31 August 2018



# NetIron OS 06.3.00 for ExtremeRouting MLX Series Devices

Release Notes 1.0

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## Document history

Version	Summary of changes	Publication date
1.0	Initial release	08/31/2018

## Preface

### Contacting Extreme Technical Support

As an Extreme customer, you can contact Extreme Technical Support using one of the following methods: 24x7 online or by telephone. OEM customers should contact their OEM/solution provider. If you require assistance, contact Extreme Networks using one of the following methods:

- GTAC (Global Technical Assistance Center) for immediate support
- Phone: 1-800-998-2408 (toll-free in U.S. and Canada) or +1 408-579-2826. For the support phone number in your country, visit: <u>www.extremenetworks.com/support/contact</u>.
- Email: support@extremenetworks.com. To expedite your message, enter the product name or model number in the subject line.
- GTAC Knowledge Get on-demand and tested resolutions from the GTAC Knowledgebase, or create a help case if you need more guidance.
- The Hub A forum for Extreme customers to connect with one another, get questions answered, share ideas and feedback, and get problems solved. This community is monitored by Extreme Networks employees, but is not intended to replace specific guidance from GTAC.
- Support Portal Manage cases, downloads, service contracts, product licensing, and training and certifications.

Before contacting Extreme Networks for technical support, have the following information ready:

- Your Extreme Networks service contract number and/or serial numbers for all involved Extreme Networks products
- A description of the failure
- A description of any action(s) already taken to resolve the problem
- A description of your network environment (such as layout, cable type, other relevant environmental information)
- Network load at the time of trouble (if known)
- The device history (for example, if you have returned the device before, or if this is a recurring problem)
- Any related RMA (Return Material Authorization) numbers

### Extreme resources

Visit the Extreme website to locate related documentation for your product and additional Extreme resources.

White papers, data sheets, and the most recent versions of Extreme software and hardware manuals are available at www.extremenetworks.com. Product documentation for all supported releases is available to registered users at <a href="https://www.extremenetworks.com/support/documentation/">https://www.extremenetworks.com</a>.

### Document feedback

Quality is our first concern at Extreme, and we have made every effort to ensure the accuracy and completeness of this document. However, if you find an error or an omission, or you think that a topic needs further development, we want to hear from you.

You can provide feedback in two ways:

- Use our short online feedback form at <a href="https://www.extremenetworks.com/documentation-feedback/">https://www.extremenetworks.com/documentation-feedback/</a>
- Email us at documentation@extremenetworks.com

Provide the publication title, part number, and as much detail as possible, including the topic heading and page number if applicable, as well as your suggestions for improvement.

## Overview

NetIron OS Release 06.3.00 enhances the capabilities of ExtremeRouting MLX Series, and ExtremeRouting CER 2000 Series in the following areas:

- \* BGP services,
- \* Network Packet Broker functionality

In addition, this release also has further enhancements to manageability and troubleshooting functions to enable efficient network operations.

With these features, the MLX Series Router continues as the leading platform for converged data center and service provider network services.

## Behavior changes

### Behavior changes in release NetIron 06.3.00

There are no behavior changes in release NetIron 06.3.00.

## Software Features

### New software features

The following software features are new for NetIron 06.3.00 release.

### Management features and enhancements

- **SSH server management**: This feature configures the SSH server to allow incoming SSH connection requests from ports that belong to any VRF and from the out-of-band management port when the management VRF is configured.
- Increase maximum telnet session number from 5 to 10: The maximum telnet session is increased from 5 to 10.

### Security

• **Regular expression support in RADIUS command authorization**: The Extreme-specific RADIUS attribute foundry-command-string now supports specifying a range of data for a CLI command.

### **IP Routing**

- **BGP Large Communities:** RFC8092 BGP Large Communities attribute is supported. All routes with this attribute belong to the communities specified in the attribute.
- Increase number of loopback interfaces in NetIron to 1024: The number of supported loopback interfaces is increased to 1024.

### Monitoring

• Beginning with Extreme NetIron Release 06.3.00, the Network Processor (NP) error monitoring and recovery feature is supported on Extreme NetIron 8x10G, 2x100G, 20x10G, 2x100G-CFP2 and 4x10G-IPSEC line card modules for ExtremeRouting XMR/MLX Series.

### **Network Packet Broker**

• The maximum TVF LAG FID group size (system-max tvf-lag-lb-fid-group) is increased to 32.

## CLI commands

### New CLI commands NetIron 06.3.00

- ip large-community-list extended
- ip large-community-list standard
- ip ssh include-all-vrf
- match large-community-list
- set large-community
- set large-community-list
- system-max loopback-interface
- show default values
- show ip bgp routes large-community
- show ip bgp routes large-community-access-list
- show ip bgp routes large-community-regex
- show ip bgp routes detail large-community
- show ip bgp routes detail large-community-access-list
- show ip bgp routes detail large-community-regex

### Modified commands

- ip ssh strict-management-vrf
- neighbor send-community
- show ip ssh config
- show who
- system-max tvf-lag-lb-fid-group

### Deprecated commands

There are no deprecated commands in this release.

## MIBs and messages

### MIBs

### New MIB Objects

No MIB objects were introduced in release NetIron 06.3.00.

### Modified MIBs

The following MIBs have been modified for this release:

Not Applicable

### **Deprecated MIBs**

The following MIBs have been deprecated beginning with this release:

Not Applicable

### Messages

### New Messages

The following messages are new in this release:

Not Applicable

### Modified Messages

The following messages have been modified for this release:

Not Applicable

### Deprecated Messages

The following messages have been deprecated beginning with this release:

• Not Applicable

## RFCs and standards

The following new RFC is supported in this release.

• RFC8092 -- BGP Large Communities Attribute

## Hardware support

### Supported devices

The following devices are supported in this release:

**NOTE:** Beginning with NetIron OS 06.3.00 and later, the ExtremeSwitching CES 2000 Series devices are not supported. Refer to the <u>End of Sale and End of Support</u> page for additional information.

ExtremeRouting XMR Series	ExtremeRouting MLX Series	ExtremeRouting CER 2000 Series
XMR 4000	MLX-4	CER-RT 2024C-4X
XMR 8000	MLX-8	CER-RT 2024F-4X
XMR 16000	MLX-16	CER 2024C
XMR 32000	MLX-32	CER-RT 2024C
	MLXe-4	CER 2024F
	MLXe-8	CER-RT 2024F
	MLXe-16	CER 2048C
	MLXe-32	CER-RT 2048C
		CER 2048CX
		CER-RT 2048CX
		CER 2048F
		CER-RT 2048F
		CER 2048FX
		CER-RT 2048FX

### Supported devices for Network Packet Broker R06.3.00

XMR Series	MLX Series
XMR 4000	MLX-4
XMR 8000	MLX-8
XMR 16000	MLX-16
XMR 32000	MLX-32
	MLXe-4
	MLXe-8
	MLXe-16
	MLXe-32

### Supported modules

The following interface modules are supported in this release:

