



In addition to these 1.7.0 P1 Release Notes, see the *Release Notes for the NX64000 IP Core Router NX-IS Software, Release 1.7*, Part Number: NX112-00012-00, dated August 8, 2001 for more information.

Resolved Issues

This patch provides the following fixes for the NX-IS software:

- Corrects a problem with the unused Gigabit Ethernet port trap generation.
- Resolves a problem with the `show ip bgp neighbors` command. The command now correctly displays the routes advertised to specific BGP neighbors.
- Static routes redistributed into BGP continue to be advertised after running the `clear ip bgp *` command.
- Resolves a problem loading BGP configuration when booting from the backup image.
- Improves error messages when running the `copy-sync` command.
- Resolves improper restart with invalid login for RADIUS.
- Resolves an intermittent problem when running the `copy running-config startup-config` command. The command now consistently copies the startup.cfg file the secondary RCP.

Upgrading to NX-IS 1.7.0 P1

This procedure documents how to perform the NX-IS Version 1.7.0 to NX-IS Version 1.7.0 (P1) upgrade.

- ▶ The following procedure describes how to upgrade a duplex NX64000 system. If you do not have a secondary (standby) RCP, ignore the steps that refer to the secondary RCP.

Upgrading to NX-IS Version 1.7.0 P1 requires:

- Confirming available disk space for the PCMCIA cards.
 - Optional backing up the Release 1.7 image file and configuration to the network.
 - Optional setting up of the backup utility for the Release 1.7 image file.
 - Copying the r170p1 image file to the PCMCIA card on the primary RCP.
 - Copying the r170p1 image file to the secondary RCP.
 - Loading the Secondary RCP.
 - Loading the Primary RCP.
-

Checking Available Disk Space

1. Run the `show flash summary` command to make sure that the PCMCIA cards on the primary RCP and secondary RCP have sufficient disk space to hold the new image file.

The PCMCIA card has a capacity of 128 MB. You will need a minimum of **46302720** bytes for the `r170p1.tar` image. For example:

```
nx# show flash summary
device name:                /pcmcia0
total number of sectors:    250592
bytes per sector:           512
media byte:                 0xf0
# of sectors per cluster:   4
# of reserved sectors:      1
# of FAT tables:            2
# of sectors per FAT:       245
max # of root dir entries:  112
# of hidden sectors:        0
removable medium:          TRUE
disk change w/out warning:  not enabled
auto-sync mode:            not enabled
long file names:           not enabled
exportable file system:    not enabled
lowercase-only filenames:  not enabled
volume mode:                O_RDWR (read/write)
available space: 49661568 bytes
max avail. contig space: 47344384 bytes
```

2. If needed, run the `delete` and `squeeze` commands to delete unnecessary files and to create more free space on the PCMCIA card:

```
nx# pwd
/pcmcia0
nx# cd /releases/
nx# pwd
/pcmcia0/releases/
nx# dir
size            date            time            name
-----
512             MAR-01-2001    09:55:24       .                <DIR>
12189          MAR-01-2001    12:17:43       STARTUP.DEL
64241          MAR-01-2001    13:54:18       NEWSTART.CFG

nx# del newstart.cfg
nx# squeeze /pcmcia0/releases/
nx# dir
size            date            time            name
-----
512             MAR-01-2001    09:55:24       .                <DIR>
```

Backing up Release 1.7

To copy the Release 1.7 image file and configuration file to a network drive:

Copy the Release 1.7 startup.cfg file and the r170.tar file onto a network drive, as shown below, before starting the upgrade.

Use FTP to transfer the r170.tar file and startup.cfg file to a network drive. For example:

```
nx# ftpput octet ip-address username password
/pcmcia0/releases/current/r170.tar
Opening data connection.....
FTP Transfer Started.....
## bytes written to xxx.xxx.xxx.xxx
Transfer complete
nx# ftpput ascii ip-address username password /pcmcia0/startup.cfg
/startup.cfg
.
.
.
```

To copy the r170.tar file to the PCMCIA card and make use of the optional backup utility:

Release 1.7 provides a backup utility to boot the system if the image in the pcmcia0/releases/current directory fails. To use the backup utility:

1. Move the r170.tar file to the /pcmcia0/releases/backup directory.

```
nx# backup
```

2. Run the show boot command to verify that path for the boot backup is set to pcmcia0/releases/backup/.

```
nx# show boot
BOOT SYSTEM variable = /pcmcia0/releases/current/
BOOT BACKUP variable = /pcmcia0/releases/backup/
CONFIG_FILE variable = /pcmcia0/startup.cfg
```

If required, run the boot backup command to set the path for backup image file. For example:

```
nx# configure terminal
nx(config)# boot backup /pcmcia0/releases/backup/
nx(config)# exit
```

Copying the r170p1 Image File to the Primary RCP

FTP the r170p1.tar file from the Lucent FTP server to your server, then FTP the file to the system as shown below:

1. FTP the r170p1.tar file from the Lucent FTP server to your FTP server. For example:

```
ftp ftp.lucent.com
ftp> Login
ftp> Username
ftp> Password
ftp> bin
ftp> hash
ftp> cd directory-name
ftp> get r170p1.tar
ftp> quit
ftp> exit
```

2. FTP the r170p1.tar file from your FTP server to the system.

```
ftp IP address of Ethernet0
ftp> Login
ftp> Username
ftp> Password
ftp> bin
ftp> hash
ftp> cd /pcmcia0/releases/current/
ftp> put r170p1.tar
ftp> quit
ftp> exit
```

- ▶ The system does not display a message if the PCMCIA card has inadequate disk space for the file you are copying to the system. Compare the size of the file you copy to the system with the size of the source file to make sure that the copy was successful.

