



# Release Notes for Cisco 7000 Family NPE-G1 ROMmon

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**September 15, 2003**

These release notes for the Cisco 7000 family describe the current changes to the NPE-G1 ROMmon Image.

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## NPE-G1

The NPE-G1 is the first network processing engine for the Cisco 7200 VXR routers to provide the functionality of both a network processing engine and I/O controller. If used without an I/O controller, an I/O blank panel must be in place.

While its design provides I/O controller functionality, it can also work with any I/O controller supported in the Cisco 7200 VXR routers. The NPE-G1, when installed with an I/O controller, provides the primary input/output functionality; that is, the NPE-G1 input/output functionality enhances that of the existing I/O controller. However, when both the I/O controller and NPE-G1 are present, the functionality of the auxiliary port and console port are on the I/O controller.

The NPE-G1 maintains and executes the system management functions for the Cisco 7200 VXR routers and also holds the system memory and environmental monitoring functions.

The NPE-G1 consists of one board with multiple interfaces. It is keyed so that it can be used only in the Cisco 7200 VXR routers.



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# Caveats

The following sections contain caveat information:

- [Open Caveats for NPE-G1 ROMmon, page 2](#)
- [Resolved Caveats for NPE-G1 ROMmon, page 2](#)

## Open Caveats for NPE-G1 ROMmon

This section documents possible unexpected behavior by NPE G1 ROMmon:

- CSCec18376

Issuing “continue” in ROMmon prompt after a send-break sequence sometimes does not switch back to IOS. Instead, it displays TLB or other crash exceptions and continues to stay in ROMmon. User needs to issue a “reset” and reboot IOS.

Normally, if the system is configured to allow send-break for debugging purpose. A send-break sequence will switch from IOS to ROMmon. While in ROMmon, issuing “continue” will switch back to IOS. This caveat requires user to reboot to go back to IOS.

Workaround: Issue “reset” to reset and reboot IOS.

## Resolved Caveats for NPE-G1 ROMmon

All the caveats listed in this section are resolved for NPE-G1 ROMmon:

- CSCdx91956

Send-break can not be disabled to prevent IOS dropping to ROMmon via CLI “no service password-recovery”.

Workaround: Disable send-break via CLI “config-register”.

- CSCdy02277

Issuing a break sequence on the console port fails to drop the router back to ROMMON. This affects both ROMMON and IOS. This means that password recovery will not work.

This only affects NPE-G1 on C7200 platforms.

Workaround: If you issue a break sequence several times while the boothelper image is decompressing, you can force the NPE-G1 back to ROMMON.

For example:

```
epping_2001#reload
Proceed with reload? [confirm]
```

```
00:01:21: %SYS-5-RELOAD: Reload requested
System Bootstrap, Version 12.2(8r)B, RELEASE SOFTWARE (fc1)
TAC Support: http://www.cisco.com/tac
Copyright (c) 2002 by cisco Systems, Inc.
C7200 platform with 524288 Kbytes of main memory
```

```
Self decompressing the image : #####
telnet> send brk
#####
#####
```

```
#####
#####
##### [OK]
```

```
telnet> send brk
```

```
telnet> send brk
```

```
%PLATFORM-4-NOCPUVER: Invalid CPU ID, assuming revision 1
*** System received an abort due to Break Key ***
signal= 0x3, code= 0x0, context= 0x60e2eef0
PC = 0x605f3ebc, SP = 0x60e3eac8, RA = 0x605f4050
Cause Reg = 0xffffffff, Status Reg = 0x3400e103
rommon 1 >
```

- CSCdy35485  
ROMMON on a 7200 with NPE-G1 may go into loop when IOS crashes.  
There are no known workarounds.
- CSCdy36315  
A 64-MB Translational Bridging (TLB) page size is not supported on a Network Processing Engine G1 (NPE-G1) that is installed in a Cisco 7200 series router, which may cause the router to fail to boot the Cisco IOS software, or if it does boot up, to produce “insufficient memory” errors, or to reload.  
  
This problem is observed only on a Cisco 7200 series router that is configured with an NPE-G1. Other NPEs work fine.  
  
There are no known workarounds.
- CSCdy43246  
Router will constantly cycle during bootup with boot statement pointing to image on disk0: and no disk is in the location specified.  
  
Workaround: Using the **no service config** command will allow the router to bootup successfully with no disk0: present in the chassis.
- CSCeb22301  
The NPE-G1 may break into ROMMON or boot-mode when boot up, but this problem is very rare case.  
  
There are no known workarounds, but it can be recovered by reload.

