

# Hardware Installation and IP Infrastructure Setup for Native Deployment GEP5

Ericsson Dynamic Activation 1

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## INSTALLATION INSTRUCTION

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# 1 Introduction

This document provides instructions for installing and performing a basic configuration of hardware in Ericsson Dynamic Activation (EDA) using GEP5 blades.

The hardware components included in this configuration contain 4–12 GEP5 blades. The hardware is complemented with a pair of SCX switches and a pair of CMX routers.

## 1.1 Purpose and Scope

The scope of this document is to:

- Specify all hardware components required for installing the system.
- Provide instructions on how to install and mount all hardware components in a cabinet.
- Specify the required cabling.
- Prepare and conduct a maiden installation of all hardware and software products as well as an initial installation and basic configuration of all hardware-related software.

## 1.2 Target Group

The target group for this document is as follows:

- System Administrator
- Network Administrator
- System Integrator
- Technicians who perform hardware installation.

The target groups are described in more detail in the *Library Overview*, Reference [1], document.

## 1.3 Typographic Conventions

Typographic conventions are described in the document *Library Overview*, Reference [1].



For information about abbreviations used throughout this document refer to *Glossary of Terms and Acronyms*, Reference [2].



## 2 Prerequisites and Preparations

Installation of the Dynamic Activation GEP5 system requires that the user has:

- Linux system administration skills
- Switch and router administration skills
- The document *Customer Questionnaire for Native Deployment*, Reference [5] is available with all values of the installation parameters.

### 2.1 Hardware and Software Required

This section specifies hardware and software prerequisites and describes what to prepare before an installation.

#### 2.1.1 Hardware

It is a prerequisite to have the correct hardware set ordered according to the document **ECP Guideline for Ordering BSP8100 in Dynamic Activation 1**, in <http://prodcats.internal.ericsson.com>. Deviations from the quantity or type of hardware can result in immediate or future problems.

This document is used for performing a maiden installation of GEP5, CMXB3, and SCXB3.

If using GEP3, CMXB3, and SCXB3, refer to *Hardware Installation and IP Infrastructure Setup for Native Deployment GEP3*, Reference [19].

#### 2.1.2 Software

Verify that the correct software is delivered. Deliveries can be retrieved from the software gateway web page <https://swgateway.ericsson.net/>. Check the release note of the specific product for information about how to download it.

For information about the software delivered with Dynamic Activation, refer to *Software Specification*, Reference [3].

##### 2.1.2.1 LDEwS Installation Media

For information on how to configure an installation server on LDEwS, see *LDEwS SW Installation*, Reference [11].



## 2.2 Documentation

The software component products that together form the system are delivered in a hardware-independent way. The documentation for the respective products does not assume any specific hardware set onto which they are installed.

The included hardware and software components provide a full set of documentation targeted to different users. The documentation is provided in two different types of ALEX libraries, the Customer Product Information (CPI Store) library and the Support (CAL Store) library. The CPI library is targeted for external customers (end users) and the Support library is written for Ericsson internal personnel. For example, BUGS and R&D personnel.

The documentation for the following components can be found and downloaded from CPI Store (<http://cpistore.internal.ericsson.com/alex>) or CAL Store (<http://cpi2.al.sw.ericsson.se/alex>).

The following set of libraries are of relevance for this Dynamic Activation GEP5 system:

### **LDEwS (Linux Distribution Extensions with SUSE)**

Provides both a CPI library and support library

### **eVIP LSB**

Provides both a CPI library and support library

### **BSP**

Provides a support library

[http://calstore.internal.ericsson.com/alexserv?li=EN/LZ/N7800024\\*](http://calstore.internal.ericsson.com/alexserv?li=EN/LZ/N7800024*)

Ensure that the following documents have been read:

- *Personal Health and Safety Information*, see Reference [6].
- *System Safety Information*, see Reference [7].

## 2.3 Tools

The following tools are required:

- Installation server used for LDEwS and BSP installation.
- Tools required for installation of an EGEM2 subrack with a pair of SCXs in BYB 501 cabinet is presented in *BSP Hardware Installation*, Reference [8]. This document is available in the BSP document library.
- Screwdriver of type TORX bits (size T5 and T8) is needed for installation of GEP5, CMX, and SCX blades.
- To install the required SW, an installation server is used. The BSP documentation refers to it as a jumpstart server. A Console Server can





be used for the basic initial configuration of BSP. The required tools are described in *BSP Jumpstart Instruction*, Reference [10].

- The basic initial configuration of GEP5, CMX, and SCX blades are made through a Command-Line Interface (CLI). For example, use a Console Server, a terminal, or a PC with a serial port.
- A Console Server is recommended for remote access to GEP and SCX blades. CMX is administered from the SCXs. An alternative to a Console Server could be a terminal or a PC with a serial port and a terminal cable.

## 2.4 Conditions

Before using this Installation Instruction, verify that a site inspection has been performed, see Section 3.1.1 on page 9.

The instructions throughout this document are based on the assumption that a Console Server is used.





## 3 Installation

This section goes through all installation steps. Upon completion of this section, the system is installed.

The reader will be guided by installing product after product while pointing at the product installation instruction. If deviations from a separate product installation are required, these are stated in this document. The information given in this document thus overrides similar information in the product own installation instruction.

The installation results in:

- Hardware configured and installed
- IP network configured
- LDEwS operating system installed
- eVIP installed
- Dynamic Activation application installed

This installation instruction provides the complete installation flow for the Dynamic Activation GEP5 system as shown in Figure 8.

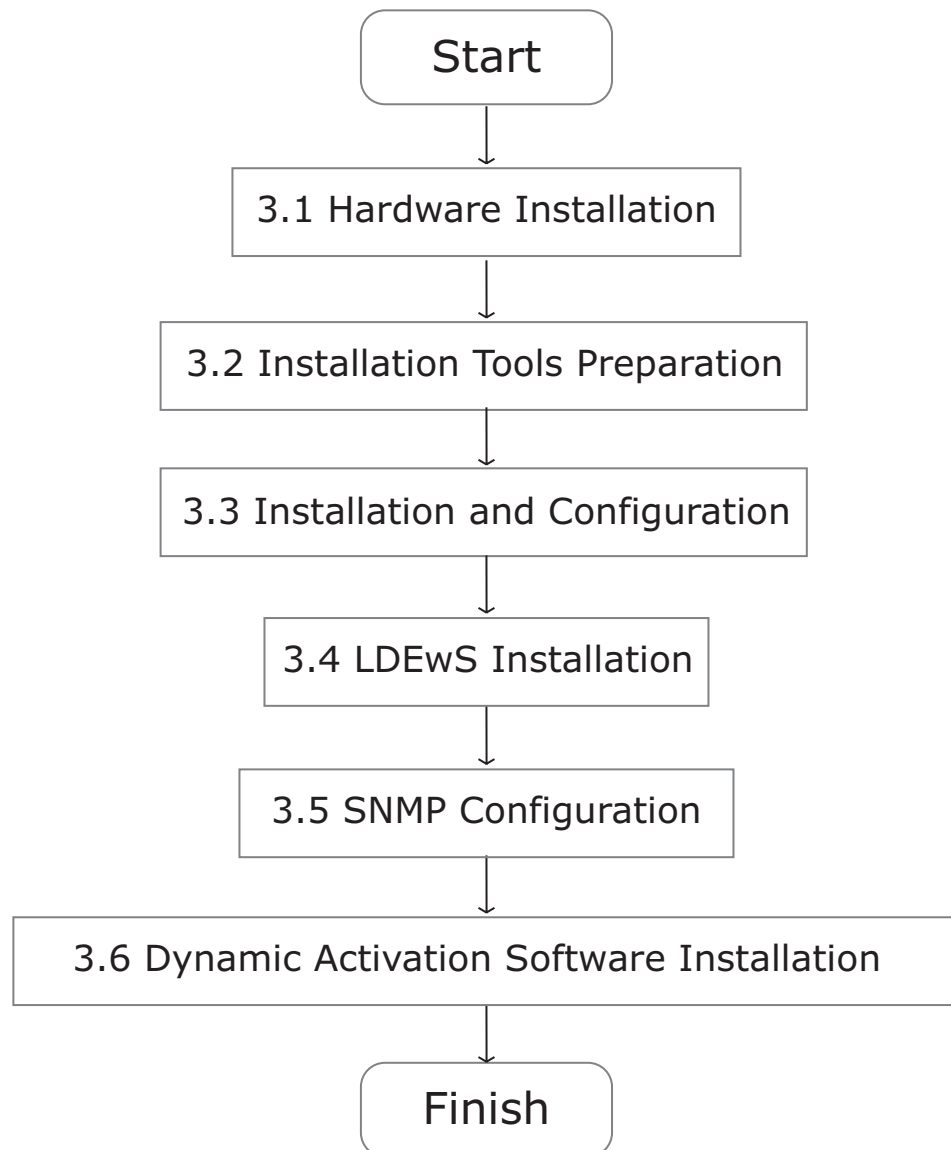


Figure 1 Work Process

## 3.1 Hardware Installation

This section provides the complete hardware installation flow for the Dynamic Activation GEP5 system. The BSP Hardware Installation, see *BSP Hardware Installation*, Reference [8], is used as a base in this instruction.

Figure 2 shows the workflow that must be performed to install the hardware.

