

CUSTOMER RELEASE NOTES

X-Pedition Router
Boot Firmware Version E3.2.0.0
Boot Firmware Release Date: October, 2001

INTRODUCTION:

This document provides specific information for Boot Firmware version E3.2.0.0 for the Enterasys X-Pedition family of products.

It is recommended that this release note be thoroughly reviewed prior to the installation or upgrade of this product.

GLOBAL SUPPORT:

Enterasys Global Technical Assistance Center
By Phone: (603) 332-9400
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For information regarding the latest firmware available, recent release note revisions, or additional assistance, please visit the Enterasys Networks Support web site.

FIRMWARE SPECIFICATION:

| Boot Firmware File Name | Version No. | Type | Release Date |
|--------------------------------|--------------------|------------------|---------------------|
| p3200fix | E3.2.0.0 | Customer Release | October 2001 |
| p3200mod | E3.2.0.0 | Customer Release | October 2001 |
| p3100fix | E3.1.0.0 | Customer Release | June 2001 |
| p3100mod | E3.1.0.0 | Customer Release | June 2001 |

HARDWARE / BOOT FIRMWARE COMPATIBILITY:

This version of Boot Firmware supports the X-Pedition Router hardware listed in the following table. Other X-Pedition Router hardware not listed is Boot Firmware version independent.

The Minimum Boot Firmware Version is a function of:

- The hardware installed in the system (as listed below).
- The version of VFS you want to use. For more information on VFS versions see the “PCMCIA Card VFS Version” sub-section in the following “INSTALLATION AND CONFIGURATION NOTES” section.
- The need for new features or corrections that are provided in a specific version.

The issue of determining your minimum Boot Firmware version can be avoided by installing this version of Boot Firmware.

For the two SSR-PCMCIA part numbers listed below, sub-part numbers, e.g. 35-028-02, are also listed. Find the sub-part number on your SSR-PCMCIA card. Then match it with a sub-part number listed above to aid in determining your minimum System Firmware and Boot Firmware versions.

| Part | Description | Minimum Boot Firmware Version |
|---|--|-------------------------------|
| 5SSRM-02 | X-Pedition Router Module for Matrix E5 | 1.1.0.8 |
| 6SSRM-02 Rev 0F- | X-Pedition Router Module for Matrix E6 (SS6000) and Matrix E7 (Rev. 0F or EARLIER) | 1.1.0.7 |
| 6SSRM-02 Rev 0G+ | X-Pedition Router Module for Matrix E6 (SS6000) and Matrix E7 (Rev. 0G or LATER) | 1.1.0.8 |
| ER16-CM3-128 | Control Module 3 (291 MHz CPU) with 128MB for ER16 | E3.0.0.0 |
| ER16-CM4-256 | Control Module 4 (380 MHz CPU) with 256MB for ER16 | E3.1.0.0 |
| SSR-2-B128 | X-Pedition 2000 Base Configuration with 16-ports 10/100 TX and 128 MB memory | 1.1.0.9 |
| SSR-2-GSX | X-Pedition 2100 with 8-ports 1000Base-SX | 1.1.0.5 |
| SSR-CM2-128 Rev 0K - | Control Module 2 (198 MHz CPU) with 128 MB memory for X-Pedition 8000/8600 (Rev. 0K or EARLIER) | 1.1.0.2 |
| SSR-CM2-128 Rev 0L + | Control Module 2 (198 MHz CPU) with 128 MB memory for X-Pedition 8000/8600 (Rev. 0L or LATER) | E3.2.0.0 |
| SSR-CM2-64 Rev 0K - | Control Module 2 (198 MHz CPU) with 64 MB memory for X-Pedition 8000/8600 (Rev. 0K or EARLIER) | 1.1.0.2 |
| SSR-CM2-64 Rev 0L + | Control Module 2 (198 MHz CPU) with 64 MB memory for X-Pedition 8000/8600 (Rev. 0L or LATER) | E3.2.0.0 |
| SSR-CM3-128 | Control Module 3 (291 MHz CPU) with 128MB memory for X-Pedition 8000/8600 | E3.0.0.0 |
| SSR-CM4-256 | Control Module 4 (380 MHz CPU) with 256MB memory for X-Pedition 8000/8600 | E3.1.0.0 |
| SSR-MEM-128 | 128MB Memory Upgrade Kit for SSR-CM2-64, SSR-CM2-128, SSR-CM3-128, and ER16-CM3-128 | 1.1.0.2 |
| SSR-PCMCIA 35-028-01 35-053-01 35-053-02 35-053-03 37-002-01 | 8MB PCMCIA card for SSR-CM2-64, SSR-CM2-128, SSR-CM3-128, SSR-CM4-256, ER16-CM3-128, and ER16-CM4-256 | 1.0.0.0 |
| SSR-PCMCIA 35-028-02 35-053-04 37-010-01 | 8MB PCMCIA card for SSR-CM2-64, SSR-CM2-128, SSR-CM3-128, SSR-CM4-256, ER16-CM3-128, and ER16-CM4-256 | E3.0.0.0 |
| XP-PCMCIA-16AT | 16MB PCMCIA card for SSR-CM2-64, SSR-CM2-128, SSR-CM3-128, SSR-CM4-256, ER16-CM3-128, and ER16-CM4-256 | E3.1.0.0 |
| XP-PCMCIA-32AT | 32MB PCMCIA card for SSR-CM2-64, SSR-CM2-128, SSR-CM3-128, SSR-CM4-256, ER16-CM3-128, and ER16-CM4-256 | E3.1.0.0 |
| XP-PCMCIA-16LN | 16MB PCMCIA card for SSR-CM2-64, SSR-CM2-128, SSR-CM3-128, SSR-CM4-256, ER16-CM3-128, and ER16-CM4-256 | E3.0.0.0 |