Module	Description	Compatik	le devices	Generation
		MLXe with MLX or MR2-M mgmt. module	MLXe with XMR or MR2-X mgmt. module	
BR-MLX-10GX4- IPSEC-M	MLX 4-port 10 GbE/1 GbE combo and 4-port 1 GbE (- M) IPsec module with 512,000 IPv4 routes or 240,000 IPv6 routes in hardware	Yes	Yes	3
BR-MLX-10GX20-X2	MLX 20-port 10 GbE/1 GbE (X2) SFP+ and SFP combo module with extended route table support for up to 2.4 million IPv4 or 1.8 million IPv6 routes in hardware. Integrated hardware-enabled MACsec.	Yes	Yes	3
BR-MLX-10GX20-M	MLX 20-port 10 GbE/1 GbE (M) combo module. Supports SFP+ and SFP with up to 512,000 IPv4 routes or 240,000 IPv6 routes in FIB. Integrated hardware- enabled MACsec.	Yes	Yes	3
BR-MLX-1GCX24-X- ML	MLX 24-port (X) 10/100/1,000 copper (RJ- 45) module with IPv4/IPv6/MPLS hardware support. Supports 512,000 IPv4 routes in FIB. License upgradable to "X" scalability (1 million IPv4 routes in hardware).	Yes	No	1.1

Module	Description	Compatible devices		Generation
		MLXe with MLX or MR2-M mgmt. module	MLXe with XMR or MR2-X mgmt. module	
BR-MLX-100GX2- CFP2-M	MLX 2-port 100 GbE (M) CFP2 module. Supports 512,000 IPv4 routes in FIB.	Yes	Yes	3
BR-MLX-100GX2- CFP2-X2	MLX 2-port 100 GbE (X2) CFP2 module with extended route table support for up to 2.4 million IPv4 or 1.8 million IPv6 routes in hardware.	Yes	Yes	3
BR-MLX-10GX8-X	MLX Series 8-port 10 GbE (X) module with IPv4/IPv6/MPLS hardware support—requires SFP optics. Supports up to 1 million IPv4 routes in FIB. Requires high-speed switch fabric modules.	Yes	Yes	2
BR-MLX-1GCX24-X	MLX 24-port (X) 10/100/1,000 copper (RJ- 45) module with IPv4/IPv6/MPLS hardware support. Supports 1 million IPv4 routes in hardware.	Yes	Yes	1.1

Module	Description	Compatible devices		Generation
		MLXe with MLX or MR2-M mgmt. module	MLXe with XMR or MR2-X mgmt. module	
BR-MLX-40GX4-M	MLX Series 4-port 40 GbE (M) module with IPv4/IPv6/MPLS hardware support and support for QSFP+ optics, including both LR and SR versions. Supports up to 512,000 IPv4 routes or 128,000 IPv6 routes. Requires high-speed switch fabric modules.	Yes	Yes	3
BR-MLX-10GX4-X	MLX Series 4-port 10 GbE (X) module with IPv4/IPv6/MPLS hardware support—requires XFP optics. Supports 1 million IPv4 routes in hardware.	Yes	Yes	1.1
BR-MLX-10GX4-X- ML	MLX/MLXe 4-port 10 GbE (ML) module with IPv4/IPv6/MPLS hardware support—requires XFP optics. Supports 512,000 IPv4 routes in FIB. License upgradable to "X" scalability (1 million IPv4 routes in hardware).	Yes	No	1.1
NI-MLX-10GX8-M	MLX Series 8-port 10 GbE (M) module with IPv4/IPv6/MPLS hardware support and up to 512,000 IPv4 routes—requires SFP+ optics and high- speed switch fabric modules.	Yes	No	2

Module	Description	Compatib	le devices	Generation
		MLXe with MLX or MR2-M mgmt. module	MLXe with XMR or MR2-X mgmt. module	
BR-MLX-1GFX24-X	MLX Series 24-port FE/GbE (SFP) module, with IPv4/IPv6/MPLS hardware support. Supports 1 million IPv4 routes in hardware.	Yes	Yes	1.1
BR-MLX-1GFX24- X-ML	MLX Series 24-port FE/GbE (SFP) module, with IPv4/IPv6/MPLS hardware support. Supports 512,000 IPv4 routes in FIB. License upgradable to "X" scalability (1 million IPv4 routes in hardware).	Yes	No	1.1
BR-MLX-10GX24- DM	MLXe 24-port 10 GbE module with IPv4/IPv6/MPLS hardware support—requires SFP optics. Supports 256,000 IPv4 routes in FIB.	Yes	No	3a
NI-MLX-10GX8-D	MLX Series 8-port 10-GbE (D) module with IPv4/IPv6 hardware support - requires SFPP optics. Supports 256K IPv4 routes in FIB. Does not support MPLS. Requires high speed switch fabric modules.	Yes	No	2

Module	Description	Compatik	le devices	Generation
		MLXe with MLX or MR2-M mgmt. module	MLXe with XMR or MR2-X mgmt. module	
BR-MLX- 10GX10-X2	MLX 10-port 10- Gbe/1Gbe (X2) SFP+ and SFP combo module with extended route table support up to 2M IPv4 and 800K IPv6 routes in hardware. MACsec enabled. Upgradeable to 20X10G-X2 using additional software license.	Yes	Yes	3
BR-MLX-1GX20- U10G-M	MLXe twenty (20)-port 1-GBE/1-GBE (M) module with IPv4/IPv6/MPLS hardware support. Requires SFP optics. Supports 512K IPv4 routes in FIB. Requires high speed switch fabric modules. Upgradeable to 10G, with BR-MLX- 1GX20-U10G-MUPG license.	Yes	Yes	3

Module	Description	Compatible devices		Generation
		MLXe with MLX or MR2-M mgmt. module	MLXe with XMR or MR2-X mgmt. module	
BR-MLX-1GX20- U10G-X2	MLXe twenty (20)-port 1-GBE (X2) module with IPv4/IPv6/MPLS hardware support. Requires SFP optics. Supports simultaneous 2M IPv4 and 0.8M IPv6, or 1.5M IPv4 and 1M IPv6 routes in FIB. Requires hSFM. Upgradeable to 10G with extra license.	Yes	Yes	3

- Depending on your router model, you can install up to 32 single-slot interface modules, or 16 double-slot interface modules.
- Interface modules are hot-swappable. Interface modules can be removed and replaced without powering down the system.
- Gen 3 X2 modules with an MR2-M module will only support 512M routes.

### Supported power supplies

The following table lists the power supplies that are available for the devices supported in this release:

Part number	Description	Compatible devices
BR-MLXE-ACPWR-1800	1800W power supply.	16-, 8- and 4-slot MLXe and 16
		and 8-Slot XMR/MLX AC
BR-MLXE-DCPWR-1800	1800W power supply.	16-, 8- and 4-slot MLXe and 16
		and 8-Slot XMR/MLX DC
NI-X-ACPWR	1200W power supply.	16-, 8- and 4-slot MLXe and 16
		and 8-Slot XMR/MLX AC
NI-X-DCPWR	1200W power supply.	16-, 8- and 4-slot MLXe and 16
		and 8-Slot XMR/MLX DC
NI-X-ACPWR-A	1200W power supply.	4-Slot XMR/MLX AC
NI-X-DCPWR-A	1200W power supply.	4-Slot XMR/MLX DC
BR-MLXE-32-ACPWR-3000	AC 3000W power supply.	32-slot MLXe/XMR/MLX
BR-MLXE-32-DCPWR-3000	DC 3000W power supply.	32-slot MLXe/XMR/MLX
NIBI-32-ACPWR-A	AC 2400W power supply.	32-Slot MLXe/XMR/MLX
NIBI-32-DCPWR	2400W power supply.	32-Slot MLXe/XMR/MLX DC

### Supported optics

For a list of supported fiber-optic transceivers that are available from Extreme, refer to the latest version of the Extreme Optics Family Data Sheet available online at <u>https://cloud.kapostcontent.net/pub/a070d154-d6f1-400b-b2f0-3d039ae2f604/data-center-ethernet-optics-data-sheet?kui=Cc1YBpmqyfb2mDfw2vlq2g</u>.