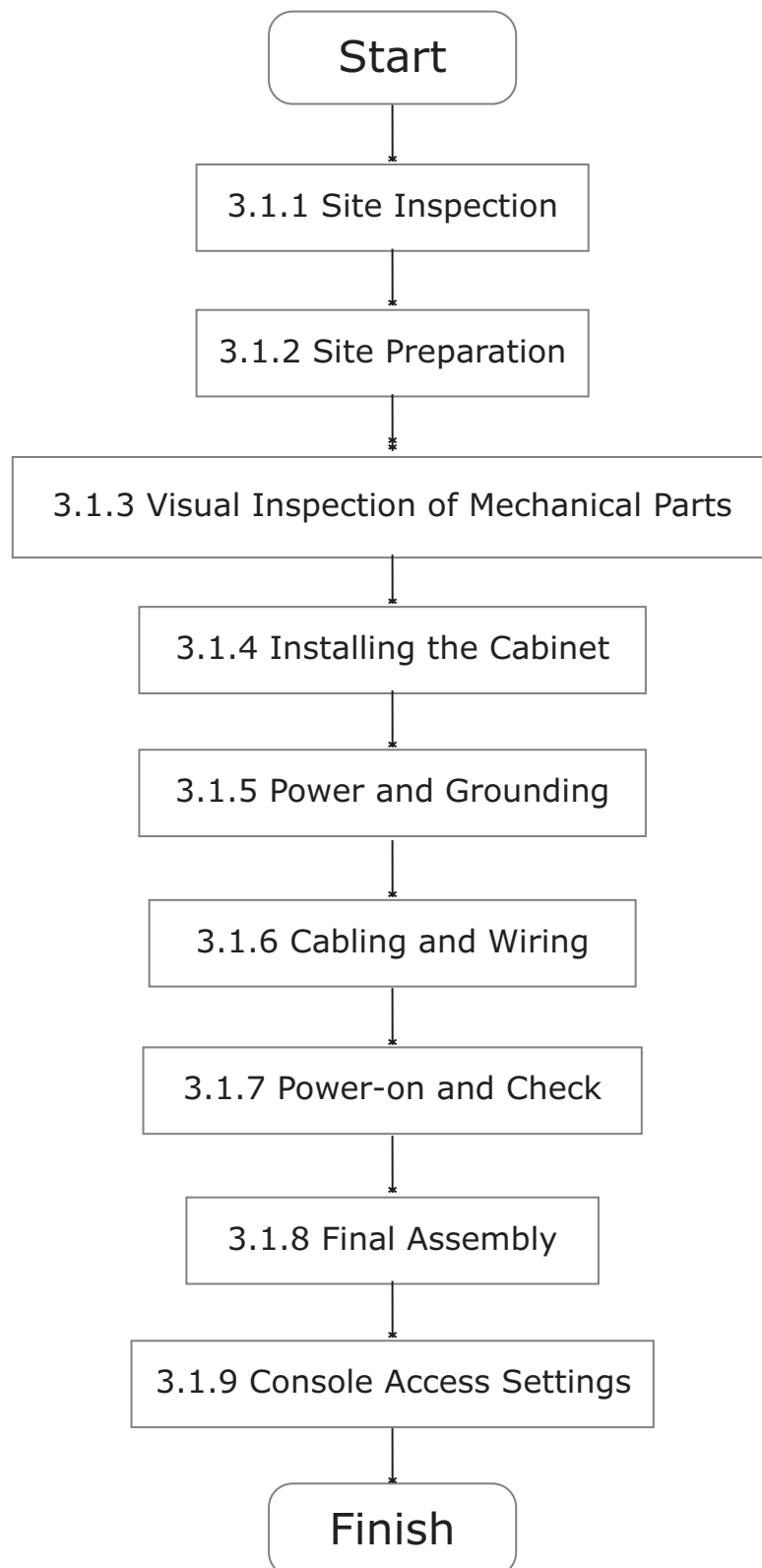


Figure 2 Hardware Installation Workflow



### **3.1.1 Site Inspection**

Perform site Inspection as described in *BSP Hardware Installation*, Reference [8].

### **3.1.2 Site Preparation**

Prepare the site as described in *BSP Hardware Installation*, Reference [8].

### **3.1.3 Visual Inspection of Mechanical Parts**

Perform a visual inspection of the cabinet and subrack equipment as described in *BSP Hardware Installation* Reference [8].

The Dynamic Activation GEP5 system includes several separate delivery packages that need to be assembled to build a complete system.

For detailed information regarding the different hardware parts, see *BSP Hardware Description*, Reference [22].

### **3.1.4 Installing the Cabinet**

This section provides instructions how to install cabinets with all hardware components required for the Dynamic Activation GEP5 system.

When working with plug-in units such as GEP5 blades and CMX blades, use an Electrostatic Discharge (ESD) wrist strap to avoid ESD damage. Connect the strap to the ESD connection point in the upper part of the cabinet. When handling the unit, do not touch any components or connector pins.

An example of a Dynamic Activation GEP5 system cabinet where the EGEM2 subrack is placed in the bottom of the cabinet is shown in Figure 3.

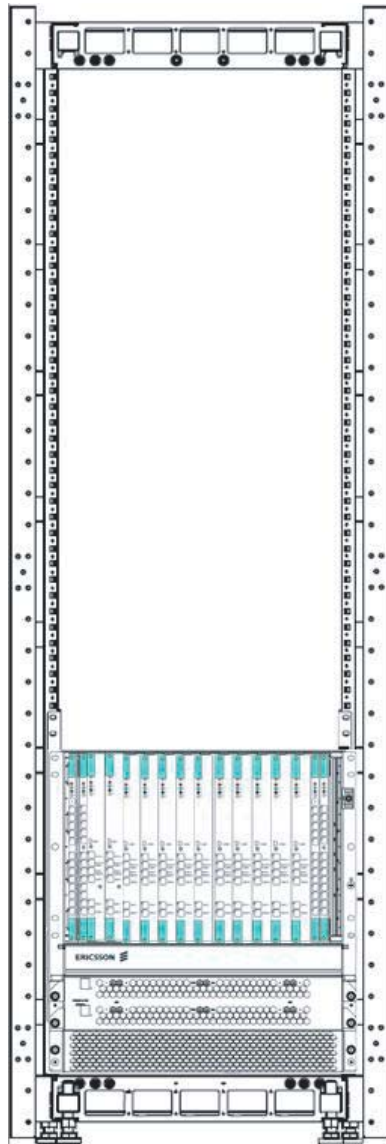


Figure 3 Dynamic Activation GEP5 Cabinet

#### 3.1.4.1 Installing the Base Cabinet

Install the BYB 501 cabinet in accordance with the general installation procedures in *Installation of Equipped Cabinet BYB 501*, Reference [12].

#### 3.1.4.2 Installing the EGEM2 Subrack with SCXs

Install the EGEM2 subrack with SCXs in the cabinet as described in *BSP Hardware Installation*, Reference [8].

In addition, also install the power cables to the PFM units as described in *BSP Hardware Installation*, Reference [8].



Check the address plugs as described in *BSP Hardware Installation*, Reference [8].

A subrack must have an address. In Dynamic Activation GEP5, the address is set to 0. This can be arranged to adjust dip switches on the address plugs. In total, each subrack has three address plugs.

**Note:** The second (from bottom in the subrack) address plug slot is empty.

For more information see *BSP System Architecture Description*, Reference [13].

### 3.1.4.3 Installing the GEP5, SCX, and CMX Blades

The GEP5 blades are inserted in the EGEM2 subrack in slot positions 1, 3, 5, 7, ..., 23.

The SCX blades are inserted in the EGEM2 subrack in slot positions 0 and 25.

The CMX blades are inserted in the EGEM2 subrack in slot positions 26 and 28.

Slot positions in the EGEM2 subrack are described in Figure 4.

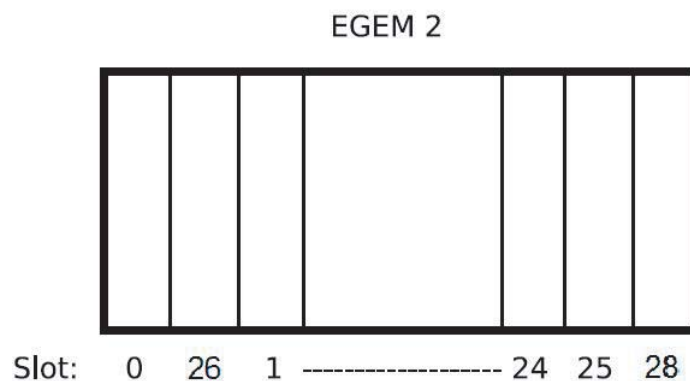


Figure 4 Slot Positions in EGEM2 Subrack

Install the GEP5 blades, SCX, and the CMX blades in the EGEM2 subrack by repeating the following steps for each blade:

1. Remove the unit from its ESD bag.
2. Check that there is no obvious damage.
3. Check the product identity of the unit.
4. Align the blade with the upper card rails in the subrack.
5. Carefully push the blade plug-in unit into the subrack. Tighten the mounting screws, with a torque of 0.5–0.7 Nm.

When all blades have been installed in the EGEM2 subrack, the procedure is completed and the ESD wrist strap can be removed.



### 3.1.5 Power and Grounding

Connect the cabinet to ground and install the power cables (HOD or LOD) connected to the PFM units to the power supply as described in *BSP Hardware Installation*, Reference [8].

### 3.1.6 Cabling and Wiring

This section contains information about cabling and wiring of the Dynamic Activation GEP5 system.

Use an ESD wrist strap to avoid ESD damage. Connect the strap to the ESD connection point in the upper part of the cabinet. When handling the unit, do not touch any components or connector pins.

#### 3.1.6.1 Internal Data Cabling

##### General

The internal cables are to be connected to the ports as shown in Figure 5. The types of cables to use are listed in the *Internal Cables for BSP Hardware* document, section *Cable Types*, Reference [20].

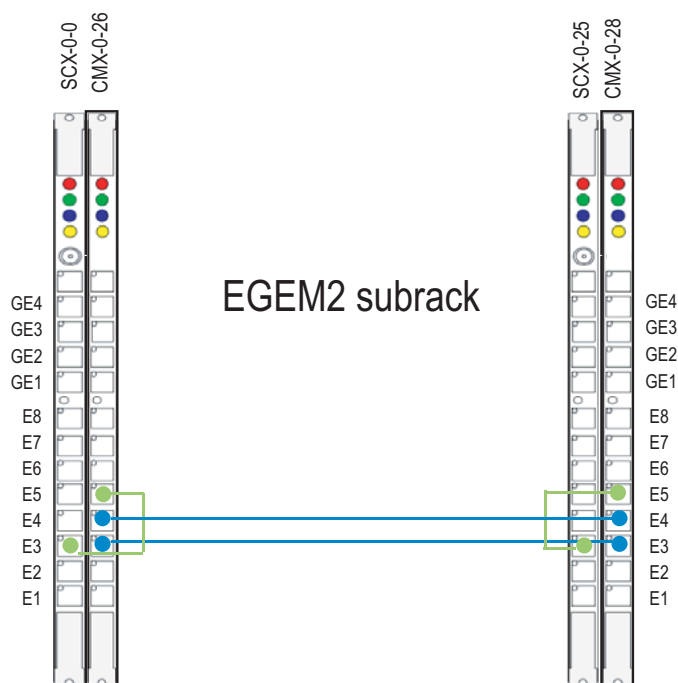


Figure 5 Dynamic Activation GEP5 Internal Network Cabling

The Table 1 , Table 2, Table 3, and Table 4 show the system internal data cables connections.

*Table 1 Cable Connected to Left SCX-0-0*

<b>SCX-0-0</b>	<b>Destination</b>	<b>Label</b>
E3	CMX-0-26; Port: E5	SCX-0-0_E3 CMX-0-26_E5

*Table 2 Cable Connected to Right SCX-0-25*

<b>SCX-0-25</b>	<b>Destination</b>	<b>Label</b>
E3	CMX-0-28; Port: E5	SCX-0-25_E3 CMX-0-28_E5

*Table 3 Cables Connected to CMX-0-26*

<b>CMX-0-26 Port</b>	<b>Destination</b>	<b>Label</b>
E3	CMX-0-28; Port: E3	CMX-0-26_E3 CMX-0-28_E3
E4	CMX-0-28; Port: E4	CMX-0-26_E4 CMX-0-28_E4

*Table 4 Cables Connected to CMX-0-28*

<b>CMX-0-28 Port</b>	<b>Destination</b>	<b>Label</b>
E3	CMX-0-26; Port: E3	CMX-0-28_E3 CMX-0-26_E3
E4	CMX-0-26; Port: E4	CMX-0-28_E4 CMX-0-26_E4

### 3.1.6.2

#### **External Data Cabling for 1GE External Uplink Configuration**

This section applies when using two physical cables for each CMX.

Connect the two external cables to each CMX. Each cable uses 1Gb interface and is connected to the GE2 or GE4 port, as shown in Figure 6.

The types of cables to use are listed in the *External Cables for BSP Hardware* document, section *Cable Types*, Reference [21].

