Intel® NetStructure™ Host Media Processing Software Release for Linux Licensing Manager Administration Guide* describes how to obtain and use license files, and the various tasks you can perform with the License Manager.

You can try out the HMP Software with a verification, evaluation, or trial license before you purchase a permanent, production license from Intel. If a license file is lost or damaged, you can obtain an emergency replacement for it. Table 1 shows the types of licenses available for use with HMP Software.

Table 1. License Types

License Type	Features	Expires?	Where to get license?	MAC address required?[1]
Verification (free)	1 channel for RTP G.711 and Voice	no	included with HMP Software[2]	no - use with any MAC address
Evaluation (free)	4 channels for all components	expires in 45 days	available from Web site[3]	no - use with any MAC address
Trial (free)	any supported channel component combination	expires in 30 days	Intel authorized distributor or account manager[4]	yes - supply MAC address when ordering
Purchased	any supported channel component combination	no	Intel authorized distributor or account manager	yes - supply MAC address when ordering
Emergency Replacement	replaces a “Purchased” license	expires in 14 days	Intel authorized distributor or account manager	yes - supply MAC address when ordering

1. For more information about MAC addresses, refer to the *Intel® NetStructure™ Host Media Processing Software Release for Linux License Manager Administration Guide*.
2. A license is supplied with the HMP Software that allows you to run a verification demo. This demo verifies that you have set up HMP properly. For more information, refer to Section 2.6, “Verifying the Installation Using the IP Media Server Demo”, on page 24.
3. An evaluation license is available from *www.intel.com/go/mediaprocessing*.
4. For a list of authorized distributors, go to: *http://www.intel.com/buy/wtb/wtb1028.htm*.

For more information, refer to the *Intel® NetStructure™ Host Media Processing Software Release for Linux Licensing Manager Administration Guide.*

Installing the Software 2

This chapter provides procedures for installing and licensing the HMP software. This information is contained in the following sections:

2.1 Assumptions and Prerequisites

The following are basic requirements to install and run the HMP software:

- Before installing the HMP Software, make sure that the system meets the hardware and software "System Requirements" as described the HMP Software *Release Guide*. These requirements include the following:
  - A system with RedHat Advanced Server 3.0 Workstation or Server installed and Update 1 installed.
  - You must install the Intel-provided 2.6.5 Kernel contained on CD 2 on top of the base RedHat release. See the README file on disc 2 of this HMP release.
  - A minimum of 512MB of RAM if running without an X Windows System.
  - A minimum of 1GB of RAM if running in an X Windows System.
  - The machine must be able to resolve its name to an IP address, either using DNS or the /etc/hosts file. If it cannot resolve its name, HMP will NOT start.
- To install the software, you must have local administrative privileges. Contact your network administrator to set up administrative privileges as required.
- Uninstall any previous version of the HMP Software (or any Intel® Dialogic® system release).

Note that the HMP software has three install scripts:

- One in the redistributable-runtime directory, which installs runtime components (no header files)
- One in the sdk directory, which installs header files for application development
- One at the top level which installs both runtime components as well as header files (run this one to be able to compile your application)

2.2 Order of Procedures

This section describes the order in which the installation procedures must be performed.

Before you use the HMP Software, you must obtain a license file containing HMP license data. You can obtain a license before or after you install the HMP Software. A verification license supplied with the software will allow you to run the verification demo (IP Media Server demo) to confirm that you have installed the HMP Software properly. However, its features are limited and you may want to obtain another license. For more information, refer to Section 1.2, "HMP Licenses", on page 9 and the *Intel® NetStructure™ Host Media Processing Software Release 1.2 for Linux License Manager Administration Guide*.

The basic order of the installation process is as follows:

1. Install the HMP 1.2 software as described in Section 2.3, "Installing the HMP Software", on page 12.
2. Use the License Manager application to configure the system. This consists of activating an HMP Software license (refer to Section 2.4, "Configuring the System (Activating a License)", on page 14).
3. Manually start HMP services using `dlstart`. HMP services will start automatically whenever you reboot your system.
4. Optionally run the IP Media Server demo to verify proper installation of the HMP Software (refer to Section 2.5, "Running the IP Media Server Demo", on page 17).