## Software upgrade and downgrade

### Image file names

Download the following images from <u>www.extremenetworks.com</u>.

**NOTE:** Beginning with NetIron OS 06.3.00 and later, the ExtremeSwitching CES 2000 Series devices are not supported. Refer to the <u>End of Sale and End of Support</u> page for additional information.

### MLX Series and NetIron XMR devices

NOTE: When upgrading MLX Series and XMR Series devices, follow the manifest upgrade to ensure all required files are upgraded. Boot upgrade is not part of the manifest upgrade. If the boot image is R05.6.00 or older, upgrade the boot image.

#### Required images for R06.3.00 MLX Series/XMR software upgrade

# Manifest File for XMR/MLX Release 06.3.00

```
-NETIRON IRONWARE VER XMR-MLXV6.3.00
```

```
-DIRECTORY /Boot/InterfaceModule xmlprm05900.bin
```

```
-DIRECTORY /Boot/ManagementModule xmprm05900.bin
```

```
# Application Images
-DIRECTORY /Combined/FPGA
lpfpga06300.bin
```

```
-DIRECTORY /Combined/Application xm06300.bin
```

```
-DIRECTORY /Monitor/InterfaceModule xmlb06200.bin
```

```
-DIRECTORY /Monitor/ManagementModule xmb06200.bin
```

```
-DIRECTORY /Application/ManagementModule xmr06300.bin
```

```
-DIRECTORY /Application/InterfaceModule xmlp06300.bin
```

```
-DIRECTORY /FPGA/InterfaceModule
pbif4x40 06300.bin 2.11
pbif8x10 06300.bin 2.24
pbifmrj 06300.bin 4.04
pbifsp2 06300.bin 4.02
statsmrj_06300.bin 0.09
xgmacsp2 06300.bin 0.17
xpp2x100_06300.bin 1.06
xpp4x40 06300.bin 6.20
xpp4x10q3 06300.bin 0.00
xpp8x10 06300.bin 1.10
xppmrj 06300.bin 1.03
xppsp2 06300.bin 1.01
xppxsp2 06300.bin 1.01
pbif-ber-q3 06300.bin 2.11
xpp20x10g3 06300.bin 0.00
xpp2x100g3 06300.bin 0.00
-DIRECTORY /FPGA/ManagementModule
mbridge32 06300.xsvf 36
mbridge 06300.xsvf 37
sbridge 06300.mcs 6
hsbridge 06300.mcs 17
-END OF IMAGES
-DIRECTORY /Signatures
xmlprm05900.sig
xmprm05900.sig
xmlb06200.sig
xmb06200.sig
xmr06300.sig
xmlp06300.sig
lpfpqa06300.sig
hsbridge 06300.sig
mbridge 06300.sig
mbridge32 06300.sig
sbridge 06300.sig
pbif4x40 06300.sig
pbif8x10 06300.sig
pbifmrj 06300.sig
pbifsp2 06300.sig
pbif-ber-g3 06300.sig
statsmrj 06300.sig
xgmacsp2 06300.sig
xpp2x100_06300.sig
xpp20x10g3 06300.sig
xpp2x100q3 06300.sig
xpp4x40 06300.sig
xpp4x10g3 06300.sig
xpp8x10 06300.sig
xppmrj 06300.sig
xppsp2 06300.sig
```

```
xppxsp2 06300.sig
xmlprm05900.sha256
xmprm05900.sha256
xmlb06200.sha256
xmb06200.sha256
xmr06300.sha256
xmlp06300.sha256
lpfpga06300.sha256
hsbridge 06300.sha256
mbridge 06300.sha256
mbridge32 06300.sha256
sbridge 0\overline{6}300.sha256
pbif4x40 06300.sha256
pbif8x10 06300.sha256
pbifmrj \overline{0}6300.sha256
pbifsp2_06300.sha256
pbif-ber-g3 06300.sha256
statsmrj_06300.sha256
xgmacsp2_06300.sha256
xpp2x100 06300.sha256
xpp20x10g3 06300.sha256
xpp2x100g3 06300.sha256
xpp4x40 06300.sha256
xpp4x10g3 06300.sha256
xpp8x10 06300.sha256
xppmrj 06300.sha256
xppsp2_06300.sha256
xppxsp2 06300.sha256
```

#### FPGA file names and supported modules

File Name	Supported Modules
pbif4x40_06300.bin	4x40G modules
pbif8x10_06300.bin	8x10G modules
pbifmrj_06300.bin	24x1G and 48x1G modules
pbifsp2_06300.bin	2x10G, 4x10G, 4x10G-x and 20x1G modules
statsmrj_06300.bin	24x1G and 48x1G modules
xgmacsp2_06300.bin	2x10G, 4x10G-x and 4x10G modules
xpp2x100_06300.bin	2x100G modules (double-wide CFP-based module)
xpp4x40_06300.bin	4x40G modules
xpp4x10g3_06300.bin	4x10G modules
xpp8x10_06300.bin	8x10G modules
xppmrj_06300.bin	24x1G and 48x1G modules
xppsp2_06300.bin	2x10G, 4x10G, and 20x1G modules
xppxsp2_06300.bin	4x10G-x

pbif-ber-g3_06300.bin	20x10G and 2x100G modules (-M and –X2)
xpp20x10g3_06300.bin	20x10G modules
xpp2x100g3_06300.bin	2x100G modules (half-slot CFP2-based module)
mbridge32_06300.xsvf	MBRIDGE32
mbridge_06300.xsvf	MBRIDGE
sbridge_06300.mcs	Switch fabric modules
hsbridge_06300.mcs	High speed switch fabric modules

#### CER 2000 Series devices

When upgrading CER 2000 Series devices, follow the manifest upgrade to ensure all required files are upgraded. Boot upgrade is not part of the manifest upgrade. If the boot image is R05.5.00 or older, upgrade the boot image.

#### Required images for R06.3.00 CER 2000 software upgrade

```
-DIRECTORY /Boot
ceb06000.bin
-DIRECTORY /Application
ce06300.bin
-DIRECTORY /FPGA
pbifmetro 06300.bin
```

-END OF IMAGES

-DIRECTORY /Signatures ceb06000.sig ce06300.sig pbifmetro\_06300.sig ceb06000.sha256 ce06300.sha256 pbifmetro 06300.sha256

-DIRECTORY /MIBS ce06300.mib ce06300 std.mib

-DIRECTORY /Yang ExampleXML.txt common-defs.yang interface-config.yang interface-statedata.yang

```
mpls-config.yang
mpls-statedata.yang
netiron-config.yang
netiron-statedata.yang
version-statedata.yang
vlan-config.yang
vlan-statedata.yang
```

```
-DIRECTORY
CES-CER06300_mnf.txt
CES-CER06300_mnf.sig
CES-CER06300_mnf.sha256
```

-DIRECTORY /Manuals

### Manifest for Network Packet Broker devices

**NOTE:** When upgrading MLX Series and XMR Series devices, follow the manifest upgrade to ensure all required files are upgraded. Boot upgrade is not part of the manifest upgrade. If the boot image is R05.6.00 or older, upgrade the boot image.