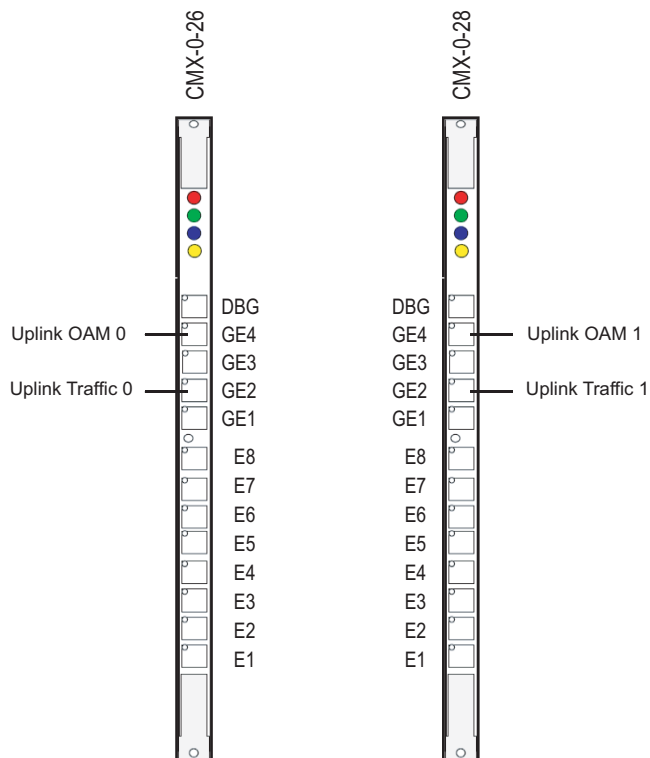


Figure 6 External Cabling

The Table 5 and Table 6 show the system external data cables connections.

Uplink Traffic 0 and Uplink Traffic 1 must not be connected to the same customer equipment. This to avoid single point of failure.

Uplink OAM 0 and Uplink OAM 1 must not be connected to the same customer equipment. This is to avoid single point of failure.

Table 5 Cables Connected to CMX-0-26

CMX-0-26 Port	Destination	Label
GE4	Uplink OAM 0 (customer equipment)	Site-specific labeling
GE2	Uplink Traffic 0 (customer equipment)	Site-specific labeling

*Table 6 Cables Connected to CMX-0-28*

<b>CMX-0-28 Port</b>	<b>Destination</b>	<b>Label</b>
GE4	Uplink OAM 1 (customer equipment)	Site-specific labeling
GE2	Uplink Traffic 1 (customer equipment)	Site-specific labeling

### 3.1.6.3 External Data Cabling for 10GE External Uplink Configuration

This section applies when using one physical cable for each CMX and the mandatory Active Patch Panel (APP) HW.

The APP is an Optical/Electrical (O/E) converter used for optical Ethernet connection. APP HW is mandatory for 10GE external uplink configuration.

APP HW is not required for 1GE external uplink configuration.

The cables are connected as shown in Figure 7.

The types of cables to use are listed in the *Internal Cables for BSP Hardware* document, section *Cable Types*, Reference [20].

For more information about the APP, refer to the *BSP Hardware Description* document, sections *Active Patch Panel* and *Sample Installation*, Reference [22], and the *BSP Hardware Installation* document, Reference [8].

For information on how to define an APP after BSP is configured, refer to the *BSP Initial Configuration* document, Reference [9].

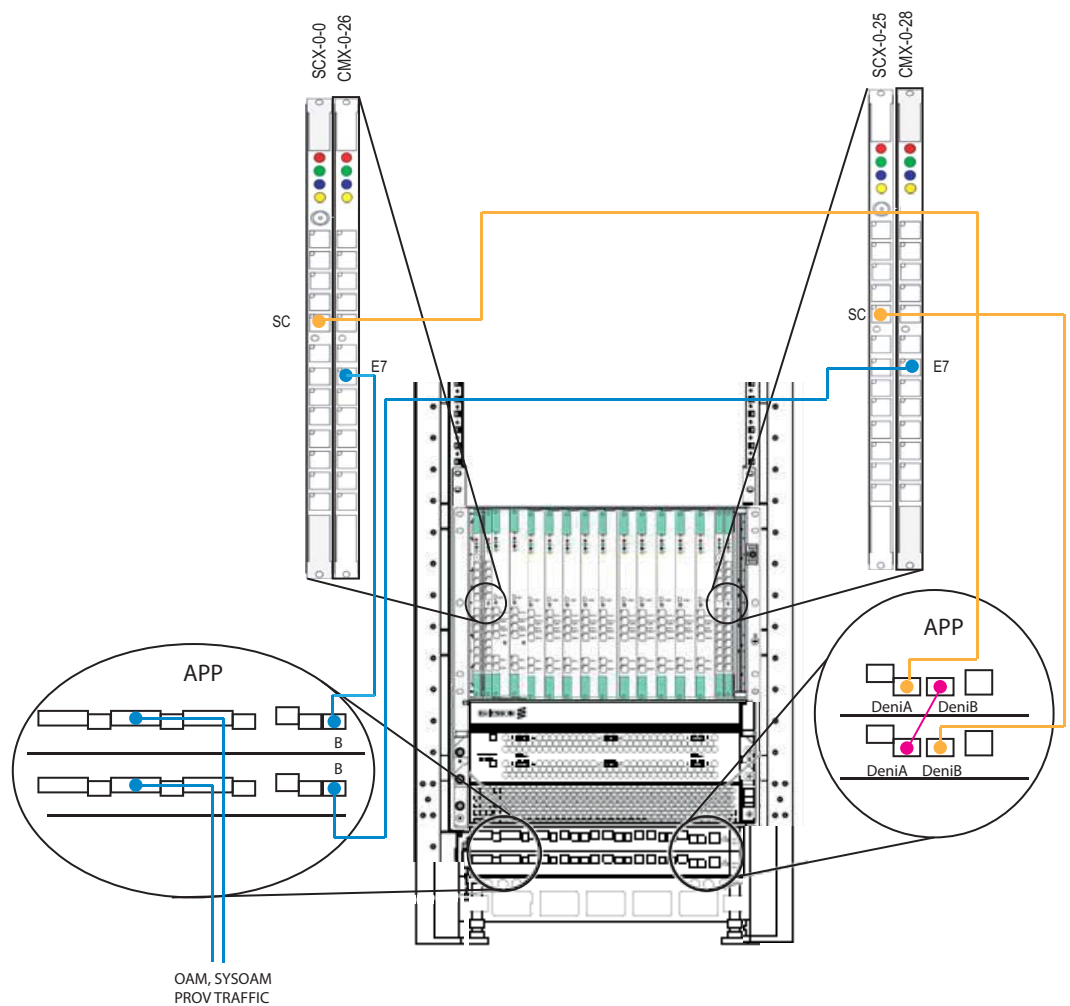


Figure 7 External Cabling with APP

**Note:** When using 10GE External Uplink Configuration, both Traffic and OAM goes through one single uplink port, E7.

The Table 7 to Table 11 show the data cables connections.

Table 7 Cables Connected to CMX-0-26

CMXB Port	Destination	Label
E7	Upper APP port 10GbE B	Site specific labeling

*Table 8 Cables Connected to CMX-0-28*

CMXB Port	Destination	Label
E7	Lower APP port 10GbE B	Site specific labeling

*Table 9 Cables Connected to SCX-0-0*

SCXB Port	Destination	Label
SC	Upper APP port DeniA	Site specific labeling

*Table 10 Cables Connected to SCX-0-25*

SCXB Port	Destination	Label
SC	Lower APP port DeniB	Site specific labeling

*Table 11 Cables Connected to APP*

APP Port	Destination	Label
Upper APP port DeniB	Lower APP port DeniA	Site specific labeling

### 3.1.7 Power-on and Check

Power On and check the EGEM2 subrack as described in *BSP Hardware Installation*, Reference [8].

### 3.1.8 Final Assembly

Perform the final assembly as described in *BSP Hardware Installation*, Reference [8].

### 3.1.9 Console Access Settings

This section contains information on the basic Console Access settings regarding the SCXB3 switches and the GEP5 blades.

A Console Server can be connected locally for out-of-band configuration and management. The Console Server provides a way to connect to the management interfaces on the RS232 port.

#### 3.1.9.1 Configuring Basic Settings for SCX

Use these serial port settings for SCX:

- Baud rate: 115200



- Data bits: 8
- Parity: None
- Hardware Flow Control: Yes
- Software Flow Control: None

Use the following credentials to log on to the SCX:

Login: `root`  
 Password: `tre,14`

### 3.1.9.2 Configuring Basic Settings for GEP5

Use these serial port settings for the GEP5 blades:

- Baud rate: 115200
- Data bits: 8
- Stop bit: 1
- Parity: None
- Flow Control: None
- DTR behavior: High when open

Use the following credentials to log on to the GEP5 blades:

Login: `root`  
 Password: `<User_Defined_Password>(1)`

*(1) This password is defined during the installation.*

## 3.2 Installation Tools Preparation

For the hardware configuration part, prepare the following:

- If using a Console Server, connect it to the "RS232" port on the SCXs. For all GEP5 blades, if using a Console Server, connect it to the "CONS" port.  
 If Putty is used as terminal, set the keyboard to Xterm R6 to get **F<x>** buttons to work.
- Connect the installation server to the "DBG" port on the left SCX (SCX-0-0) for the BSP SW installation. The connection from the installation server is to be moved to the eth0 front port on the GEP5 blade, acting as the first System Controller (SC) blade SC-1 for the LDEwS installation.



More information is found in *BSP Jumpstart Instruction*, Reference [10].

For more information regarding the hardware configuration, see Section 3.3 on page 20.

## 3.3 Installation and Configuration

**Note:** Make sure that the instructions in Section 3.1 on page 8 are fulfilled before proceeding.

This section presents all installation and basic configuration steps of the BSP, GEP5, SCX, and CMX parts of the system.

The following work process shows all steps that must be performed to install and perform a basic configuration of BSP. The workflow is shown in Figure 8.

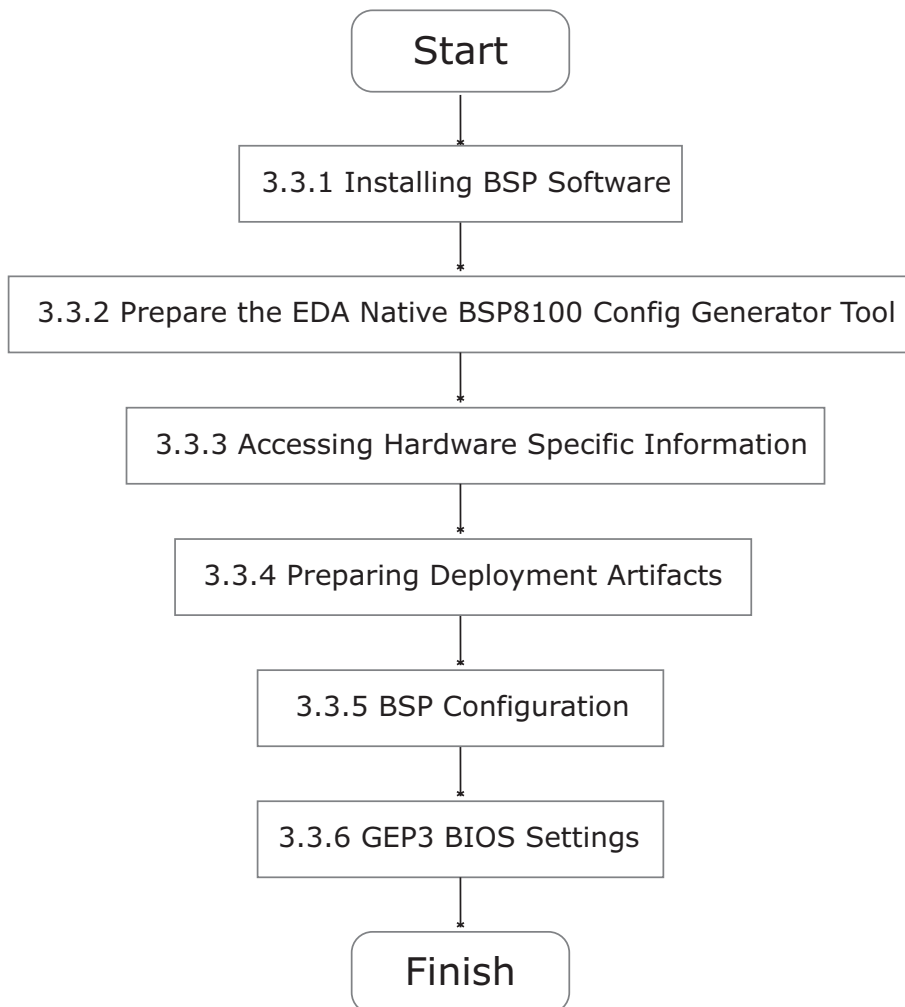


Figure 8 Workflow

The basic configuration is conducted after stepping through this section.