2.3 Installing the HMP Software

The following procedure describes how to install HMP Release 1.2 for Linux software.

1. Log in to the Linux system as root.

2. Insert CD disc 1 containing the HMP software in the CD-ROM drive. Then, if your system is not set up to automount the CD-ROM drive when a CD is inserted, enter the following command to mount the CD to */mnt/cdrom*:

   ```
   mount /mnt/cdrom
   ```

   For further information about mounting a directory in Linux, see the mounting information in the */etc/fstab* file or the Red Hat Linux documentation.

3. Change directory to */mnt/cdrom*:

   ```
   cd /mnt/cdrom
   ```

4. Enter the following command to start the install script:

   ```
   ./install.sh
   ```

   The following messages are displayed:

```
------------------------------------------------------------------------
Installing Intel(R) NetStructure(TM) Host Media Processing Software 1.2
Redistributable Runtime for Linux

Initializing install, please wait .......

========================================================================
        Intel ® NetStructure ™ Host Media Processing Software 1.2
                  Redistributable Runtime
                       INSTALLATION

You will now have an opportunity to install software packages.
After the menu is displayed, enter the package number(s) of the desired
packages, separated by a space. Enter A for all packages, Q to quit.

Package dependencies will be automatically resolved during installation. For example,
selecting a single package will automatically install all packages required for that
selection.

Press ENTER to display the menu packages.
```

5. Press **Enter**.

   The following menu is displayed:

```
Item   Package Description
---- ------------------------------------------------------------------------
  1    Intel(R) NetStructure(TM) Host Media Processing Software (75 MB)
  2    SNMP Component Manager (43 MB)
  3    Documentation (16 MB)

  A    Install All (98 MB)
  Q    Quit Installation

Enter the packages you wish installed, separated by a space, or [A,a,Q,q]:
```

6. Enter the numbers or letter that correspond to what you want to install. Unless space or other considerations dictate that you limit what you install, you can just enter **a** to install everything.

   You will see messages about package installation order, checking for previously installed packages, checking for sufficient disk space, and installation progress. Then the installation menu (shown above) will reappear.

7. Enter **q** to quit and complete the installation process. The following message is displayed:

```
Do you wish to run config.sh to configure your system [Yn] ?
```

8. At this point, you have two options:
   - Enter **y** if you already have obtained a license[1] or want to use the verification license supplied with the software. Follow the procedure in Section 2.4, “Configuring the System (Activating a License)”, on page 14.
   - Enter **n** if you do not want to use the verification license or have not obtained the license you want. After you have obtained a license, run `config.sh` (located in */usr/dialogic/bin*) and follow the procedure in Section 2.4, “Configuring the System (Activating a License)”, on page 14.

   Note: You must run `config.sh` at least once after installing the software.

1.For more information about HMP Software licenses, see Section 1.2, “HMP Licenses”, on page 9 and the *Intel® NetStructure™ Host Media Processing Software Release 1.2 for Linux License Manager Administration Guide*.

2.4 Configuring the System (Activating a License)

Configuring the system consists of activating an HMP Software license. You can activate the verification license supplied with the software or another license you have obtained.[1]

You can configure the HMP system immediately after installing the HMP Software or at some later time. If you configure the system immediately after installing the software, enter **y** when asked "`Do you want to run config.sh...`" Otherwise, run `config.sh` (located in */usr/dialogic/bin*).