#### Required images for Network Packet Broker R06.3.00 software upgrade

```
-NETIRON IRONWARE VER XMR-MLXV6.3.00
-DIRECTORY /Boot/InterfaceModule
xmlprm05900.bin
-DIRECTORY /Boot/ManagementModule
xmprm05900.bin
# Application Images
-DIRECTORY /Combined/FPGA
lpfpga_npb_06300.bin
-DIRECTORY /Combined/Application
xm06300.bin
-DIRECTORY /Monitor/InterfaceModule
xmlb06200.bin
-DIRECTORY /Monitor/ManagementModule
xmb06200.bin
-DIRECTORY /Application/ManagementModule
xmr06300.bin
-DIRECTORY /Application/InterfaceModule
```

#### xmlp06300.bin

```
-DIRECTORY /FPGA/InterfaceModule
pbif4x40 06300.bin 2.11
pbif8x10 06300.bin 2.24
pbifmrj 06300.bin 4.04
pbifsp2 06300.bin 4.02
statsmrj 06300.bin 0.09
xqmacsp2 06300.bin 0.17
xpp2x100 06300.bin 1.06
xpp4x40 06300.bin 6.20
xpp4x10g3 06300.bin 0.00
xpp8x10 06300.bin 1.10
xppmrj 06300.bin 1.03
xppsp2 06300.bin 1.01
xppxsp2 06300.bin 1.01
pbif-ber-g3 06300.bin 2.11
xpp20x10g3_npb_06300.bin 0.10
xpp2x100g3 npb 06300.bin 0.10
-DIRECTORY /FPGA/ManagementModule
mbridge32 06300.xsvf 36
mbridge 06300.xsvf 37
sbridge 06300.mcs 6
hsbridge 06300.mcs 17
-END OF IMAGES
-DIRECTORY /Signatures
xmlprm05900.sig
xmprm05900.sig
xmlb06200.sig
xmb06200.sig
xmr06300.sig
xmlp06300.sig
lpfpqa npb 06300.sig
hsbridge 06300.sig
mbridge 06300.sig
mbridge32 06300.sig
sbridge 06300.sig
pbif4x40 06300.sig
pbif8x10 06300.sig
pbifmrj_06300.sig
pbifsp2 06300.sig
pbif-ber-g3 06300.sig
statsmrj 06300.sig
xgmacsp2 06300.sig
xpp2x100<sup>-06300.sig</sup>
xpp20x10g3 npb 06300.sig
xpp2x100g3 npb 06300.sig
xpp4x40 06300.sig
xpp4x10g3 06300.sig
```

xpp8x10 06300.sig xppmrj 06300.sig xppsp2 06300.sig xppxsp2 06300.sig xmlprm05900.sha256 xmprm05900.sha256 xmlb06200.sha256 xmb06200.sha256 xmr06300.sha256 xmlp06300.sha256 lpfpga npb 06300.sha256 hsbridge 06300.sha256 mbridge 06300.sha256 mbridge32 06300.sha256 sbridge 06300.sha256 pbif4x40 06300.sha256 pbif8x10 06300.sha256 pbifmrj\_06300.sha256 pbifsp2 06300.sha256 pbif-ber-g3 06300.sha256 statsmrj 06300.sha256 xqmacsp2 06300.sha256 xpp2x100\_06300.sha256 xpp20x10g3 npb 06300.sha256 xpp2x100g3 npb 06300.sha256 xpp4x40 06300.sha256 xpp4x10q3 06300.sha256 xpp8x10 06300.sha256 xppmrj 06300.sha256 xppsp2 06300.sha256 xppxsp2 06300.sha256 # MIBS: -DIRECTORY /MIBS xmr06300.mib xmr06300 std.mib -DIRECTORY /Yang ExampleXML.txt common-defs.yang interface-config.yang interface-statedata.yang mpls-config.yang mpls-statedata.yang netiron-config.yang netiron-statedata.yang version-statedata.yang vlan-config.yang vlan-statedata.yang -DIRECTORY /Tools

```
sbsupgrd.zip
```

-DIRECTORY MLX\_npb\_06300\_mnf.txt MLX\_npb\_06300\_mnf.sig MLX\_npb\_06300\_mnf.sha256

-DIRECTORY /Manuals

FPGA file names for NPB and supported modules

File Name	Supported Modules
xpp20x10g3_npb_06300.bin	20x10G modules FPGA for NPB
xpp2x100g3_npb_06300.bin	2x100G modules (half-slot CFP2-based module) FPGA to NPB

### Migration path

To establish an appropriate migration path from your current release of Extreme NetIron, consult your Extreme TAC representative (see the Preface of this document).

### Upgrade and downgrade considerations

To upgrade to NetIron 06.3.00, a two-step approach may be required.

### Scenario 1

Customers running releases 05.9.00a, 05.6.00ga, 05.6.00h, 05.8.00d, 05.7.00e or subsequent releases can directly upgrade to NetIron 06.3.00.

**NOTE:** If you are not running one of the releases listed above, you CANNOT directly upgrade to 6.3.

### Scenario 2

To upgrade from 05.6.00c or any later release (other than the images mentioned in Scenario 1), a twostep approach is required.

1. Upgrade to 05.9.00a or any of the following releases: 05.6.00ga, 05.6.00h, 05.8.00d, 05.7.00e or subsequent patch releases and reload the device.

2. Upgrade to NetIron 06.3.00. Reload the device.

### Scenario 3

To upgrade to NetIron 06.3.00 from releases prior to R05.6.00c, a two-step approach is required.

1. Upgrade to 5.9.00a or any of the following releases: 05.6.00ga, 05.6.00h, 05.8.00d or 05.7.00e and reload the device.

2. Upgrade again to the same image which was used in step 1 and reload the device again. This ensures that the device will have the SHA256 signatures on the device if they are needed, for example for LP Auto-upgrade.

3. Upgrade to NetIron 06.3.00 and reload the device.

### Scenario 4

Use Scenario 4 if you want to use the following features specific to the NPB FPGA.

- VxLAN header stripping
- GTP de-encapsulation
- Packet Timestamping
- Source port labeling
- NVGRE stripping
  - NetIron 06.3.00 UDA Enhancements

- 1. Upgrade to NetIron 06.3.00 using any of above scenarios based on the image from which the upgrade is being performed.
- 2. Reload the device again and verify that the system is up with NetIron 06.3.00.
- 3. Configure the **fpga-mode-npb** command and save the configuration.
- 4. Upgrade to the NetIron 06.3.00 NPB image using MLX\_npb\_06300\_mnf.txt and reload the device.
- 5. Make sure BR-MLX-10Gx20 and BR-MLX-100Gx2-CFP2 have NPB XPP images.
- 6. Verify the system. Check the output of the show version command and the show flash command to make sure the image versions are correct. Check the output of the show module command to make sure the line cards are not in Interactive state due to FPGA mismatch. Interactive state is an error state due to FPGA mismatch.

#### Show output examples

The following examples provide excerpts of the command output.