SUPPORTED FUNCTIONALITY:

The Boot Firmware, which is stored in the Boot PROM, starts executing when the X-Pedition is powered on. Its primary function is to load the System Firmware.

INSTALLATION AND CONFIGURATION NOTES:

Boot Firmware File Names

Beginning with the E3.1.0.0 release, Enterasys Networks' Boot Firmware images have been renamed. Prior to E3.1.0.0, these two images were labeled "prom-E3000**cm2**" and "prom-E3000**ssr2**," depending on the type of CPU used. In order to make this distinction easier, the images have been renamed as shown below. The names have also been shortened to eight characters in order to cooperate with TFTP applications that do not accept longer file names.

The Boot Firmware file names that correspond to Boot Firmware versions for X-Pedition Routers with fixed CPUs (5SSRM-02, 6SSRM-02, SSR-2-B128, and SSR-2-GSX) are:

| <u>Boot Firmware Version</u> | <u>Boot Firmware File Name</u> |
|------------------------------|--------------------------------|
| 1.1.0.8 | prom-1108-ssr2 |
| E3.0.0.0 | prom-E3000-ssr2 |
| E3.1.0.0 | p3100fix |
| E3.2.0.0 | p3200fix |

The Boot Firmware file names that correspond to Boot Firmware versions for X-Pedition Routers with modular CPUs (SSR-CM2-64, SSR-CM2-128, SSR-CM3-128, SSR-CM4-256, ER16-CM3-128, and ER16-CM4-256) are:

| <u>Boot Firmware Version</u> | <u>Boot Firmware File Name</u> |
|------------------------------|--------------------------------|
| 1.1.0.8 | prom-1108-cm2 |
| E3.0.0.0 | prom-E3100-cm2 |
| E3.1.0.0 | p3100mod |
| E3.2.0.0 | p3200mod |

Upgrading the Boot Firmware to version E3.2.0.0

To upgrade the X-Pedition's Boot Firmware to version E3.2.0.0:

1. Enter Enable mode on the X-Pedition using the **enable** command.
xp> **enable**
2. Verify the current Boot Firmware version loaded on the X-Pedition. Enter the **system show version** command:
xp# **system show version**
Software Version : E9.0.0.0
Copyright : Copyright © 2001 Enterasys Networks.
Image Information : Version 9.0.0.0 built on Fri Oct 12 01:16:15 2001
Image Boot Location: tftp://10.50.89.88/xp9000
Boot Prom Version : **p3100fix**
3. Verify the new Boot Firmware image is in the tftp directory of the tftp server used to load the X-Pedition.
4. The X-Pedition 2000, the CM2, CM3 and CM4 for the X-Pedition 8000 & 8600, and the ER16 use different Boot Firmware images. Verify you have the correct Boot Firmware image for your system.
5. Use the **system promimage upgrade** command to copy and upgrade the Boot Firmware image:
xp# **system promimage upgrade 10.50.89.88 p3200fix**
Downloading image "p3200fix" from host "10.50.89.88"
to local image "p3200fix" (takes a few minutes)
Kernel: 100%
Image checksum validated.
Image added.
6. Reboot the X-Pedition and enter the **system show version** command to verify the upgrade.

PCMCIA Card VFS Version

NOTE: The user will not be able to modify the file system version on the XP-PCMCIA-16AT and XP-PCMCIA-32-AT PCMCIA cards so this section is not applicable to them. VFS3 is the only file system they support.

This section pertains to the SSR-PCMCIA and XP -PCMCIA-16LN PCMCIA cards and the file systems used to organize the files stored on them. In Boot Firmware version 1.1.0.8 and System Firmware version 3.0.0.6 support for an additional file system format was added for performance and stability reasons. The original file system is now referred to as Virtual File System 1 (VFS1). The new file system is referred to as Virtual File System 2 (VFS2). Adding or deleting a System Firmware image with VFS1 takes 10-20 minutes. With VFS2 those operations take a fraction of that time. This table illustrates firmware and file system version compatibility:

| | <u>Supports VFS1?</u> | <u>Supports VFS2?</u> |
|--|-----------------------|-----------------------|
| Boot Firmware version 1.0.0.0 and up | YES | NO |
| Boot Firmware version 1.1.0.8 and up | YES | YES |
| System Firmware version 1.0.0.0 and up | YES | NO |
| System Firmware version 3.0.0.6 and up | YES | YES |

Conversion between VFS1 and VFS2 does not alter any files stored on the PCMCIA card.

Before entering the commands to convert between VFS versions, perform the following steps:

1. Reboot or power off then on the X-Pedition to get to the Boot Firmware's CLI. When the Boot Firmware goes through its initialization, prevent it from booting the System Firmware by pressing the Escape key. Typically, the Boot Firmware waits two seconds for user interruption before starting to boot the System Firmware.
2. After pressing the Escape key, the Boot Firmware's CLI prompt will display:

To convert VFS1 to VFS2 enter the following command:

```
xp-boot> pcmakeversion2
```

To convert VFS2 to VFS1 enter the following command:

```
xp-boot> pcmakeversion1
```

To display the current VFS version on the PCMCIA card enter the following command:

```
xp-boot> pcshowversion
```

FIRMWARE CHANGES AND ENHANCEMENTS:**New Firmware Support:**

None.

New Hardware Support:

- Support for the SSR-CM2-64 Rev. 0L Control Module has been added.

ISSUES RESOLVED IN E3.2.0.0:

| System | I.D. |
|--|-------------|
| Entering the command unset moresz sets pagination to 28 lines, rather than the default of 24 lines. | 01298 |

| Boot Command Line Interface (CLI) | I.D. |
|--|-------------|
| After attempting to boot several times with an invalid or missing image, the system will no longer allow a valid tftp boot. The following message will appear despite the validity of the image: "couldn't open <image> for reading Kernel not found or lost in transmission All bootsources failed." | 01256 |

KNOWN RESTRICTIONS AND LIMITATIONS:

None.

IETF STANDARDS MIB SUPPORT:

MIB support is supplied by and dependent upon the System Firmware on the device within which this Boot Firmware resides.

ENTERASYS PRIVATE ENTERPRISE MIB SUPPORT:

MIB support is supplied by and dependent upon the System Firmware on the device within which this Boot Firmware resides.

Enterasys Networks Private Enterprise MIBs are available in ASN.1 format from the Enterasys web site at:
<http://www.enterasys.com/support/mibs/>

Indexed MIB documentation is also available.

SNMP TRAP SUPPORT:

SNMP trap support is supplied by and dependent upon the System Firmware on the device within which this Boot Firmware resides.