The HMP configuration Main Screen will appear:

```
================================================================================
  Intel(R) NetStructure(TM) Host Media Processing Software Release 1.2
                                CONFIGURATION


This is the configuration tool for Host Media Processing Software Release 1.2.
You will be asked to supply information for configuring the software.


Starting ssp_x86Linux_boot:                                 [  OK  ]
Intel(R) NetStructure(TM) Host Media Processing (HMP) software was detected.
Starting HMP-specific configuration...

Press ENTER to continue...

--------------------------------------------------------------------------------
```

1. Press **Enter** and the following menu will appear:

   ```
   Please choose one of the following options:

   1. View active license file information
   2. Activate license file
   3. View all license files
   4. Display HMP IP address
   5. Set user-defined HMP IP address
   6. Remove user-defined HMP IP address
   7. Exit the program

   Select the option by entering the corresponding number:
   ```

2. Enter **2** to activate the license file

   A menu appears listing all available license files plus options to change directory (if the license files are located in a different directory) or return to the previous menu. Following is an example of what this might look like. Note that only one license file is listed here (*1r1v1e1r1s1f_ver.xml*), but there could be more. The example shows the default location for licenses.

   ```
   Files in directory /usr/dialogic//data:

   1: 1r1v1e1c1s1f_ver.xml
   2: Change directory
   3: Return to the previous menu

   Enter the number that corresponds to the license you want to activate. You also have the
   option to change the directory or return to the previous menu :
   ```

1.For more information about HMP Software licenses, see Section 1.2, "HMP Licenses", on page 9 and the *Intel® NetStructure™ Host Media Processing Software Release 1.2 for Linux License Manager Administration Guide.*

3. Enter the number that corresponds to the license you want to activate[1].

   Details about the license you selected will appear so you can confirm that you really want to activate this license. Here is an example of what the details might look like.

```
Information from the file /usr/dialogic//data/1r1v1e1c1s1f_ver.xml :

Serial number :       VERIFICATION
MAC address :         *****************
License type :        Verification
Expiration date :     **********
PCD file name :       1r1v1e1c1s1f_ver.pcd
Feature description : Name - Quantity
                      Conferencing - 1
                      Enhanced RTP - 1
                      RTP G.711 - 1
                      Speech Integration - 1
                      T.38 Fax Termination - 1
                      Voice - 1

Do you want to activate this license? [y/n] : y
```

4. Enter **y** to activate this license or **n** to select another one.

   If you select **y**, a message will appear to confirm that the license has been activated.

5. As instructed on the screen, press **Enter** to continue. The License Manager menu will reappear.

   Note: You must adjust the HMP IP address (License Manager menu choice 5) if you plan to use a different network card for IP telephony than the licensing network card. Refer to the *Intel® NetStructure™ Host Media Processing Software Release 1.2 for Linux License Manager Administration Guide* for more details about changing the HMP IP address.

6. If you have activated a license, you can exit from the License Manager menu. If you selected SNMP Component Manager during the first part of the install, you will get some SNMP-related prompts. If you did not select SNMP Component Manager, skip the next two steps.

7. The first SNMP-related prompt that appears is the following:

```
Would you like to configure SNMP on this system (y/n, default=n)?
```

8. If you *don't* want to configure SNMP, enter **n** and skip to the next step.

   If you *do* want to configure SNMP, enter **y**. The following information and prompt will appear:

```
Dialogic SNMP Agents Configuration Tool
(C)2000-2004 Intel Corp.

You may choose to manually configure all communities and trap sinks(destinations), or you
may select an automatic configuration.  If the automatic configuration is chosen, this tool
will create the required 'admin' community and prompt you to enter trap sinks.  Selecting
the manual configuration allows you to easily create custom communities and configure trap
sinks.  If the 'admin' community does not exist yet, it may be created the same way as
other communities using the manual configuration.  Note, the 'admin' community MUST be
assigned read-write priviledges or else abnormal behavior will occur when the Intel
Dialogic SNMP Agents are loaded.
```

1.License file names consist of a sequence of numbers and letters that describe the quantity of each resource (1r stands for one RTP G.711 port, 1v stands for one voice port, etc.), followed by an underscore and a three-letter abbreviation for the license type (ver stands for verification license). For a full explanation of license file names, refer to the HMP for Linux License Manager Administration Guide.

```
Would you like to proceed with automatic configuration? (no will select manual
configuration) (y)es or (n)o?
```