#### Output example for the show version command

```
SSH@MLX8-PE1#show version
System Mode: MLX
. . .
. . .
. . .
SL 3: NI-MLX-10Gx8-M 8-port 10GbE (M) Module (Serial #: BEQ0427H04G, Part #:
60 - 1001587 - 16)
(LID: dgsFJHMjFJi)
      : Version 5.9.0T175 Copyright (c) 1996-2015 Brocade Communications
Boot
Systems, Inc.
Compiled on Mar 19 2015 at 03:17:00 labeled as xmlprm05900
(449576 bytes) from boot flash
Monitor : Version 6.2.0T175 Copyright (c) 1996-2015 Brocade Communications
Systems, Inc.
Compiled on Aug 17 2017 at 11:22:42 labeled as xmlb06200
(573366 bytes) from code flash
IronWare : Version 6.3.0T177 Copyright (c) 1996-2015 Brocade Communications
Systems, Inc.
Compiled on Aug 27 2018 at 18:26:50 labeled as xmlp06300
(9572782 bytes) from Primary
FPGA versions:
Valid PBIF Version = 2.24, Build Time = 4/7/2016 14:16:00
```

#### Valid XPP Version = 1.10, Build Time = 2/7/2017 10:41:00

#### Output example for the show flash command

SSH@MLX8-PE1#show flash

```
. . .
. . .
. . .
Line Card Slot 1
Code Flash: Type MT28F256J3, Size 66846720 Bytes (~64 MB)
  o IronWare Image (Primary)
   Version 6.3.0T177, Size 9572782 bytes, Check Sum 93f3
   Compiled on Aug 27 2018 at 18:26:50 labeled as xmlp06300
  o IronWare Image (Secondary)
   Version 5.7.0bT177, Size 7800332 bytes, Check Sum 5d75
   Compiled on Oct 22 2014 at 20:08:46 labeled as xmlp05700b
  o Monitor Image
   Version 6.2.0T175, Size 573366 bytes, Check Sum faad
   Compiled on Aug 17 2017 at 11:22:42 labeled as xmlb06200
Boot Flash: Type MX29LV040C, Size 512 KB
  o Boot Image
   Version 5.9.0T175, Size 449576 bytes, Check Sum 3bc9
   Compiled on Mar 19 2015 at 03:17:00 labeled as xmlprm05900
FPGA Version (Stored In Flash):
 PBIF Version = 2.11, Build Time = 8/19/2016 14:54:00
XPP Version = 0.00, Build Time = 5/9/2017 17:31:00
Output example for the show module command
MCT2#show module
Module
                                                             Status
               Ports Starting MAC
M1 (left ): BR-MLX-MR2-X Management
Module
                           Active
M2 (right):BR-MLX-MR2-X Management Module
                                                             Standby (Ready
State)
```

F1: NI-X-HSF Switch Fabric Module Active F2: NI-X-HSF Switch Fabric Module Active F3: NI-X-HSF Switch Fabric Module Active S1: BR-MLX-10Gx8-X 8-port 10GbE (X) 8 Module CARD STATE UP 0024.38a4.9 200 S2: BR-MLX-10Gx20 20-port 1/10GbE Module CARD STATE UP 20 0024.38a4 .9230

S3: BR-MLX-40Gx4-M 4-port 40GbE Module CARD\_STATE\_UP 4 0024.38 a4.9260

S4: BR-MLX-100Gx2-CFP2 2-port 100GbE Module CARD\_STATE\_UP 2 0024.38a4.92 90

### OpenFlow upgrade and downgrade

When downgrading the system from NetIron 06.3.00 to NetIron 05.8.00, if there are any VRF interfaces which are enabled with OpenFlow, some unexpected IFL entries will be seen after moving to R05.8.00. These unexpected IFL entries may affect the L3VPN/6VPE traffic.

Extreme recommends removing OpenFlow from the VRF interfaces before downgrading the router to R05.8.00 For upgrade and migration considerations, refer to the latest version of the Extreme NetIron Software Upgrade Guide.

#### Hitless upgrade support

Hitlesss Upgrade from any release to R06.3.00 is NOT supported.

## Limitations and restrictions

### Important notes

Saving system information to flash

• This feature is not supported on Gen1 LPs.

Support for Management IP as snmp trap-source

• IPV6 support is not present currently for trap source addresses.

ACL/PBR co-existence with Openflow on same port

- PBR/ACL is not supported on L23 openflow hybrid port.
- L2 PBR/ACL is not supported on L3 openflow hybrid port.
- L3 PBR/ACL is not supported on L2 openflow hybrid port.
- L2 ACL Deny logging is not supported openflow hybrid port.

RADIUS Over Transport Layer Security (TLS)

• Dot1x accounting is not supported over RADSEC/TLS.

IPv6 ACL based rate limit for CES/CER

• ACL based rate limit is supported only on physical interface.

SCP based simplified upgrade

- This is not supported on CES/CER devices.
- This feature is supported on MR2 management modules.
- Feature is supported from 5.7 and above version.
- The signature verification is performed when the firmware version is 6.1.

• Verification supported only when pre-upgrade version on device is NetIron 6.1 and above.

OpenFlow group table

- The only action allowed in action bucket is output port.
- Each action bucket can have only one output port.
- Maximum of 8 buckets are allowed in an OpenFlow group with logical ports.

• Group types All, Indirect and Fast-Failover are not supported for logical port groups. Only SELECT group type will be supported.

- Bucket statistics is not supported.
- Group cannot have physical port and logical port in the buckets. Either physical ports or logical ports should be present.

• Modification of a group with all physical ports to all logical ports in the buckets and vice versa are not supported.

- Generic OpenFlow rule with action logical port group is not supported.
- This feature is not supported in CES/R.
• Logical port group along with actions other than L2VPN/L3VPN label in flow action are not supported.

VLAN modification in MPLS egress

- Pop VLAN action is limited to OpenFlow hybrid ports as output in action.
- In a dual tagged packet, only modification of outer VLAN is supported and addition/deletion of outer VLAN he inner VLAN modification/addition/deletion are not supported.

SCP checksum, firmware integrity

• The signature verification is not performed for copying LP application, monitor to specific slot using TFTP , Slot1/Slot2 and LP boot using from Slot1/Slot2

IPv6 ACL Scaling 4k Enhancement is supported only on XMR /MLX Series-

LDP interface transport address

• LDP interface transport address should not be enabled when there are multiple parallel adjacencies (interfaces) present between the LDP routers. If user wishes to enable this feature then they should remove the additional adjacencies. If a user enables this feature with multiple adjacencies to a peer then it is possible that the interface transport address may not be used and/or the session would be torn down due to role conflict.

• Pre-requisites: Enabling LDP interface transport address feature on the interface (adjacency) will cause any existing session to flap and come back up with interface IP address as transport address (only in cases where there is a single adjacency between the peers). This can be service impacting and something the user should be well aware of before executing the command.

# Defects

### TSBs—Critical issues to consider prior to installing this release

Technical Support Bulletins (TSBs) provide detailed information about high priority defects or issues present in a release. The following sections specify all current TSBs that have been identified as being a risk to or resolved with this specific release. Please review carefully and refer to the complete TSB for relevant issues prior to migrating to this version of code. TSBs can be found at <a href="https://extremeportal.force.com/">https://extremeportal.force.com/</a> (note that TSBs are generated for all Extreme platforms and products, so not all TSBs apply to this release).

#### TSB issues resolved in NI 06.3.00

TSB	Summary	
None		

#### TSB issues outstanding in NI 06.3.00

TSB	Summary
None	

## Closed with code changes NI06.3.00

This section lists software defects with Critical, High, and Medium Technical Severity closed with a code change as of 08/30/2018 in NetIron OS 06.3.00.