Upgrading the Secondary RCP

You must upgrade both the primary and secondary RCPs.

To upgrade the secondary RCP:

1. Run the `copy sync all` command to copy the files from the PCMCIA card on the primary RCP to the PCMCIA card on the secondary RCP. For example:

```
nx# copy sync all
```

- ▶ Make sure that the PCMCIA card, in the secondary RCP, is of equal size to the PCMCIA card in the primary RCP before running the `copy sync` command.

2. Run the `reload rcp-secondary` command to run the r170P1.tar file on the secondary RCP. The secondary RCP does not take over for the primary RCP when you run the `reload rcp-secondary` command. For example:

```
nx# cards
nx(cards)# reload rcp-secondary
Working...DONE
nx(cards)#
```

3. Reload the primary RCP to run the new code; the secondary RCP will become active. For example run the reload command:

```
nx# reload
Confirm reload? <yes|no> y
```

4. Check that the new load is now active by running the show version command.

```
nx# show version
Card      Revision
Route Control Card 1
      R 1.7.0 (BL 44).
      (P1) RCP Image.
      Fri Aug 17 06:17:15 EDT 2001
      BSP:2.3/2
      OS: 5.3.1

spf
      R 1.7.0 (BL 44).
      (P1) OSPF.
      Fri Aug 17 06:06:55 EDT 2001

nx#
```

5. After the system is completely reloaded go to [step 6 on page -6](#).

You can check the progress by running the show chassis command. When all modules are up, the output of the show chassis command will look similar to the output below. Notice that all cards are show as being up or active except the secondary RCP, which shows as being the standby

```
nx# show chassis
Chassis Up Time: 1 day, 0:07:52
Date/time: 2001-8-22, 15:15:44.0,+5:0
Incoming Air Temperature 36
Up time of last Chassis Configuration Change: 0:05:37
Chassis Serial Number: SAN0600010106721
Fan Trays Present: Fan1: True , Fan2: True , Fan3: True
Fan Tray Status:   Fan1: OK   , Fan2: OK   , Fan3: OK
Power Distribution Units Present: Pdul: True , Pdu2: False
Power Distribution Unit Status:   Pdul: OK   , Pdu2: FAULT
Chassis Clock Source: Network Derived
BITS port number: 1
Network Timing, Primary Card#: 3
Network Timing, Secondary Card#: 9
Alarm State: 1 Current Alarm: 0
Chassis Card Slots:
RCP-0   RCP-1   SF-0     SF-1     SF-2     SF-3     CTA-0     CTA-1
primary |standby |active   |         |         |         |active   |
        |         |up       |         |         |         |up       |
IO-0    IO-1    IO-2     IO-3     IO-4     IO-5     IO-6     IO-7
        |lowSpeed|ATM      |ATM      |ATM      |POS      |lowSpeed|
        |OC3     |OC3     |OC3     |OC12    |OC48    |OC12    |
        |8 ifs  |8 ifs  |8 ifs  |2 ifs  |1 if   |4 ifs  |
        |up     |up     |up     |up     |up     |up     |
IO-8    IO-9    IO-10    IO-11    IO-12    IO-13    IO-14    IO-15
        |POS    |        |        |        |        |        |
        |OC48   |        |        |        |        |        |
        |1 if   |        |        |        |        |        |
        |up     |        |        |        |        |        |

nx#
```

6. Run the `copy sync all` command to copy the files from the PCMCIA card on the primary RCP to the PCMCIA card on the secondary RCP. For example:

```
nx# copy sync all
```

Syslog Source Interface IP Workaround

Syslog messages show an incorrect source address as the inet on the ethernet default address 10.0.100.74.

Check the messages coming into the syslog server. The source IP address of the messages should not be 10.0.100.74; it should be the address of the source-interface that you specified on the system. Perform the steps listed below to correct the source address after each system reboot.

1. Display the running parameter and configuration settings currently in running memory.

```
nx# show running-config
Building configuration....
Current configuration:
no service password-encryption
!
auth-order local radius
radius
secret testing
primary-auth-server 10.0.1.10
secondary-auth-server 172.168.1.250
exit
username jdoe privilege 15 password 0 johndoe1
hostname nx#
!
```

```
logging console notifications
logging console inline
logging file log_file.txt informational
logging source-interface ethernet0
logging facility local7
logging trap debugging
no logging monitor
no logging linecard
logging history warnings
logging syslog-IP 152.148.149.93 log_file.txt
```

```
!
!
ip domain-name inse.lucent.com
!
interface null0
no ip address
exit
```

2. Select and copy the logging section of the `show running-config` output (outlined in the example output above).

3. Turn off logging to all configured destinations. For example:

```
nx# configure terminal
nx (config)# no logging on
```

4. Enable logging to all configured destinations. For example:

```
nx (config)# logging on
```

5. Paste the logging section that you copied in [step 2](#) above, at the `nx(config)#` prompt .

Verifying the Syslog Workaround

To confirm that you have successfully implemented the workaround, check the messages coming into the syslog server. The source IP address of the messages should be that of the source-interface you specified on the system.

Documentation Changes

NX64000 Command Reference

The syntax for the `reload` command in the Command Reference has changed; it should read:

```
reload {ioc | rcp-secondary | sfc | tac} slot-number
```

Running the `reload rcp-secondary` command reboots the secondary RCP controller, but the secondary RCP does not take over for the primary RCP.

The following example reboots the secondary RCP:

```
nx# cards
nx(cards)# reload rcp-secondary
nx(cards)#
```