### 3.3.1 Installing BSP Software

1. Install BSP software as described in *BSP Jumpstart Instruction*, Reference [10].

**Note:** The default SCX root user password is `tre,14`.

The default SCX advanced user password is `ett,30`.

The default CMX root user password is `tre,14`.

The default CMX advanced user password is `ett,30`.

### 3.3.2 Prepare the EDA Native BSP8100 Config Generator Tool

This section includes information on how to prepare the tool to be able to retrieve the generated artifacts.

1. Download the EDA Native BSP8100 Config Generator tool:
  - Save the zip file, [EDA Native BSP8100 Config Generator.zip](#) to, for example a local area on a local machine
  - Unpack the zip file.

### 3.3.3 Accessing Hardware Specific Information

This section describes how to obtain the MAC addresses of the GEP5 blades, that are to be used in the EDA Native BSP8100 Config Generator tool.

#### 3.3.3.1 Getting MAC Addresses and Preparing Jumpstart

The MAC addresses are input to the EDA Native BSP8100 Config Generator tool to generate the `cluster.conf` file which is used by LDEwS. They are also used for the `dhcpd.conf` file, which is used by the Installation server for LDEwS installation, see *LDEwS SW Installation*, Reference [11]. The procedure is as follows:

1. Log in to SCX where the DMXC is active:

```
# telnet <Console Server IP-address> <port number connected
to SCX-0-0 or SCX-0-25>
```

```
Wind River Linux release 3.0.2
Kernel 2.6.27.39 on ppc (ttyS0)
SC-2-2 login: root
```

2. Enter `root` as logon.

Password:

3. Enter `tre,14` as password.



```
Last login: Tue Aug 11 12:45:43 on ttyS0
Wind River Linux glibc_std (standard) 3.0.2
Last failed login by root was on
2015-08-11T10:28:01.617+0000 from localhost (ttyS0)
```

4. Execute the following command to get the MAC addresses on all blades in the cluster:

```
# count=1; while (test "$count" -le 24); do
result=`blade_ipmi getBladeMacAddresses $count`; if [[
${result} =~ "ERROR" ]]; then break; else echo $result
| grep -io '[0-9A-F]\{2\}\(:[0-9A-F]\{2\}\)\{5\}' |
head -1; fi; let "count=count+2"; done
```

Example printout:

```
90:55:AE:3B:0A:DD
90:55:AE:3B:07:95
90:55:AE:3B:05:FD
90:55:AE:3B:09:8D
```

5. Start the EDA Native BSP8100 Config Generator tool. Double-click the `Activation_ConfigGen.jar` file located in the folder where the tool was unzipped.

**Note:** Requires Oracle's JAVA version 1.8.0\_71 or higher.

6. Copy the retrieved printout in Step 4. In the EDA Native BSP8100 Config Generator tool, go to tab **Import > MAC Addresses** and paste the copied MAC addresses in the newly displayed window, all at once as one string.

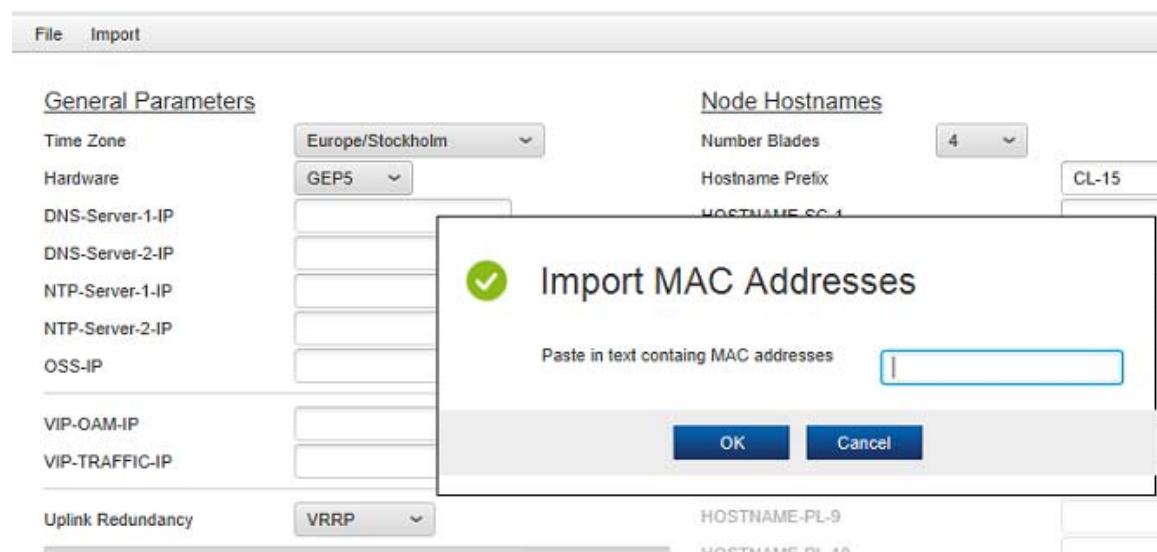




Table 12 is an example of how the tool calculates and maps the MAC addresses for `ethx` on the GEP5 blade for the `cluster.conf` file.

`eth0` is used for the `dhcpd.conf` file.

**Table 12** MAC Addresses

	<b>GEP5</b>	
First MAC address	90:55:AE:3B:0A:DD	
eth0 - MAC Address for ext.PXE Boot in the EDA Native BSP8100 Config Generator tool.	increase with 8	90:55:ae:3b:0a:e5
eth3	increase with 1	90:55:ae:3b:0a:de
eth4	increase with 2	c8:35:b8:27:3c:df
eth5	increase with 5	c8:35:b8:27:3c:e2
eth6	increase with 6	c8:35:b8:27:3c:e3

7. Set the MAC address in `dhcpd.conf`.

#### **GEP5:**

Use the generated, by the EDA Native BSP8100 Config Generator tool, MAC Address for ext.PXE Boot address.

**Note:** All fields in the following example are mandatory. Addresses and netmask must be changed to reflect the setup of the network.

The `next-server` parameter in the example below refers to the installation server.

```
#
# /etc/dhcpd.conf
#

ddns-update-style none;

subnet 192.168.0.0 netmask 255.255.255.0 {
    filename "pxelinux.0";
    next-server 192.168.0.10;
    host controll {
        hardware ethernet 90:55:ae:3b:0a:e5;
        fixed-address 192.168.0.1;
    }
}

# End of file
```



8. Restart the dhcpd server to load the new values:

```
# /etc/init.d/dhcpd restart
```

9. Create an etc directory in /tftpboot:

```
# mkdir /tftpboot/etc
```

10. Mount the LDEwS iso file to the /mnt:

```
# mount -o loop ldews-4.0.5-iso-sle-ana90139.iso /mnt
```

11. Copy the content of the iso file to /tftpboot:

```
# cp -r /mnt/* /tftpboot
```

### 3.3.4 Preparing Deployment Artifacts

1. If not already started, start the EDA Native BSP8100 Config Generator tool by double-clicking the `Activation_ConfigGen.jar` file. The file is located in the folder where the tool was unzipped.

**Note:** Requires Oracle JAVA version 1.8.0\_71 or higher.

2. Fill in the required values.

**Note:** It is important to know the hardware type (in this case GEP5), what Uplink Redundancy to use (BFD/VRRP) it affects the parameter choices for the `PROV_OM_CN` and `OM_CN_SP` tabs, and the number of nodes that are to be used.

Example of a filled in form using GEP5 as hardware type, VRRP as Uplink Redundancy, and four nodes:



File

Import

General Parameters

Time Zone

Europe/Stockholm

Hardware

GEP5

DNS-Server-1-IP

10.64.2.226

DNS-Server-2-IP

10.64.2.227

NTP-Server-1-IP

10.64.2.226

NTP-Server-2-IP

10.64.2.227

OSS-IP

10.216.129.81

VIP-OAM-IP

10.64.26.246

VIP-TRAFFIC-IP

10.64.26.245

Uplink Redundancy

VRRP

PG\_OM\_SP1

BSP\_NBI

PROV\_OM\_CN

OM\_CN\_SP

Netmask

/29

VLAN ID

184

PG\_OM\_SP1\_NW

10.44.186.64

PG\_OM\_SP1\_VRRP\_IP

10.44.186.65

PG\_OM\_SP1\_CMx\_0\_26\_IP

10.44.186.66

PG\_OM\_SP1\_CMx\_0\_28\_IP

10.44.186.67

PG\_OM\_SP1\_SC\_1\_IP

10.44.186.68

PG\_OM\_SP1\_SC\_2\_IP

10.44.186.69

Node Hostnames

Number Blades

4

Hostname Prefix

CL15

HOSTNAME-SC-1

CL15-SC-1

HOSTNAME-SC-2

CL15-SC-2

HOSTNAME-PL-3

CL15-PL-3

HOSTNAME-PL-4

CL15-PL-4

HOSTNAME-PL-5

CL15-PL-5

HOSTNAME-PL-6

CL15-PL-6

HOSTNAME-PL-7

CL15-PL-7

HOSTNAME-PL-8

CL15-PL-8

HOSTNAME-PL-9

CL15-PL-9

HOSTNAME-PL-10

CL15-PL-10

HOSTNAME-PL-11

CL15-PL-11

HOSTNAME-PL-12

CL15-PL-12

First MAC address-SC-1

90:55:AE:3B:0A:DD

MAC address for ext. PXE Boot

90:55:ae:3b:0a:e5

First MAC address-SC-2

90:55:AE:3B:07:95

First MAC address-PL-3

90:55:AE:3B:05:FD

First MAC address-PL-4

90:55:AE:3B:09:8D

First MAC address-PL-5

First MAC address-PL-6

First MAC address-PL-7

First MAC address-PL-8

First MAC address-PL-9

First MAC address-PL-10

First MAC address-PL-11

First MAC address-PL-12

Generate Artifacts

Figure 9 Example 1 of Filled in Form

**Note:** All fields are not required in the **General Parameters** area. It is optional to choose between, one, two or none DNS IP addresses, and one or two NTP IP addresses.