Defect ID:	DEFECT000628768		
<b>Technical Severity:</b>	Medium	Probability:	Medium
Product:	Brocade NetIron OS	Technology Group:	Layer 3
			Routing/Network
			Layer
Reported In Release:	NI 06.0.00	Technology:	DHCP - Dynamic Host
			Configuration
			Protocol
Symptom:	"show dai" CLI output showing DHCP snooping entries with null port		
	information for interfaces where DHCP snooping is disabled		
Condition:	(1) configure a VE interface through which DHCP clients are		
	configured and DHCP snooping is enabled		
	(2) configure a second VE interface on which DHCP clients are		
	connected through a DHCP relay agent, but DHCP snooping is not		
	enabled		
	(3) configure another \	/E interface on which DH	ICP server resides

Defect ID:	DEFECT000642455		
Technical Severity:	High	Probability:	Medium
Product:	Brocade NetIron OS	Technology Group:	Layer 3
			Routing/Network
			Layer
Reported In Release:	NI 05.6.00	Technology:	OSPF - IPv4 Open
			Shortest Path First
Symptom:	Standby Management	Module may unexpected	dly reload with the
	following stack trace:-		
	Possible Stack Trace (fu	unction call return addre	ss list)
	203afea4: nht_get_spe	cific_index_from_pool(p	oc)
	203b31fc: nht_create_new_entry_standby(lr)		
	203b31fc: nht_create_new_entry_standby		
	203b3d38: nht_standby_mp_update_entry		
	203b56a4: nht_standby_mp_process_dy_messages		
	2033a738: process_dy	_change_packet	
	2032192c: ipc_process	_messages	
	20322600: ipc_receive	_packet	
	20f3cc70: sw_receive_packet		
	20f3d778: mp_rx_main		
	00005e18: sys_end_ta:	sk	
Condition:	It is observed rarely on	a MLX/XMR device with	OSPF, VRRP or MPLS
	combination		

Defect ID:	DEFECT000644574		
Technical Severity:	Medium	Probability:	Low
Product:	Brocade NetIron OS	Technology Group:	Layer 3
			Routing/Network
			Layer
Reported In Release:	NI 05.8.00	Technology:	OSPF - IPv4 Open
			Shortest Path First
Symptom:	OSPF neighbors may show all ECMP paths after upgraded MLXe fails		
	setting a forwarding address in AS External LSA.		
Condition:	It is rarely observed with the following steps:-		
	(1) OSPFv2 is enabled on the device		
	(2) static routes are configured with gateway, which is reachable and		
	redistributed into OSPFv2		
	(3) Repeated image up	grade and downgrade	
Recovery:	Flapping the interface	towards the gateway wil	I resolve the issue.

Defect ID:	DEFECT000645700		
<b>Technical Severity:</b>	Low	Probability:	Low
Product:	Brocade NetIron OS	Technology Group:	Monitoring
Reported In Release:	NI 05.8.00	Technology:	Sysmon
Symptom:	Execution of "sysmon sfm walk status" command may not return to command prompt		
Condition:	Execution of "sysmon sfm walk status" from telnet or ssh		
Workaround:	Execute "sysmon sfm walk status" from console session		
Recovery:	A return key will help		

Defect ID:	DEFECT000646227		
<b>Technical Severity:</b>	Medium	Probability:	Medium
Product:	Brocade NetIron OS	Technology Group:	Monitoring
<b>Reported In Release:</b>	NI 05.8.00	Technology:	OAM - Operations,
			Admin &
			Maintenance
Symptom:	Link may go down with Brocade 100G-LR4 CFP2 optic		
Condition:	Rarely observed when a interface is disabled and then enabled with		
	Brocade 100G-LR4 CFP	2 optic having serial nun	nber starting from YDF

Defect ID:	DEFECT000646510		
<b>Technical Severity:</b>	High	Probability:	Medium
Product:	Brocade NetIron OS	Technology Group:	Monitoring
<b>Reported In Release:</b>	NI 06.0.00	Technology:	RAS - Reliability,
			Availability, and
			Serviceability
Symptom:	Unable to configure "speed-duplex 100-full" on CES/CER 1G port		
Condition:	On Optics E1MG-100B	KD and E1MG-100BXU	

Defect ID:	DEFECT000646724		
Technical Severity:	High	Probability:	Medium
Product:	Brocade NetIron OS	Technology Group:	Layer 3
			Routing/Network
			Layer
<b>Reported In Release:</b>	NI 06.0.00	Technology:	BGP4 - IPv4 Border
			Gateway Protocol
Symptom:	Traffic drop due to increase in BGP convergence time		
Condition:	1. The device has both BGP/OSPF configuration		
	2. BGP has (iBGP/eBGP) neighborship with more than 50		
	neighbor of routers with multiple policies configured for RIB-Out		
	processing		
	3. OSPF is used as IGP for installing the BGP routes		
	4. OSPF path cha	nges by cost modificatio	ns or port down events

Defect ID:	DEFECT000649540		
<b>Technical Severity:</b>	High	Probability:	Low
Product:	Brocade NetIron OS	Technology Group:	MPLS
<b>Reported In Release:</b>	NI 05.6.00	Technology:	IP over MPLS
Symptom:	Connectivity may be lost for 3 minutes when backup LSP path is down		
Condition:	1. The problematic prefix has to be learned from two different BGP		
	peers.		
	2.Both BGP peers should have equal IGP cost		
	3.Static NULL0 drop route also configured for the next-hop		
	4.Backup LSP path is down		
Workaround:	Configure route-maps	with MED to override th	e Static NULLO route

Defect ID:	DEEECT000649776			
Technical Coverity	Madium	Drobobility	Madium	
Technical Severity:	Neulum	Probability:	Medium	
Product:	Brocade NetIron US	Technology Group:	Management	
Reported In Release:	NI 06.0.00	Technology:	SNMP - Simple	
			Network	
			Management	
			Protocol	
Symptom:	Management Module	module may unexpected	lly reload with the	
	following stack trace:-			
	Possible Stack Trace (fu	unction call return addre	ss list)	
	20adcd84:			
	cu_optic_process_cfp_	aggregate_optical_mon	_parameter(pc)	
	20ade1e8: cu_get_agg	regate_optical_paramet	er_from_object(lr)	
	20ade1e8: cu_get_aggregate_optical_parameter_from_object			
	208a98b4: snlfOpticalMonitoringInfoEntry_get_value			
	208a9e2c: snlfOpticalMonitoringInfoEntry_next			
	209642f4: SNMP_Process_Bulk_Redo			
	20966fb4: SNMP_Continue_function			
	20967088: process_packet_two			
	2096751c: process_packet_one			
	20967868: Process Rcvd SNMP Packet Async			
	20965504: Process_Re	ceived_SNMP_Packet		
	209919a4: snmp_recei	ve_message		
	209943a0: snmp_udp_	recv_callback_common		
	209944ac: snmp_udp_	recv_callback		
	20ba0540: itc_process	_msgs_internal		
	20ba09ec: itc_process	_msgs		
	2099101c: snmp task			
	00005e18: sys_end_ta	sk		
Condition:	While inserting non-Br	ocade (Flex Optix) CFP2-	QSFP28 adapter on a	
	2x100G-CFP2 Linecard	module		

Defect ID:	DEFECT000649996		
<b>Technical Severity:</b>	High	Probability:	Low
Product:	Brocade NetIron OS	Technology Group:	Management
<b>Reported In Release:</b>	NI 06.0.00	Technology:	SNMP - Simple
			Network
			Management
			Protocol
Symptom:	VRRP-E session state changes unexpectedly		
Condition:	Polling SNMP table: IldpRemTable (.1.0.8802.1.1.2.1.4.1)		
Workaround:	Disable SNMP polling for the table: IldpRemTable		
	(.1.0.8802.1.1.2.1.4.1)		

Defect ID:	DEFECT000650682		
Technical Severity:	Medium	Probability:	Low
Product:	Brocade NetIron OS	Technology Group:	Layer 3
			Routing/Network
			Layer
Reported In Release:	NI 05.6.00	Technology:	OSPF - IPv4 Open
			Shortest Path First
Symptom:	OSPF ECMP route for some of external destinations may not be		
	installed into the routing table of non-translator NSSA ABR.		
Condition:	(1) Atleast two NSSA ABRs present in the OSPF network		
	(2) About 100 or so external destinations are redistributed into NSSA		
	area by two NSSA ASB	Rs with FA set to an addr	ess within the NSSA
	area.		