## Obtaining Documentation

The following sections explain how to obtain documentation from Cisco Systems.

### World Wide Web

You can access the most current Cisco documentation on the World Wide Web at the following URL:

<http://www.cisco.com>

Translated documentation is available at the following URL:

[http://www.cisco.com/public/countries\\_languages.shtml](http://www.cisco.com/public/countries_languages.shtml)

## Documentation CD-ROM

Cisco documentation and additional literature are available in a Cisco Documentation CD-ROM package, which is shipped with your product. The Documentation CD-ROM is updated monthly and may be more current than printed documentation. The CD-ROM package is available as a single unit or through an annual subscription.

## Ordering Documentation

Cisco documentation is available in the following ways:

- Registered Cisco.com users (Cisco direct customers) can order Cisco product documentation from the Networking Products MarketPlace:  
[http://www.cisco.com/cgi-bin/order/order\\_root.pl](http://www.cisco.com/cgi-bin/order/order_root.pl)
- Registered Cisco.com users can order the Documentation CD-ROM through the online Subscription Store:  
<http://www.cisco.com/go/subscription>
- Nonregistered Cisco.com users can order documentation through a local account representative by calling Cisco corporate headquarters (California, USA) at 408 526-7208 or, elsewhere in North America, by calling 800 553-NETS (6387).

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San Jose, CA 95134-9883

We appreciate your comments.

## Obtaining Technical Assistance

Cisco provides Cisco.com as a starting point for all technical assistance. Customers and partners can obtain documentation, troubleshooting tips, and sample configurations from online tools by using the Cisco Technical Assistance Center (TAC) Web Site. Cisco.com registered users have complete access to the technical support resources on the Cisco TAC Web Site.

## Cisco.com

Cisco.com is the foundation of a suite of interactive, networked services that provides immediate, open access to Cisco information, networking solutions, services, programs, and resources at any time, from anywhere in the world.

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- Resolve technical issues with online support
- Download and test software packages
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- Register for online skill assessment, training, and certification programs

You can self-register on Cisco.com to obtain customized information and service. To access Cisco.com, go to the following URL:

<http://www.cisco.com>

## Technical Assistance Center

The Cisco TAC is available to all customers who need technical assistance with a Cisco product, technology, or solution. Two types of support are available through the Cisco TAC: the Cisco TAC Web Site and the Cisco TAC Escalation Center.

Inquiries to Cisco TAC are categorized according to the urgency of the issue:

- Priority level 4 (P4)—You need information or assistance concerning Cisco product capabilities, product installation, or basic product configuration.
- Priority level 3 (P3)—Your network performance is degraded. Network functionality is noticeably impaired, but most business operations continue.
- Priority level 2 (P2)—Your production network is severely degraded, affecting significant aspects of business operations. No workaround is available.
- Priority level 1 (P1)—Your production network is down, and a critical impact to business operations will occur if service is not restored quickly. No workaround is available.

Which Cisco TAC resource you choose is based on the priority of the problem and the conditions of service contracts, when applicable.

## Cisco TAC Web Site

The Cisco TAC Web Site allows you to resolve P3 and P4 issues yourself, saving both cost and time. The site provides around-the-clock access to online tools, knowledge bases, and software. To access the Cisco TAC Web Site, go to the following URL:

<http://www.cisco.com/tac>

All customers, partners, and resellers who have a valid Cisco services contract have complete access to the technical support resources on the Cisco TAC Web Site. The Cisco TAC Web Site requires a Cisco.com login ID and password. If you have a valid service contract but do not have a login ID or password, go to the following URL to register:

<http://www.cisco.com/register/>

If you cannot resolve your technical issues by using the Cisco TAC Web Site, and you are a Cisco.com registered, you can open a case online by using the TAC Case Open tool at the following URL:

<http://www.cisco.com/tac/caseopen>

If you have Internet access, it is recommended that you open P3 and P4 cases through the Cisco TAC Web Site.

## Cisco TAC Escalation Center

The Cisco TAC Escalation Center addresses issues that are classified as priority level 1 or priority level 2; these classifications are assigned when severe network degradation significantly impacts business operations. When you contact the TAC Escalation Center with a P1 or P2 problem, a Cisco TAC engineer will automatically open a case.

To obtain a directory of toll-free Cisco TAC telephone numbers for your country, go to the following URL:

<http://www.cisco.com/warp/public/687/Directory/DirTAC.shtml>

Before calling, please check with your network operations center to determine the level of Cisco support services to which your company is entitled; for example, SMARTnet, SMARTnet Onsite, or Network Supported Accounts (NSA). In addition, please have available your service agreement number and your product serial number.

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