Uplink Redundancy VRRP

PG_OM_SP1	BSP_NBI	PROV_OM_CN	OM_CN_SP
Netmask			
/29			
VLAN ID			
4054			
BSP_NBI_NW			
10.44.178.192			
BSP_NBI_VRRP_IP			
10.44.178.193			
BSP_NBI_CMx_0_26_IP			
10.44.178.194			
BSP_NBI_CMx_0_28_IP			
10.44.178.195			
BSP_NBI_IP			
10.44.178.196			

Figure 10 Example 2 of Filled in Form - BSP\_NBI

Uplink Redundancy VRRP

PG_OM_SP1	BSP_NBI	PROV_OM_CN	OM_CN_SP
PROV_OM_CN_VRRP_GW_IP			
10.44.166.81			
PROV_OM_CN_VRRP_IP			
10.44.166.84			
PROV_OM_CN_CMx_0_26_IP			
10.44.166.85			
PROV_OM_CN_CMx_0_28_IP			
10.44.166.86			
PROV_OM_CN UplinkPort			
GE2			
PROV_OM_CN_VID			
1161			
PROV_OM_CN_VRRP_VRID			
10			

Figure 11 Example 3 of Filled in Form - PROV\_OM\_CN

Uplink Redundancy VRRP

PG_OM_SP1	BSP_NBI	PROV_OM_CN	OM_CN_SP
OM_CN_SP_VRRP_GW_IP			
10.44.166.89			
OM_CN_SP_VRRP_IP			
10.44.166.92			
OM_CN_SP_CMx_0_26_IP			
10.44.166.95			
OM_CN_SP_CMx_0_28_IP			
10.44.166.96			
OM_CN_SP UplinkPort			
GE4			
OM_CN_SP_VID			
1162			
OM_CN_SP_VRRP_VRID			
20			

Figure 12 Example 4 of Filled in Form - OM\_CN\_SP

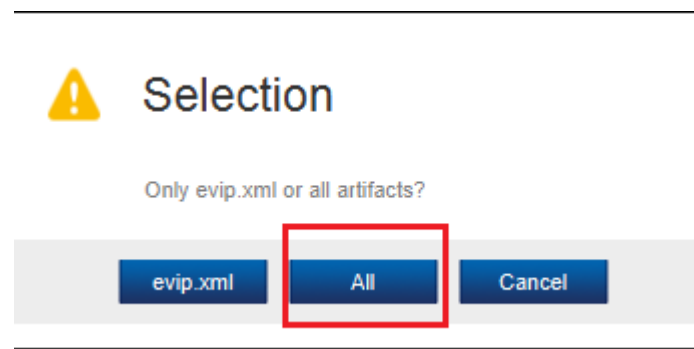
**Note:** It is possible to save the filled in values as a .cnf file by clicking **File** > **Save as**.



3. When all values are filled in, click the **Generate Artifacts** button to generate the following configuration files:

```
BSP_Common
cluster.conf
CMX-0-26-BSP-VRRP
CMX-0-28-BSP-VRRP
GEP5-installation.conf
evip.xml
```

Click on **All** in the prompted **Selection** window.



Save the generated files on the local machine.

### 3.3.5 BSP Configuration

In this section BSP Common, CMX-0-26 and CMX-0-28 are configured by using the files generated by EDA Native BSP8100 Config Generator tool.

1. Log in to SCX where the DMXC is active:

```
# telnet <Console Server IP-address> <port number connected
to SCX-0-0 or SCX-0-25>
```

```
Wind River Linux release 3.0.2
Kernel 2.6.27.39 on ppc (ttyS0)
SC-2-2 login: root
```

2. Enter **root** as logon.

Password:

3. Enter **tre,14** as password.

```
Last login: Tue Aug 11 12:45:43 on ttyS0
Wind River Linux glibc_std (standard) 3.0.2
Last failed login by root was on
2015-08-11T10:28:01.617+0000 from localhost (ttyS0)
```

4. Enter **cliss**:



```
# cliss
```

```
BSP 8100
```

```
This system is provided for authorized users only.  
If you are not an authorized user, please  
exit IMMEDIATELY.
```

5. Change scriptmode to on.

```
> scriptmode on
```

**Note:** When executing `cliss` on a MontaVista based SCXB, `scriptmode` must be set to on. This is to avoid problems with pasting configuration to `cliss` over RS-232.

6. Paste all the commands from the generated `BSP_Common` file:

```
> <All commands from BSP_Common file>
```

**Note:** It is advisable to paste in smaller parts of the file, including a `commit -s` command, and not all commands at the same time.

7. Paste all the commands from the generated `CMX-0-26-BSP` file in the terminal window.

```
> <All commands from CMX-0-26-BSP file>
```

**Note:** It is advisable to paste in smaller parts of the file, including a `commit -s` command, and not all commands at the same time.

8. Paste all the commands from the generated `CMX-0-28-BSP` file in the terminal window.

```
> <All commands from CMX-0-28-BSP file>
```

**Note:** It is advisable to paste in smaller parts of the file, including a `commit -s` command, and not all commands at the same time.

9. Lock all empty slots (not containing any GEP blades) in the cluster. Run the following command for all empty slots in the cluster, one at a time:

```
(config-NextHop=vipprov) > ManagedElement=1,Equipment=1  
,Shelf=0,Slot=<slot position_of_empty_slot>,Blade=1,admini  
strativeState=LOCKED
```





**Note:** For a cluster that consists of four GEP blades, the `<slot position_of_empty_slot>` variable will be 9, 11, 13, 15, 17, 19, 21, and 23.

For a cluster that consists of six GEP blades, the `<slot position_of_empty_slot>` variable will be 13, 15, 17, 19, 21, and 23.

For a cluster that consists of 12 GEP blades, no action is needed.

When all empty slot positions are locked, run the following command:

```
(config-NextHop=vipprov) > commit -s
```

10. Exit configuration mode:

```
(config-NextHop=vipprov) > end
```

```
(NextHop=vipprov) > top
```

11. Create a backup of the CMX configuration.

**Example:**

```
> ManagedElement=1, SystemFunctions=1, BrM=1, BrmBackupManager=1, createBackup MyFirstBackup
```

**Note:** If the backup creation command is valid, output 0 is received

**Output:**

```
0
```

12. Verify that the backup process was completed successfully:

```
> show ManagedElement=1, SystemFunctions=1, BrM=1, BrmBackupManager=1, progressReport
```

**Note:** The backup process will take a couple of minutes before it is successful.

If the backup was not successful, contact Ericsson support personnel for further help.

**Example - Viewing createBackup Action Information:**



```

progressReport
  actionId=0
  actionName="createBackup"
  progressInfo=""
  progressPercentage=100
  result=SUCCESS
  resultInfo="BSP configuration successfully saved"
  state=FINISHED
  timeActionCompleted="2014-07-28T14:17:31Z"
  timeActionStarted="2014-07-28T14:17:29Z"
  timeOfLastStatusUpdate="2014-07-28T14:17:31Z"

```

### 13. Check the backup status:

```
> show ManagedElement=1, SystemFunctions=1, BrM=1, BrmBackupManager=1, BrmBackup=1, status
```

#### Example - Viewing Backup Status:

```
status=BRM_BACKUP_COMPLETE
```

### 14. Exit cliss:

```
> exit
```

## 3.3.6 GEP5 BIOS Settings

Prepare the GEP5 BIOS settings to match the LDEwS settings for, boot order and for disabling the Power Technology. For detailed information about the GEP5 BIOS, see *BIOS Menus and GPRs*, Reference [16].

### 3.3.6.1 Change Boot Device Order of GEP5 Blades

Change the boot device order for the SCs and Payload (PLs). The SCs are to boot from only Internal SAS Disk (device=10) and PLs from Backplane left device and then Backplane right device.

This is performed by using the following command in the UEFI shell environment:

```
ipmi bo <command> <direction> <priority> <device>
```

#### Change Boot Device Order for SCs

1. Set terminal baud rate settings on Console Server, hyper terminal, minicom, and more, to the baud rate used by GEP5 BIOS.
2. Prepare for a serial connection towards the still powered off SC blade:

```
# telnet <Console Server IP-address> <port number connected to SC blade>
```

**Note:** If Putty is used as terminal, set the keyboard to Xterm R6.



3. Log in to SCX where the DMXC is active:

```
# telnet <Console Server IP-address> <port number connected
to SCX-0-0 or SCX-0-25>
```

```
Wind River Linux release 3.0.2
Kernel 2.6.27.39 on ppc (ttyS0)
SC-2-2 login: root
```

4. Enter **root** as logon.

Password:

5. Enter **tre,14** as password.

```
Last login: Tue Aug 11 12:45:43 on ttyS0
Wind River Linux glibc_std (standard) 3.0.2
Last failed login by root was on
2015-08-11T10:28:01.617+0000 from localhost (ttyS0)
```

6. Enter **cliss**:

```
# cliss
```

```
BSP 8100 R15A
This system is provided for authorized users only.
If you are not an authorized user, please
exit IMMEDIATELY.
```

7. Turn off and on the power for the GEP5 blade acting as SC-1.

Enter configuration mode:

```
> configure
```

```
(config)> ManagedElement=1,Equipment=1,Shelf=0,Slot=1,Blade=1,administrativeState=LOCKED
```

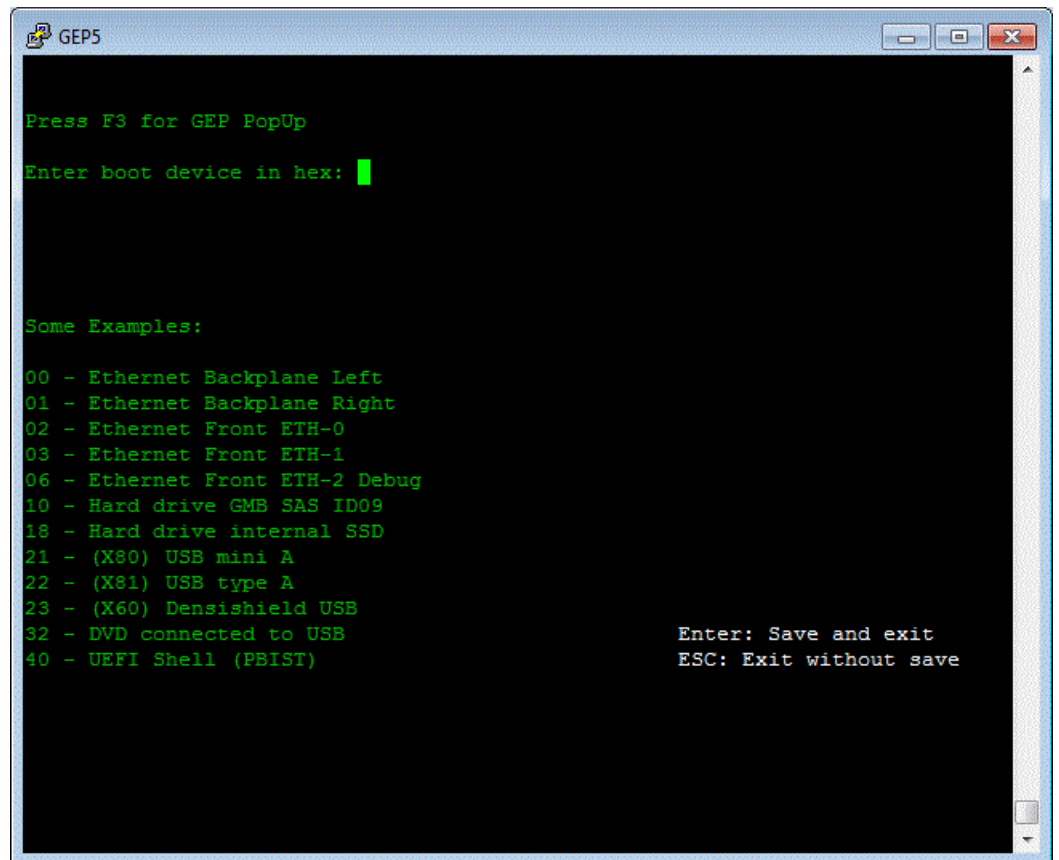
```
(config)> commit -s
```

```
(config)> ManagedElement=1,Equipment=1,Shelf=0,Slot=1,Blade=1,administrativeState=UNLOCKED
```

```
(config)> commit -s
```