Defect ID:	DEFECT000651122		
Technical Severity:	High	Probability:	Low
Product:	Brocade NetIron OS	Technology Group:	Layer 3
			Routing/Network
			Layer
Reported In Release:	NI 06.0.00	Technology:	ARP - Address
			<b>Resolution Protocol</b>
Symptom:	Line card module may	unexpectedly reload wit	h the following stack
	trace:-		
	Possible Stack Trace (fu	unction call return addre	ss list)
	20f0839c: fpip_process	s_pending_packets(pc)	
	20f08398: fpip_proces	s_pending_packets(lr)	
	20f039d0: fpip_update_host_cache_entry		
	20f03b4c: fpip_update_host_cache_in_all_vrf		
	20f19544: arp_process_one_entry_pram_update		
	20d1e178: lp_cam_update_arp_entry_pram		
	20e23fb0: process_one_arp_update_lp		
	20f176ec: process_one_arp_update		
	20f17950: process_arp_dy_messages		
	20bd5818: process_dy	_change_packet	
	20c1ca54: ipc_multi_m	odule_handler	
	20c1efc8: ipc_process_	_messages	
	20c1f7a4: ipc_receive_	packet	
	20036ce4: ge_process_	_ipc_data_msg	
	207f4f20: lp_ipc_task		
	00040158: sys_end_ta	sk	
Condition:	It is rarely observed du	ring a Line card bootup	or a link flap between
	MCT clusters		

Defect ID:	DEFECT000651855			
Technical Severity:	Medium	Probability:	Medium	
Product:	Brocade NetIron OS	Technology Group:	Monitoring	
Reported In Release:	NI 06.0.00	Technology:	OAM - Operations,	
			Admin &	
			Maintenance	
Symptom:	2x100G-CFP2 Linecard	module may unexpected	dly reload with the	
	following stack trace:-			
	Possible Stack Trace (fu	unction call return addre	ss list)	
	00069064: assert_dob	ule_free_large_memory	(pc)	
	0006905c: assert_dobu	ule_free_large_memory	(lr)	
	00069274: free_memo	ory_pool		
	00069918: free_memo	ry		
	00065e80: dev_free_m	nemory		
	00005024: xsyscall			
	2000105c: free			
	21610cb8: bcm_pm_if_cleanup			
	20026928: bcm_82790_uninit			
	209ca328: pny_adapter_removed			
	209b946c: phy_conn_c	check_existence		
	20a4086c: port_read_physical_existance			
	20a309ec: port_cneck_port_status			
	20a34900: port_link_status_poll			
	20a34404: port_status	_poll		
	200058c0: perform_ca	Праск		
	200062c8: timer_timed	Dut		
	00040160: sys_end_en	itry		
	0005e4a0. susperiu			
	000050178. uev_sieep			
	207f3af1: main			
	00040158 svs end ta	sk		
Condition:	While removing a non-	Brocade (Flex Ontix) CFF	2-0SFP28 adapter	
	from the 2x100G-CFP?	Line card module		
Condition:	00069918: free_memo 00065e80: dev_free_m 00005024: xsyscall 2000105c: free 21610cb8: bcm_pm_if 20026928: bcm_82790 209cd328: phy_adapte 209b946c: phy_conn_c 20a4086c: port_read_p 20a309ec: port_check_ 20a34900: port_link_st 20a34404: port_status 200058c0: perform_ca 200062c8: timer_timec 00040160: sys_end_en 0005cf78: dev_sleep 00005024: xsyscall 207f3af4: main 00040158: sys_end_tas While removing a non- from the 2x100G-CFP2	erry emory _cleanup _uninit er_removed check_existence ohysical_existance _port_status tatus_poll _poll Ilback out etry sk Brocade (Flex Optix) CFF Line card module	2-QSFP28 adapter	

Defect ID:	DEFECT000651862		
Technical Severity:	Medium	Probability:	Low
Product:	Brocade NetIron OS	Technology Group:	Layer 3
			Routing/Network
			Layer
<b>Reported In Release:</b>	NI 06.1.00	Technology:	IP Addressing
Symptom:	Traffic loss might be observed on MLX with Q-in-Q configuration		
Condition:	1. MRP should be configured on outer VLAN of Q-in-Q		
	2. Physical loopback connection should be established between two		
	interfaces where one interface belongs to outer VLAN and other		
	interface belongs to in	ner VLAN of Q-in-Q	

Defect ID:	DEFECT000651950		
Technical Severity:	Medium	Probability:	Low
Product:	Brocade NetIron OS	Technology Group:	Management
Reported In Release:	NI 06.0.00	Technology:	CLI - Command Line
			Interface
Symptom:	Management Module may unexpectedly reload with the following		
	stack trace:-		
	Possible Stack Trace (fu	unction call return addre	ss list)
	54797064: (pc)		
	20ac71d8: cu_show_in	t_lag_callback(lr)	
	20ad8e04: cu_show_ir	nt_lag	
	2044cc58: show_int_la	ig_all	
	202e8754: call_action_	_func	
	202e924c: parse_node		
	202e8cc8: parse_node	_recurse	
	202e9514: parse_node		
	202e8cc8: parse_node	_recurse	
	202e9514: parse_node		
	2035cd28: parse_input		
	2041c358: cli_aaa_accounting_callback		
	207906c0: aaa_accounting_start		
	202a012a, name, nade		
	202e913c: parse_node		
	202E cd 04: parse input		
	2035cd04: parse_input		
	20a34a/4. SSIL_EVENL_IIdHUIEI 20aa7ccc: ProcessChannelData		
	20aa52e8: ShProcessMessage		
	20aae688: ProcessClier	ntInputData	
	20aade20: ShFiniteStat		
	209b03cc: HandleProto	DCOIACTION	
	209001ac: HandleConr	tion took	
	20a93044: SSN_CONNEC	control	
	20a93090: SSN_SOCKEL	_control	
	20a96aZC. SSII_TECEIVE	_uala_reauy soivo data roady callba	ck
	20090070. SSII_tcp_ret	.elve_uala_reauy_callua	UK
	20093210. 110_01000055	_msgs_mternal	
	20033000. ILL_process		
	00005e18 svc and ta	sk	
Condition:	"Show interface lag" is	executed frequently fro	m one or more SSH
	sessions	checuleu nequentiy IIO	
	353310113		

Defect ID:	DEFECT000652160			
Technical Severity:	Medium	Probability:	Low	
Product:	Brocade NetIron OS	Technology Group:	Management	
Reported In Release:	NI 06.0.00	Technology:	CLI - Command Line	
			Interface	
Symptom:	Management Module	may unexpectedly reload	d with the following	
	stack trace:-			
	Possible Stack Trace (function call return address list)			
	202e3aec: generic_map_put(pc)			
	20bb6784: mplp_get_lp_data_request(lr)			
	20bb6784: mplp_get_lp_data_request			
	20ba0540: itc_process_msgs_internal			
	20ba09ec: itc_process_msgs			
	20bb8020: lp_agent_task			
	00005e18: sys_end_ta:	sk		
Condition:	"Show interface lag" is	executed frequently fro	m one or more SSH	
	sessions			

Defect ID:	DEFECT000652191		
<b>Technical Severity:</b>	High	Probability:	Medium
Product:	Brocade NetIron OS	Technology Group:	Layer 2 Switching
<b>Reported In Release:</b>	NI 06.0.00	Technology:	MCT - Multi-Chassis
			Trunking
Symptom:	MAC table synchronization may not be complete for MCT cluster		
	nodes		
Condition:	Line card module goes into a rolling reboot for any known/other		
	reasons		