Enter **y** for automatic configuration or **n** for the opportunity to perform manual configuration as described in the on-screen text shown above. If you enter **y**, the following will appear:

```
This tool will attempt to automatically make changes to /usr/share/snmpd.conf.
A backup copy will be created as /usr/share/snmp/snmpd.conf.backup.
The automatic configuration contains the following access parameters:
    o    read-write access on localhost for community admin
    o    read-only access for all external hosts for community dialogic
```

The following prompts will appear:

```
Proceed (y)es or (n)o?
```

If you answer **y** the following prompt appears:

```
Configure trap sink(destination) (y)es or (n)o?
```

Respond **y** or **n**. When you have completed configuration, the following messages will appear:

```
Configuration finished
To change the Dialogic SNMP Agent configuration later,
use '/usr/dialogic/bin/dlgcsnmpconf'

Changes made with this tool will not take effect until the
Intel Dialogic SNMP agents have been restarted.  It is recommended
that the following command-line be used to restart the agents:
/etc/init.d/dlgcsnmpd restart
```

9. Once license activation and configuration are complete, you will see a series of messages, followed by a prompt asking if you want to install the software development kit (SDK):

```
Configuration is now complete

The Intel(R) NetStructure(TM) system services will automatically
start every time the system is rebooted.

NOTE: To start and stop system services manually, use the dlstop and
      dlstart scripts found in /usr/dialogic/bin.

Installation of Intel(R) NetStructure(TM) Host Media Processing Software 1.2
Redistributable Runtime for Linux was successful.

Do you wish to install the Software Development Kit [Yn] ?
```

   Enter **n** if you don't want to install the software development kit or **y** if you do want to install it. If you choose to install it, you will see some messages during the install process, followed by this message if the installation was successful:

```
Installation of Intel(R) NetStructure(TM) Host Media Processing Software 1.2
Software Development Kit for Linux was successful.
```

10. Now that you have installed the software, you will just need to start the HMP services using the `dlstart` script found in `/usr/dialogic/bin`.

    Note: The HMP services will be started automatically whenever you reboot your system. To stop and restart HMP services, use the `dlstop` and `dlstart` scripts found in `/usr/dialogic/bin`.

At this point, you can **optionally** do the following:

- Confirm what you have installed by following the procedure in Section 4.1, "Checking the Installation", on page 23.
- Run a demo that will verify that you have set up the HMP Software properly. Refer to Section 2.5, "Running the IP Media Server Demo", on page 17.

2.5 Running the IP Media Server Demo

If you would like to verify that you have set up the HMP Software properly, you can run the IP Media Server Demo.

Note: This step is optional, but recommended.

To run the IP Media Server demo for this release, use the files in /usr/dialogic/demos/ip_demos/IPMediaServer. Perform the following:

1. Use the following command sequence to start the server:

```
cd /usr/dialogic/demos/ip_demos/IPMediaServer/Release
       ./ipmediaserver
```

2. Call into your system using Microsoft* NetMeeting* and your machine's IP address.

If you need to restart HMP services, you will need to be root and use the following command sequence:

```
dlstop;dlstart
```

An example of output from the `dlstart` command follows.