8. During the BIOS startup sequence, wait for the console printout Press F3 for GEP PopUp and then press:

**F3**



9. Choose the option 40 - UEFI Shell (PBISt) by entering the value 40.

Enter boot device in hex: **40**

In the next screen shown, press any key within a few seconds to proceed to the UEFI shell.



```

GEP5
00a0c93ec93b,80)/HD(3,GPT,8d05ac93-41a3-4da8-9480-caab3320fb98,0x23800800,0xa
000000)
  blk3 :HardDisk - Alias (null)
    PciRoot(0x0)/Pci(0x3,0x0)/Pci(0x0,0x0)/VenHw(cf31fac5-c24e-11d2-85f3-
00a0c93ec93b,80)/HD(4,GPT,3d0386c3-5f86-4a24-ac26-d1c96d6f53fb,0x2d800800,0x4
1000)
  blk4 :HardDisk - Alias (null)
    PciRoot(0x0)/Pci(0x3,0x0)/Pci(0x0,0x0)/VenHw(cf31fac5-c24e-11d2-85f3-
00a0c93ec93b,80)/HD(5,GPT,65dc3853-aa8c-4978-a38b-3f145f35edf6,0x2d841800,0x1
000000)
  blk5 :HardDisk - Alias (null)
    PciRoot(0x0)/Pci(0x3,0x0)/Pci(0x0,0x0)/VenHw(cf31fac5-c24e-11d2-85f3-
00a0c93ec93b,81)/HD(1,GPT,96329e28-daf8-4e6d-a69f-783dbb4851ae,0x800,0x2e8000
00)
  blk6 :HardDisk - Alias (null)
    PciRoot(0x0)/Pci(0x3,0x0)/Pci(0x0,0x0)/VenHw(cf31fac5-c24e-11d2-85f3-
00a0c93ec93b,82)/HD(1,GPT,6f7dc929-b983-4bc8-86f3-8fa53a3c6a7d,0x800,0x2e8000
00)
  blk7 :BlockDevice - Alias (null)
    PciRoot(0x0)/Pci(0x3,0x0)/Pci(0x0,0x0)/VenHw(cf31fac5-c24e-11d2-85f3-
00a0c93ec93b,80)
  blk8 :BlockDevice - Alias (null)
    PciRoot(0x0)/Pci(0x3,0x0)/Pci(0x0,0x0)/VenHw(cf31fac5-c24e-11d2-85f3-
00a0c93ec93b,81)
  blk9 :BlockDevice - Alias (null)
    PciRoot(0x0)/Pci(0x3,0x0)/Pci(0x0,0x0)/VenHw(cf31fac5-c24e-11d2-85f3-
00a0c93ec93b,82)
  blkA :BlockDevice - Alias (null)
    PciRoot(0x0)/Pci(0x1f,0x2)/Sata(0x4,0x0)
Press ANY key to remain in Shell. Will quit in 2 seconds...

```

10. Clear the present boot device order with command:

```
> ipmi bo erase
```

11. Check the result by command:

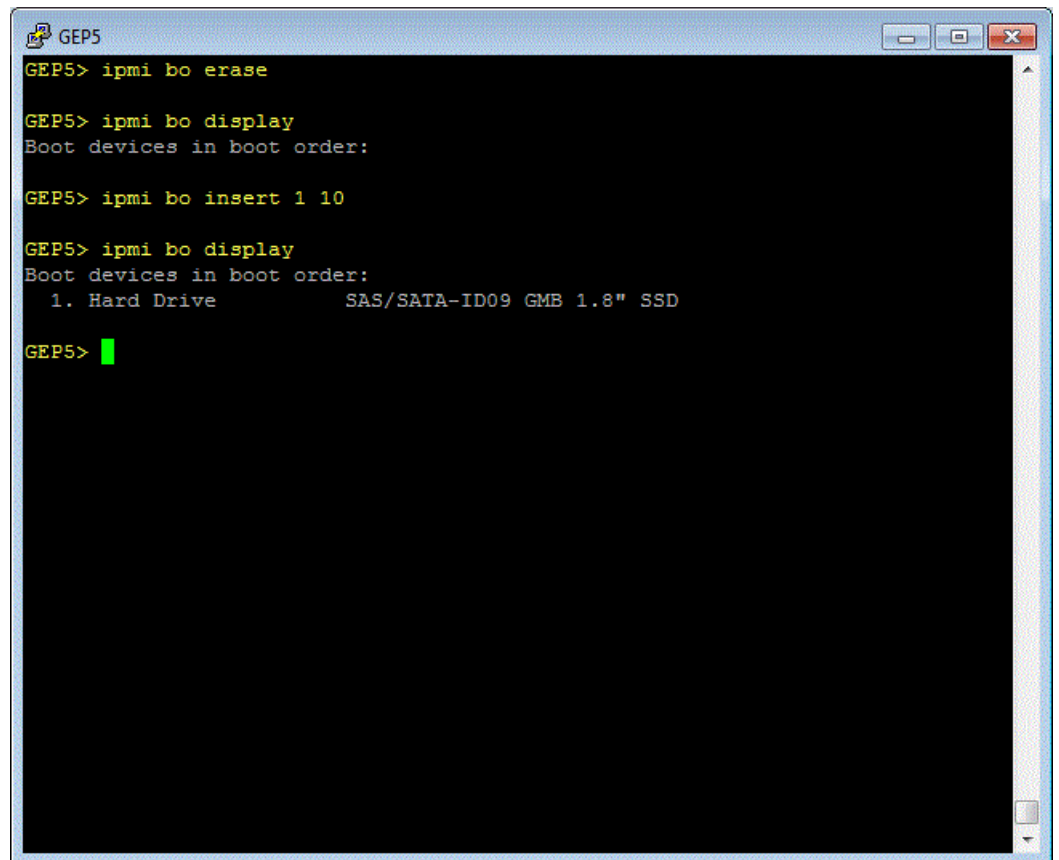
```
> ipmi bo display
```

Must be empty.

12. Set boot device order to Internal SAS disk by command:

```
> ipmi bo insert 1 10
```

(1=priority, 10=Internal SAS disk).



```
GEP5> ipmi bo erase

GEP5> ipmi bo display
Boot devices in boot order:

GEP5> ipmi bo insert 1 10

GEP5> ipmi bo display
Boot devices in boot order:
  1. Hard Drive          SAS/SATA-ID09 GMB 1.8" SSD

GEP5> █
```

13. Reset the blade:

```
> pbist -r
```

14. Login to SCX where the DMXC is active:

```
# telnet <Console Server IP-address> <port number connected  
to SCX-0-0 or SCX-0-25>
```

```
Wind River Linux release 3.0.2  
Kernel 2.6.27.39 on ppc (ttyS0)  
SC-2-2 login: root
```

15. Enter **root** as logon.

Password:

16. Enter **tre,14** as password.

```
Last login: Tue Aug 11 12:45:43 on ttyS0  
Wind River Linux glibc_std (standard) 3.0.2  
Last failed login by root was on  
2015-08-11T10:28:01.617+0000 from localhost (ttyS0)
```



17. Enter cliss:

```
# cliss

BSP 8100 R15A
This system is provided for authorized users only.
If you are not an authorized user, please
exit IMMEDIATELY.
```

18. Turn off the power for the GEP5 blade acting as SC-1.

Enter configuration mode:

```
> configure

(config)> ManagedElement=1,Equipment=1,Shelf=0,Slot=1,Blade=1,administrativeState=LOCKED

(config)> commit -s
```

19. Repeat Step 1 to Step 18 for SC-2. To turn off and on power in Step 7, use:

Enter configuration mode:

```
> configure

(config)> ManagedElement=1,Equipment=1,Shelf=0,Slot=3,Blade=1,administrativeState=LOCKED

(config)> commit -s

(config)> ManagedElement=1,Equipment=1,Shelf=0,Slot=3,Blade=1,administrativeState=UNLOCKED

(config)> commit -s
```

### Change Boot Device Order for PLs

1. Set terminal baud rate settings onf Console Server, hyper terminal, minicom, and more to the baud rate used by GEP5 BIOS.
2. Prepare for a serial connection towards the still powered off PL blade:

```
# telnet <Console Server IP-address> <port number connected to PL blade>
```

**Note:** If Putty is used as terminal, set the keyboard to Xterm R6.

3. Log in to SCX where the DMXC is active:

```
# telnet <Console Server IP-address> <port number connected to SCX-0-0 or SCX-0-25>
```



```
Wind River Linux release 3.0.2
Kernel 2.6.27.39 on ppc (ttyS0)
SC-2-2 login: root
```

4. Enter **root** as logon.

Password:

5. Enter **tre,14** as password.

```
Last login: Tue Aug 11 12:45:43 on ttyS0
Wind River Linux glibc_std (standard) 3.0.2
Last failed login by root was on
2015-08-11T10:28:01.617+0000 from localhost (ttyS0)
```

6. Enter **cliss**:

```
# cliss
```

```
BSP 8100 R15A
This system is provided for authorized users only.
If you are not an authorized user, please
exit IMMEDIATELY.
```

7. Turn off and on the power for the GEP5 blade acting as PL-3..

Enter configuration mode:

```
> configure
```

```
(config)> ManagedElement=1,Equipment=1,Shelf=0,Slot=5,B
lade=1,administrativeState=LOCKED
```

```
(config)> commit -s
```

```
(config)> ManagedElement=1,Equipment=1,Shelf=0,Slot=5,B
lade=1,administrativeState=UNLOCKED
```

```
(config)> commit -s
```

8. During the BIOS startup sequence, wait for the console printout **Press F3** for GEP PopUp and then press:

**F3**

**Note:** If Putty is used as terminal, set the keyboard to Xterm R6.

See also screen capture in previous chapter.

9. Choose the option **40 - UEFI Shell (PBIST)** by entering the value **40**:

Enter boot device in hex: **40**





In the next screen shown, press any key within a few seconds to proceed to the UEFI shell. See also screen capture in previous chapter.

10. Clear the present boot device order with command:

```
> ipmi bo erase
```

11. Check the result by command:

```
> ipmi bo display
```

Must be empty.

12. Set boot device order to Backplane left device by command:

```
> ipmi bo insert 1 00
```

(1=priority, 00=Backplane left device).