Note: This output will vary depending on the license you have enabled.

```
% dlstart
[TEELOGGER]: Starting logging of admin script
Starting Intel Dialogic Services...
Starting CORBA Event Server:                [ OK ]
Starting CORBA Name Server                  [ OK ]
Starting Error Logger:                      [ OK ]
Starting Device Mapper:      [ OK ]         [ OK ]
[TBPARMS]:Initializing System Variables for TDMBus
[TBPARMS]:Base timeslot: 0
[TBPARMS]:TDMBus Variables initialized
Starting Timeslot Doler:     [ OK ]         [ OK ]
Starting Intel(R) NetStructure(TM) DM-family board(s).
CHEETAHSTART: Removing temp files.
CHEETAHSTART: Building shared memory.
CHEETAHSTART: Done.

 HMP boot kernel is running

Starting Intel(R) NetStructure(TM) DM-family board(s) download phase.
 User initiated Reset on board 1
downloader Version 2.62 Alpha 0.01 Build: 00
Copyright (c) Intel Corporation 1997-2002

  (Using: Host Library version: 7.00  Build: 16)

Using data files from /usr/dialogic/data

================================< SCD PARSER >================================
downloader Version 2.62 Alpha 0.01 Build: 00
Copyright (c) Intel Corporation 1997-2002

  (Using: Host Library version: 7.00  Build: 16)
```

```
Using data files from /usr/dialogic/data
Parsing SCD file /usr/dialogic/cfg/pyramid.scd succeeded

=====================< DRIVER STARTUP & BOARD VERIFICATION >====================
Setting driver interface succeeded boardNumber=1
Driver Start Passed
Found boardNumber=1
cpload: main: entry
Board num set to 1
Download disabled, Start occuring
cpload: main: SetInterface called
cpload: main: qdbConnectInit  called
calling HMP Kernel start...
Calling start kernel
 HMPLinuxKernelStart: entry
Started CP RTK
cpload: main: exit
Done

==============================< PCD & FCD PARSER >==============================
Parsing PCD File /usr/dialogic/data/1r1v1e1c1s1f_ver.pcd for board boardNumber=1
Parsing PCD File /usr/dialogic/data/1r1v1e1c1s1f_ver.pcd for board succeeded boardNumber=1
Parsing FCD File /usr/dialogic/data/1r1v1e1c1s1f_ver.fcd for board boardNumber=1
Parsing FCD File /usr/dialogic/data/1r1v1e1c1s1f_ver.fcd for board succeeded boardNumber=1

==============================< BOARD 1 STARTUP >===============================

=========================< BOARD HARDWARE VERIFICATION 1 >======================
CP PLM Boot Kernel Version: 3.03  Build: 22B boardNumber=1 processor=CP

==============================< CP DOWNLOAD 1 >=================================

CP PLM /usr/dialogic/data/ssp.mlm download succeeded for board boardNumber=1
Setting global kernel parameters succeeded for board boardNumber=1
Setting parameters succeeded for processor boardNumber=1 processor=CP
LM_GetLicenseKey returned success
License retrieved and delivered boardNumber=1
IP address retrieved boardNumber=1
Starting CP PLM succeeded for board boardNumber=1
CP PLM Run Time Kernel Version: /usr/dialogic/data/ssp.mlm 3.03  Build: 22R boardNumber=1
processor=CP
Mulaw is chosen as requested boardNumber=1

============================< COMPONENT START 1 >===============================
Starting components boardNumber=1 processor=CP
Finding  components in the board boardNumber=1

==========================< COMPONENT CONFIGURE 1 >=============================
Found 22 components in the board  boardNumber=1
Configured 22 components in the board boardNumber=1
Initialized 21 components in the board boardNumber=1
configuring and initializing all components in the board succeeded boardNumber=1
board successfully set to the downloaded state boardNumber=1
Configuring and downloading board succeeded boardNumber=1
TBASSIGN: Board: 1 TDM Bus type and speed configured
REGVOX: Adding DM3 Devices ...
REGVOX: Adding DM3 Devices Done
Starting Telephony System Monitor:                         [ OK ]
Starting Clocking Server:                                  [ OK ]
Starting Clocking Daemon:                                  [ OK ]
Starting fault detection on all boards.
Successfully started fault detection on all boards.
Starting Board Watch:                                      [ OK ]
[TEELOGGER]: Finishing logging of admin script
```

Before you use the HMP Software you **must** obtain and activate a license. Refer to the *Intel® NetStructure™ Host Media Processing Software Release 1.2 for Linux License Manager Administration Guide*.

2.6 Performing a Silent Install

Silent installation allows you to predefine the answers that you would normally supply to the setup program interactively. A silent install is recommended when no user interaction is intended.