13. Set boot device order to Backplane right device by command:

```
> ipmi bo insert 2 01
```

(2=priority 2, 01=Backplane right device).

```
GEP5> ipmi bo display
Boot devices in boot order:
  1. Hard Drive          SAS/SATA-ID09 GMB 1.8" SSD

GEP5> ipmi bo erase

GEP5> ipmi bo insert 1 00

GEP5> ipmi bo insert 2 01

GEP5> ipmi bo display
Boot devices in boot order:
  1. Ethernet           Backplane A
  2. Ethernet           Backplane B

GEP5> █
```



14. Reset the blade:

```
> pbist -r
```

15. Login to SCX where the DMXC is active:

```
# telnet <Console Server IP-address> <port number connected  
to SCX-0-0 or SCX-0-25>
```

```
Wind River Linux release 3.0.2  
Kernel 2.6.27.39 on ppc (ttyS0)  
SC-2-2 login: root
```

16. Enter **root** as logon.

Password:

17. Enter **tre,14** as password.

```
Last login: Tue Aug 11 12:45:43 on ttyS0  
Wind River Linux glibc_std (standard) 3.0.2  
Last failed login by root was on  
2015-08-11T10:28:01.617+0000 from localhost (ttyS0)
```

18. Enter **cliss**:

```
# cliss
```

```
BSP 8100 R15A  
This system is provided for authorized users only.  
If you are not an authorized user, please  
exit IMMEDIATELY.
```

19. Turn off the power for the GEP5 blade acting as PL-3.

Enter configuration mode:

```
> configure
```

```
(config)> ManagedElement=1,Equipment=1,Shelf=0,Slot=5,B  
lade=1,administrativeState=LOCKED
```

```
(config)> commit -s
```

20. Repeat Step 1 to Step 19 for all PL blades. To turn power off and on in Step 7, make sure that the corresponding PL data is given as input for the command:

Enter configuration mode:

**Note:** The *<slot position>* variable corresponds to the slot position of the GEP5 blade.



```
> configure
```

```
(config)> ManagedElement=1,Equipment=1,Shelf=0,Slot=<slot position>,Blade=1,administrativeState=LOCKED
```

```
(config)> commit -s
```

```
(config)> ManagedElement=1,Equipment=1,Shelf=0,Slot=<slot position>,Blade=1,administrativeState=UNLOCKED
```

```
(config)> commit -s
```

21. Exit:

```
(config)> end
```

```
> exit
```

### 3.3.6.2 Disable Power Technology

This chapter describes how to disable the Power Technology in the GEP5 BIOS.

**Note:** Repeat all the following steps for all GEP5 blades.

1. Set the terminal baud rate settings on Console Server, hyper terminal, minicom, and more, to the baud rate used by the GEP5 BIOS.
2. Prepare for a serial connection towards the still powered off blade:

```
# telnet <Console Server IP-address> <port number connected to blade>
```

**Note:** If Putty is used as terminal, set the keyboard to Xterm R6.

3. Log in to SCX where the DMXC is active:

```
# telnet <Console Server IP-address> <port number connected to SCX-0-0 or SCX-0-25>
```

```
Wind River Linux release 3.0.2
Kernel 2.6.27.39 on ppc (ttyS0)
SC-2-2 login: root
```

4. Enter **root** as logon.

Password:

5. Enter **tre,14** as password.

```
Last login: Tue Aug 11 12:45:43 on ttyS0
Wind River Linux glibc_std (standard) 3.0.2
Last failed login by root was on
2015-08-11T10:28:01.617+0000 from localhost (ttyS0)
```



6. Enter cliss:

```
# cliss
```

```
BSP 8100 R15A
```

```
This system is provided for authorized users only.  
If you are not an authorized user, please  
exit IMMEDIATELY.
```

7. Turn on the power for the GEP5 blade:

Enter configuration mode:

```
> configure
```

```
(config)> ManagedElement=1,Equipment=1,Shelf=0,Slot=<slot  
position>,Blade=1,administrativeState=UNLOCKED
```

The *<slot position>* variable corresponds to the slot position of the GEP5 blade.

```
(config)> commit -s
```

8. During the BIOS startup sequence, wait for the following console printout:

Press <DEL> or <F4> to enter set up.

Press **F4**

**Note:** If Putty is used as terminal, set the keyboard to Xterm R6, otherwise the **F4** key does not function.

A new window is displayed, see Figure 13.

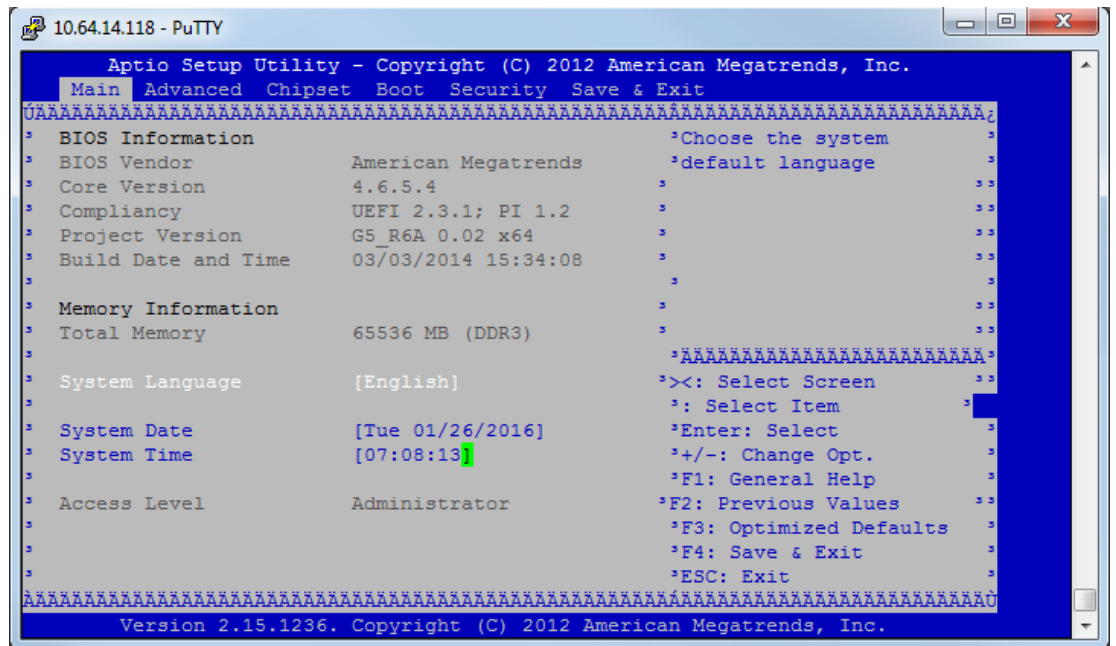
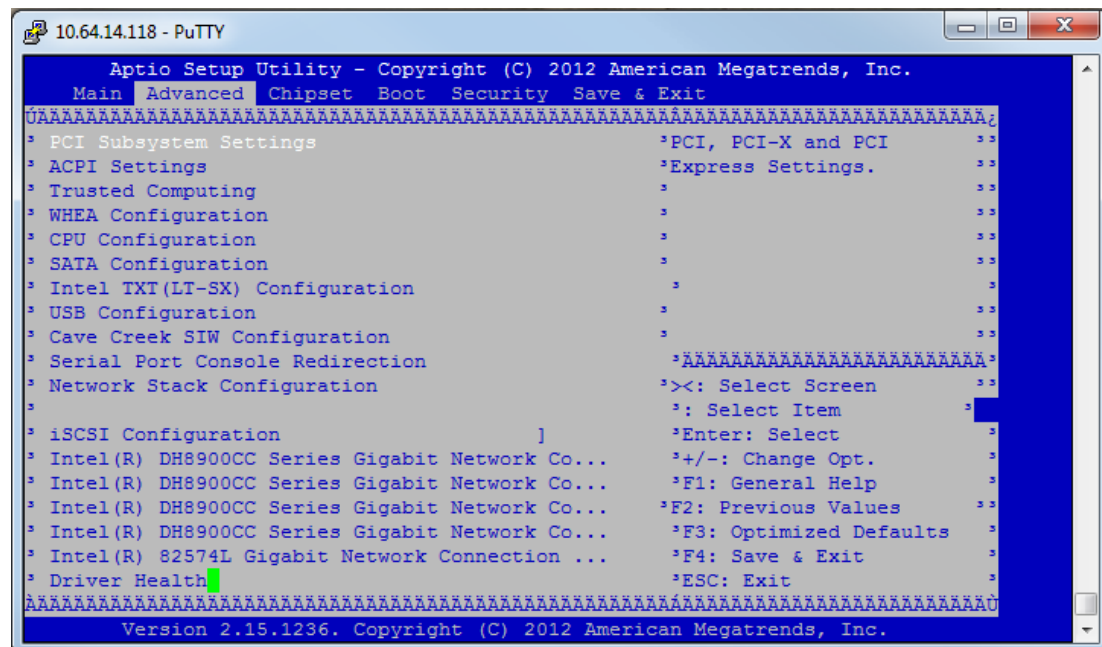


Figure 13 Enter Set up Window

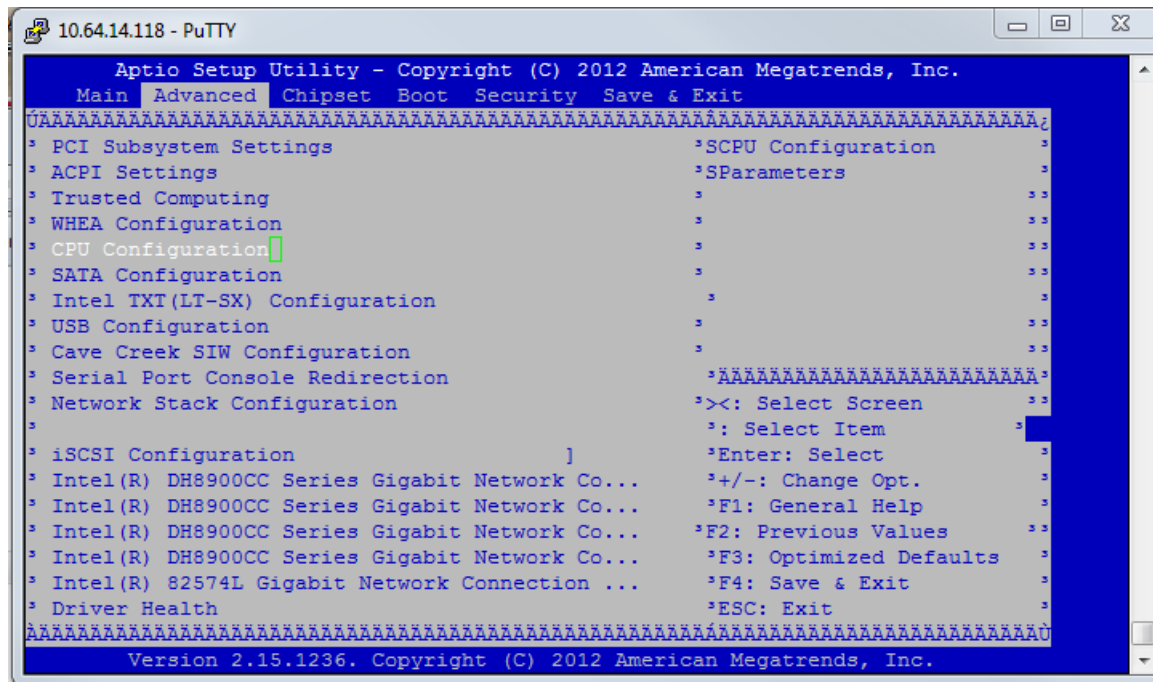
9. Use the arrow keys to navigate to the **Advanced** menu and press:

**Enter**



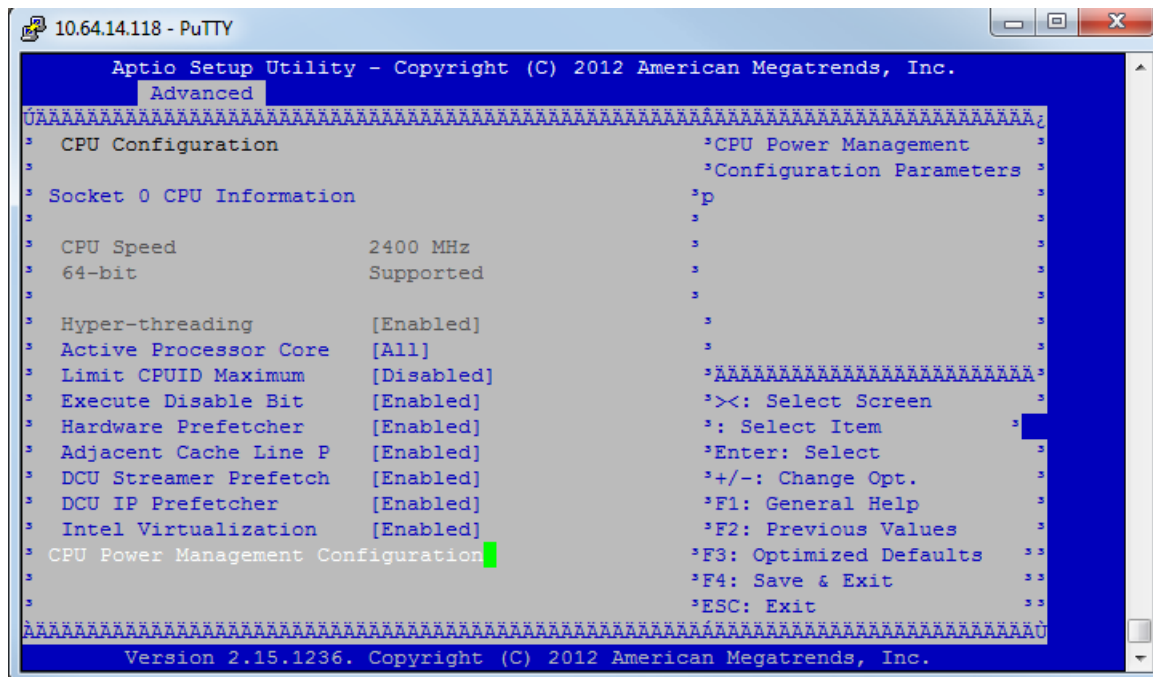
10. In the **Advanced** window, use the arrow keys to navigate to the **CPU Configuration** menu and press:

**Enter**



11. In the **CPU Configuration** window, use the arrow keys to navigate to the **CPU Power Management Configuration** menu and press:

**Enter**



12. In the **CPU Power Management Configuration** window, use the arrow keys to navigate to the **Power Technology** menu and press:



Enter

```

10.64.14.118 - PuTTY
Aptio Setup Utility - Copyright (C) 2012 American Megatrends, Inc.
Advanced
CPU Power Management Configuration
Power Technology [Disable]
Energy Performance [Balanced Performance]
Factory long duration 95 Watts
Long duration power 1 0
Factory long duration 10 s
Long duration maintai 0
Recommended short dur 1.2 * Long Duration
Short duration power 0
Enable the power management features.
><: Select Screen
: Select Item
Enter: Select
+/-: Change Opt.
F1: General Help
F2: Previous Values
F3: Optimized Defaults
F4: Save & Exit
ESC: Exit
Version 2.15.1236. Copyright (C) 2012 American Megatrends, Inc.

```

13. In the pop-up window, use the arrow keys to navigate to the **Disable** and press:

Enter

```

10.64.14.118 - PuTTY
Aptio Setup Utility - Copyright (C) 2012 American Megatrends, Inc.
Advanced
CPU Power Management Configuration
Power Technology [Disable]
Energy Performance [Balanced Performance]
Factory long duration 95 Watts
Long duration power 1 0
Factory long duration 10 s
Long duration maintai 0
Recommended short dur 1.2 * Long Duration
Short duration power 0
Enable the power management features.
><: Select Screen
: Select Item
Enter: Select
+/-: Change Opt.
F1: General Help
F2: Previous Values
F3: Optimized Defaults
F4: Save & Exit
ESC: Exit
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```



14. To Save and Exit press:

**F4**

Use the arrow keys to choose **Yes** and press:

**Enter**

15. From the terminal window:

Turn off the power for the first GEP5 blade:

Enter configuration mode:

```
> configure
```

```
(config)> ManagedElement=1,Equipment=1,Shelf=0,Slot=<slot position>,Blade=1,administrativeState=LOCKED
```

The *<slot position>* variable corresponds to the slot position of the GEP5 blade.

```
(config)> commit -s
```

16. Repeat Step 1 to Step 15 for all GEP5 blades in the subrack.

17. Exit:

```
(config)> end
```

```
> exit
```

## 3.4 LDEwS Installation

This section describes how to install LDEwS on a Dynamic Activation cluster running on GEP5.

1. Rename the `GEP5-installation.conf` (generated by the EDA Native BSP8100 Config Generator tool), to `installation.conf`.
2. Copy the renamed `installation.conf` file, and by the EDA Native BSP8100 Config Generator tool generated `cluster.conf` file, to the `/tftpboot/etc` directory on the jumpstart server.
3. Log on to the CLI:

```
# ssh -p 2024 advanced@<BSP-NBI-IP>
```

### Install LDEwS on the first SC Node (SC-1):

4. Connect the LDEwS installation server to the ETH0 front port on the GEP5 blade acting as the first control node (SC-1).





5. Open a terminal window and connect to SC-1:

**Note:** If Putty is used as terminal, set the keyboard to Xterm R6.

```
# telnet <Console Server IP-address> <port number connected to SC-1>
```

6. Turn on the power for the GEP5 blade acting as SC-1:

Enter configuration mode:

```
> config
```

```
(config)> ManagedElement=1,Equipment=1,Shelf=0,Slot=1,Blade=1,administrativeState=UNLOCKED
```

```
(config-Blade=1)> commit -s
```

7. In the terminal window connected to SC-1, see Step 5 during the BIOS startup sequence wait for the console printout *Press F3 for GEP PopUp* and then press **F3**. Select 02 as the device to boot from, which is front interface ETH0 on blade 1, SC-1.

**Note:** There is no need to enter the BIOS to configure the node to boot from hard disk because that has already been configured in Section 3.3.6 on page 30.

8. When SC-1 is rebooted, log in with password `rootroot` and change root password:

```
# ssh root@<PG_OM_SP1_SC_1_IP>
```

```
# passwd
```

#### Install LDEwS on the second SC Node (SC-2):

9. Open a terminal window and connect to SC-2:

**Note:** If Putty is used as terminal, set the keyboard to Xterm R6.

```
# telnet <Console Server IP-address> <port number connected to SC-2>
```

10. Turn on the power for the GEP5 blade acting as SC-2:

```
(config)> ManagedElement=1,Equipment=1,Shelf=0,Slot=3,Blade=1,administrativeState=UNLOCKED
```

```
(config-Blade=1)> commit -s
```

11. In the terminal window connected to SC-2, see Step 9, during the BIOS startup sequence wait for the console printout *Press F3 for GEP PopUp* and then press **F3**. Select 00 as device to boot from, which is the



blade 2, SC-2, backplane interface. This means that SC-2 does a PXE boot from SC-1.

**Note:** There is no need to enter the BIOS to configure the node to boot from hard disk because that has already been configured in Section 3.3.6 on page 30.

12. The software installation starts and the following text is shown:

```
Installing, please wait...
```

The software installation is completed once the following text is shown:

```
Installation completed successfully
```

If anything went wrong during the installation, the following message is shown instead:

```
Installation failed (see /root/install.log)
```

13. Run the following command to see the synchronization progress:

```
# drbd-overview
```

**Note:** The time duration to complete the disk synchronization is about 10 minutes.

### Install LDEwS on the PL nodes (PL3 - PL12):

14. Open a terminal window and connect to each PL node:

```
# telnet <Console Server IP-address> <port number connected  
to each PL node>
```

15. Power on each PL node:

```
(config)> ManagedElement=1,Equipment=1,Shelf=0,Slot=<slot  
position>,Blade=1,administrativeState=UNLOCKED
```

The *<slot position>* variable corresponds to the slot position of the GEP5 blade.

```
(config)> commit -s
```

16. Wait for each PL node to boot up in operational mode.

When the boot sequence is completed, a log in prompt is shown.

The PL nodes are now installed.

## 3.5 SNMP Configuration

### SNMPv2c



For information on how to configure SCX and CMX for SNMPv2c, refer to *Create SNMPv2C Target*, Reference [14].

### **SNMPv3**

For information on how to configure SCX and CMX for SNMPv3, refer to *Create SNMPv3 Target*, Reference [15].

## **3.6 Dynamic Activation Software Installation**

Perform the installation of the Dynamic Activation software according to the *Software Installation for Native Deployment*, Reference [18] document.





## Reference List

- [1] *Library Overview*, 18/1553-CSH 109 628 Uen
- [2] *Glossary of Terms and Acronyms*, 0033-CSH 109 628 Uen
- [3] *Software Specification*, 1/190 20-CSH 109 628 Uen
- [4] *Parameter List for Native Deployment* , 5/1057-CSH 109 628 Uen
- [5] *Customer Questionnaire for Native Deployment* , 4/1057-CSH 109 628 Uen
- [6] *Personal Health and Safety Information*, 124 46-2885 Uen
- [7] *System Safety Information*, 124 46-2886 Uen
- [8] *BSP Hardware Installation*, 1/1531-CRA 119 1772 Uen
- [9] *BSP Initial Configuration*, 3/1531-APP 111 01 Uen
- [10] *BSP Jumpstart Instruction*, 2/1531-APP 111 01 Uen
- [11] *LDEwS SW Installation*, 1/1531-ANA 901 39/3 Uen
- [12] *Installation of Equipped Cabinet BYB 501*, 1531-FCM 101 1317 Uen
- [13] *BSP System Architecture Description*, 3/1551-APP 111 01 Uen
- [14] *Create SNMPv2C Target*, 39/1543-APA 901 44/1 Uen
- [15] *Create SNMPv3 Target*, 33/1543-APA 901 44/1 Uen
- [16] *BIOS Menus and GPRs*, 2/15519-CXC1060242 Uen
- [17] *Network Description and Configuration for Native Deployment*, 2/1551-CSH 109 628 Uen
- [18] *Software Installation for Native Deployment*, 1/1531-CSH 109 628 Uen
- [19] *Hardware Installation and IP Infrastructure Setup for Native Deployment GEP3*, 2/1531-CSH 109 628 Uen

### Other Documents

- [20] *Internal Cables for BSP Hardware*, 1070-CRA 119 1772 Uen
- [21] *External Cables for BSP Hardware*, 1/1070-CRA 119 1772 Uen
- [22] *BSP Hardware Description*, 1/1551-APP 111 01 Uen