Before you begin a silent install, you must meet the prerequisites given in Section 2.1, "Assumptions and Prerequisites", on page 11. Then, follow steps 1 through 3 in Section 2.3, "Installing the HMP Software", on page 12. After you complete step 3, continue with the following steps:

1. To display a list of the package names that can be silently installed, enter the following command:

   ```
   ./install.sh --silent
   ```

   The following messages are displayed:

   ```
   Usage: ./install.sh --silent <PKG1> <PKG2> ... <PKGn>

   Valid package selections are:
   -----------------------------
   ```

2. Enter the silent install command with the packages you want to install. For example, if you want to install HMP software and the associated documentation, use the following command:

   ```
   ./install.sh --silent lsb-intel-hmp-hmp lsb-intel-hmp-docs
   ```

   See Table 3 for a list of all the packages.

3. Run `config.sh` at least once after installing the software.

4. Activate an HMP Software license file as described in Chapter 3, "Activating a License" of the *Intel® NetStructure™ Host Media Processing Software Release 1.2 for Linux License Manager Administration Guide*. Use the CLI procedure. Additional helpful information in the same Administration Guide can be found in Chapter 12, "License Manager Command Line Interface (CLI) Reference" and Chapter 4, "Activating Licenses in a Multi-Node Environment".

At this point, you can **optionally** do the following:

- Confirm what you have installed by following the procedure in Section 4.1, "Checking the Installation", on page 23.
- Run a demo that will verify that you have set up the HMP Software properly. Refer to Section 2.5, "Running the IP Media Server Demo", on page 17.

Before you use the HMP Software you **must** obtain and activate a license. Refer to the *Intel® NetStructure™ Host Media Processing Software Release for Linux License Manager Administration Guide*.

Uninstalling the Software 3

This chapter describes how to uninstall HMP Release 1.2 for Linux.

To uninstall the HMP Release 1.2 for Linux software, follow this procedure:

1. If the HMP service is currently running, close all telephony applications that are currently running in the system and stop the HMP services. To stop HMP services, use the `dlstop` command.

   You will see several screen messages scrolling. When the prompt returns, you have stopped HMP services.

2. Create a backup directory to save your configuration data. From the root, create a backup directory by entering the command `mkdir /backup`.

3. Go to the */usr/dialogic/data* directory (the default directory for license files) or whatever directory contains your license files.

4. Using the copy command, **`cp`**, copy all instances of the active license file (with all extensions: *.xml .pcd .fcd .config*) to the backup directory.

   To find out which file is the active license file, type `hmpconfig` (located in */usr/dialogic/bin*) to start the License Manager and select option 1 (View active license file information) from the menu that appears. Information about the active license file will appear.

5. Using the `ls` command, verify that all instances of the active license file (with all extensions) appear in the backup directory.

6. Run `dlguninstall.sh`.(located in */usr/dialogic/bin*).

   You will see a prompt that asks you if you want to back up your data. Since you have already backed up your license file, you can respond **`n`** to this prompt and proceed with the uninstall.

7. You will see messages indicating that the uninstall is stopping the software and removing it. The uninstall has completed when you see the following message:

   ```
   The removal of the Intel NetStructure software is complete.
   ```

Troubleshooting 4

This chapter provides the following information about troubleshooting problems encountered when installing the HMP Software:

4.1 Checking the Installation

After the HMP Software has been installed as described in Chapter 2, "Installing the Software", you can enter the following commands to confirm what has been installed:

1. To check which packages were installed, enter:

   ```
   rpm -qa lsb-intel-hmp-\*
   ```

   The names of the installed packages are listed.

   See Table 2 for the software packages that are installed for each menu selection, and see Table 3 for a description of each package.

2. To list the contents of the */usr/dialogic* directory, enter:

   ```
   ls /usr/dialogic
   ```

   See Table 4 for a description of the directories under */usr/dialogic*.

Table 2. Software Packages Installed

Menu Selection	Packages Installed
Intel® NetStructure™ Host Media Processing Software	lsb-intel-hmp-com, lsb-intel-hmp-dmdev, lsb-intel-hmp-hmp, lsb-intel-hmp-ooc
SNMP Component Manager	lsb-intel-hmp-com, lsb-intel-hmp-ooc, lsb-intel-hmp-snmp
Documentation	lsb-intel-hmp-docs
Install All	lsb-intel-hmp-com, lsb-intel-hmp-dmdev, lsb-intel-hmp-hmp, lsb-intel-hmp-ooc, lsb-intel-hmp-snmp, lsb-intel-hmp-docs
See Table 3 for a description of each package.	

Table 3. Software Package Descriptions

Package Name	Package Description
lsb-intel-hmp-com	Core Host Software for Linux
lsb-intel-hmp-dmdev	Intel NetStructure on DM3 Architecture Development Software

Table 3. Software Package Descriptions (Continued)

Package Name	Package Description
lsb-intel-hmp-hmp	Intel NetStructure Host Media Processing Software
lsb-intel-hmp-docs	Intel Documentation Package
lsb-intel-hmp-ooc	Orbacus CORBA Support Package **Note:** This is a CORBA support package that is required and runs in the background.
lsb-intel-hmp-sdk	Intel NetStructure Software Development Kit
lsb-intel-hmp-snmp	SNMP Component Manager

Table 4. File Locations under /usr/dialogic

Directory	Contents
bin	All Intel Dialogic executables
cfg	Configuration related files that can be viewed and modified by users. (Some configuration files are also in the *data* directory.)
data	Contains *.pcd*, *.fcd*, and *.config* files.
demos	Demonstration programs (in separate subdirectories according to the feature)
docs	Documentation
drivers	Drivers
inc	Header files (symbolically linked into */usr/include*) - exists only when SDK is installed
init.d	System startup scripts
lib	Library files (symbolically linked into */usr/lib*)
log	Log files that should be checked by users
ooc	CORBA support package
qscript	QScript tools. These tools are described in the *Diagnostic Guide*.
sctools	Files for SCbus routing convenience functions

4.2 Understanding the Install Error Messages

This section describes the error messages that can appear during installation. For convenience, the error messages have been grouped as follows:

- Installation Prerequisites (OS, Kernel, Disk Space)
- Packages/RPMs
- Config.sh

Installation Prerequisites (OS, Kernel, Disk Space)

Following is a list of error messages and what must be done to correct the error condition. The error is in bold type and an explanation follows it:

This program requires you to be a Superuser.
Log in as root and re-run the install.

This software requires a kernel upgrade. The current kernel version is [VERSION]. Please upgrade the kernel to at least version [SUPPORTED_KERNEL].
Upgrade to the requested kernel and rerun the install.

The current kernel version [VERSION] is later than the version currently supported by this software [SUPPORTED_KERNEL].
Install the supported kernel and rerun the install.

Insufficient free disk space is available on the filesystem containing [DLGCROOT] to install the selected software. Need 1 MB, but only have [SPACE_AVAILABLE] MB.
You must free up at least 1 MB of disk space before installing the HMP Software.

ERROR: check_diskspace_dlgcroot_filesystem(): number of bytes must be > 0
You must free up at least 1 MB of disk space before installing the HMP Software.

Unable to determine the specific distribution of Linux you are running.
Make sure you are running the distribution of Linux specified in Section 2.1, “Assumptions and Prerequisites”, on page 11.

Distributions from [OS DISTRIBUTOR] are not supported.
Make sure you are running the distribution of Linux specified in Section 2.1, “Assumptions and Prerequisites”, on page 11.

[OS DESCRIPTION] is not supported.
Make sure you are running the distribution of Linux specified in Section 2.1, “Assumptions and Prerequisites”, on page 11.

Unable to determine the OS version
Make sure you are running the distribution of Linux specified in Section 2.1, “Assumptions and Prerequisites”, on page 11.

Packages/RPMs

Following is a list of error messages and what must be done to correct the error condition. The error is in bold type and an explanation follows it:

You have selected an invalid package.
Review the list of packages again (in the install menu) and make sure you select one or more of the packages shown in the menu.

[PKGNM] is obsolete and will be removed
This message lets you know that the install has found an obsolete package and is deleting it.

The following RPM's from a previous release have not yet been updated. Please do so by re-running install.sh and selecting the appropriate menu items.
A list of the RPMs that need to be updated will appear. Note the RPMs. Re-run install.sh and select the RPMs in the list.

Invalid Response.
When entering your selection(s) from the install menu, you entered something other than the valid numbers and letters shown on the menu.

ERROR: Invalid package name [PACKAGE NAME].
You specified an invalid package from the command line (silent install). Check the package names listed in Section 4.1, "Checking the Installation", on page 23.

Config.sh

Following is a list of error messages and what must be done to correct the error condition. The error is in bold type and an explanation follows it:

ERROR: config.sh not found in the current directory.
Go to `/usr/dialogic/bin` and run `config.sh`.

4.3 Contacting Support

For technical support, go to *http://developer.intel.com/design/telecom/support/*.

Glossary

Emergency Replacement License: See HMP Software License for general information. In some situations, you might need to get an emergency replacement license. For example, if you need to move the HMP application to a different system due to a hardware failure, you will need an emergency replacement license. To obtain an emergency replacement license, you must contact the Intel authorized distributor or Intel account manager from whom you requested the original license. Because this emergency replacement license will expire, a request for a permanent license to replace it will be placed automatically.

Evaluation License: See HMP Software License for general information. An evaluation license is free, provides four channels for all feature components, and expires in 45 days. This license is intended to allow you to evaluate the HMP Software. You do not need to supply a MAC address to get this license

HMP: Host Media Processing

HMP Software License: HMP software is licensed using an industry-standard model in which a MAC address is used to node-lock the software to a particular computer. Before you use the HMP Software, you must obtain a license file[1] containing HMP license data. An HMP license is a file containing a combination of call control and media processing channels. You can obtain a license file either before or after you install the HMP Software, but you need to obtain a license file before you can proceed with using the HMP Software. The types of licenses are defined individually: evaluation, purchased, trial, verification, and emergency replacement.

Host Media Processing: This software performs media processing tasks on general-purpose servers based on Intel® architecture without the use of specialized hardware. When installed on a system, the software looks like an Intel® Dialogic® board with DM3 architecture to the customer application, but all media processing takes place on the host processor.

IP Media Server Demo: The IP Media Server (Global Call) demo is an object-oriented host-based application that demonstrates using the Global Call API to build an IP media server, providing voice and fax services via IP technology. Running the demo successfully confirms successful installation of HMP Software.

MAC Address: A unique 48-bit number programmed into each network interface card when it is manufactured. This number is required when you request a trial or purchased license.

Purchased License: You can request any supported channel component combination and this license does not expire. You must request this license from an Intel authorized dealer and supply a MAC address.

Simple Network Management Protocol: A a standard IP network mechanism for exchanging management information between an SNMP agent and an SNMP manager. SNMP was designed to manage routers, switches and other network devices. SNMP provides an industry standard protocol for fault and monitoring support.

SNMP: Simple Network Management Protocol

1. A verification license is installed with the HMP Software, activated and ready to use, but this license is only intended to be used for verifying that the HMP Software installation was successful (refer to the Installation Guide for more information about the verification demo).

SNMP Agent: The SNMP agent provides remote (or local) monitoring and limited control of Intel® NetStructure™ devices over an IP network. The SNMP agent resides on an IP stack and responds to SNMP "gets" and "sets" from an SNMP manager and the SNMP agent sends SNMP traps.

SNMP Component Manager: The SNMP manager is the management application that monitors and/or administers a remote system. management application, you must use a third-party product such as HP OpenView* or any other SNMP-compliant network management application.

Trial License: See HMP Software License for general information. Like an evaluation license, a trial license is free, expires after a specified time period, and will allow you to try out the HMP Software before you purchase a license. Unlike an evaluation license, the trial license can be customized. The evaluation license provides four channels for all feature components, but you can request any supported channel component combination. Because of this customization, you will need to request this license from an Intel authorized dealer and supply a MAC address.

Verification License: See HMP Software License for general information. A verification license is installed with the HMP Software, activated and ready to use, but this license is only intended to be used for verifying that the HMP Software installation was successful. Verification consists of running a demo.

XML: eXtensible Markup Language – The universal format for structured documents and data.

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