Defect ID:	DEFECT000653000		
Technical Severity:	High	Probability:	Medium
Product:	Brocade NetIron OS	Technology Group:	Layer 3
			Routing/Network
			Layer
<b>Reported In Release:</b>	NI 06.0.00	Technology:	IPv6 Addressing
Symptom:	IPV6 neighbor stuck in PROBE state		
Condition:	1. Connect the host with MLX and establish neighbors		
	2. Remove connected host		
	3. IPV6 entries are not removed and stuck in PROBE state		
Recovery:	clear ipv6 neighbors		

Defect ID:	DEFECT000653092		
<b>Technical Severity:</b>	Medium	Probability:	Medium
Product:	Brocade NetIron OS	Technology Group:	MPLS
Reported In Release:	NI 06.0.00	Technology:	MPLS VPLS - Virtual
			Private LAN Services
Symptom:	MPLS BFD session which has multiple path will go down and comes		
	up		
Condition:	During LSP path switch BFD session will go down after 60 seconds and		
	comes up. This happen	s only for adaptive LSPs	

Defect ID:	DEFECT000653095		
<b>Technical Severity:</b>	Low	Probability:	Low
Product:	Brocade NetIron OS	Technology Group:	MPLS
<b>Reported In Release:</b>	NI 06.0.00	Technology:	MPLS Traffic
			Engineering
Symptom:	Sometimes when executing "show tech-support mpls" some of the commands would not show output, instead they'll show a message "invalid input -> mpls"		
Condition:	For show rsvp session i	n "show tech-support m	pls"

Defect ID:	DEFECT000654961		
<b>Technical Severity:</b>	High	Probability:	Medium
Product:	Brocade NetIron OS	Technology Group:	Traffic Management
<b>Reported In Release:</b>	NI 05.9.00	Technology:	Traffic Queueing and
			Scheduling
Symptom:	Traffic loss may be observed with LAG		
Condition:	After boot up of any Gen1.1 line card in the presence of LAG		
	configurations		
Recovery:	Undeploy and deploy o	of LAG	

Defect ID:	DEFECT000655172		
<b>Technical Severity:</b>	Medium	Probability:	Medium
Product:	Brocade NetIron OS	Technology Group:	Monitoring
Reported In Release:	NI 05.8.00	Technology:	Hardware Monitoring
Symptom:	The 'show chassis' may display incorrect information for available		
	power and power statu	ıs fields	
Condition:	Power-off power supply manually		
	(OR)		
	Remove and re-insert t	he power cord.	

Defect ID:	DEFECT000656069		
Technical Severity:	Medium	Probability:	Medium
Product:	Brocade NetIron OS	Technology Group:	Layer 3
			Routing/Network
			Layer
Reported In Release:	NI 05.6.00	Technology:	VRRPv2 - Virtual
			Router Redundancy
			Protocol Version 2
Symptom:	Traffic loss may be observed with VRRP		
Condition:	VRRP has to be configured on virtual interface and physical port is		
	part of Un tagged VLAN		
	This is applicable for CES/CER devices only.		

Defect ID:	DEFECT000656359		
Technical Severity:	Medium	Probability:	Low
Product:	Brocade NetIron OS	Technology Group:	Management
<b>Reported In Release:</b>	NI 06.1.00	Technology:	CLI - Command Line
			Interface
Symptom:	Following error message may be observed on LP Console		
	kbp_duplicate_entry_IPVPN[0] idx : 0x00218021 tbl_id : 32 vpn_id =		
	4097, pfx : a.b.c.d/32		
Condition:	1. Configure CAM in amod mode		
	2. Configure a loopback interface		
	3. Configure a VRF in VE interface		
	4. Remove and re-add VRF in VE interface		

Defect ID:	DEFECT000656781		
Technical Severity:	Medium	Probability:	Medium
Product:	Brocade NetIron OS	Technology Group:	Management
<b>Reported In Release:</b>	NI 06.0.00	Technology:	SNMP - Simple
			Network
			Management
			Protocol
Symptom:	SNMP may display a maximum number 4294967295 when polled for		
	this object fdryVplsEndPoint2InnerTag		
Condition:	VPLS endpoints are configured with no inner tag		

Defect ID:	DEFECT000656819			
Technical Severity:	Medium	Probability:	Medium	
Product:	Brocade NetIron OS	Technology Group:	Management	
Reported In Release:	NI 06.2.00	Technology:	CLI - Command Line	
			Interface	
Symptom:	The 'show optic' comm	and may display optic da	ata as N/A even	
	though the port is up li	ke below:-		
	MLX2#sh optic 1			
	Port Temperature Tx Power Rx Power Tx Bias Current			
	++			
	1/1 N/A N/A	N/A N/A		
	1/2 N/A N/A	N/A N/A		
Condition:	1. Line card module is 20x10G.			
	2. Dual mode optic is connected and speed is configured as 1G.			
	3. Line card is reloaded with 1G speed configuration.			
Recovery:	The only recovery to correct the display issue is to reset line card by			
	following below steps:-			
	1. Remove 1G configur	1. Remove 1G configuration and reload line card module.		
	2. After boot up reappl	y the configuration.		

Defect ID:	DEFECT000657495		
Technical Severity:	Medium	Probability:	Medium
Product:	Brocade NetIron OS	Technology Group:	Layer 3
			Routing/Network
			Layer
<b>Reported In Release:</b>	NI 05.8.00	Technology:	BGP4 - IPv4 Border
			Gateway Protocol
Symptom:	SNMP polling may display incorrect information for BGP peer's		
	session UP time		
Condition:	Polling this Object "bgpPeerFsmEstablishedTime" through SNMP		

Defect ID:	DEFECT000657519		
<b>Technical Severity:</b>	High	Probability:	Low
Product:	Brocade NetIron OS	Technology Group:	Layer 3
			Routing/Network
			Layer
<b>Reported In Release:</b>	NI 05.8.00	Technology:	IPv6 Addressing
Symptom:	Following IPV6 CAM Update violations may be observed with high		
	CPU on Line Card module:-		
	Nov 8 16:37:06:A:CAM update violation: slot 3 XPP 2 0x000abcdef		
	0x0000000		
Condition:	Very rarely observed d	uring frequent modificat	ions of IPV6 routes

Defect ID:	DEFECT000657929		
Technical Severity:	Medium	Probability:	Medium
Product:	Brocade NetIron OS	Technology Group:	Layer 3
			Routing/Network
			Layer
<b>Reported In Release:</b>	NI 06.2.00	Technology:	OSPFv3 - IPv6 Open
			Shortest Path First
Symptom:	OSPFv3 Interface number may not be displayed correctly in "show		
	log" output like below:-		
	Nov 30 05:22:15:N:OSPFv3: Interface state changed, rid a.b.c.d, intf		
	eth x/y, state down, where x/y is not correct physical port/interface		
Condition:	Enable/Disable OSPFv3	interface followed by the	ne execution of "show
	ipv6 ospf neighbors"		

Defect ID:	DEFECT000658040		
<b>Technical Severity:</b>	High	Probability:	High
Product:	Brocade NetIron OS	Technology Group:	Security
<b>Reported In Release:</b>	NI 06.1.00	Technology:	IPsec - IP Security
Symptom:	IPsec tunnel session would not come up.		
Condition:	This could happen when the IPsec configuration on a linecard module		
	is out of sync with the management module.		
Recovery:	Reload the LC may recover from the problem. If not, reload of the		
	system will be required	ł.	

Defect ID:	DEFECT000658072		
<b>Technical Severity:</b>	Low	Probability:	Medium
Product:	Brocade NetIron OS	Technology Group:	Security
Reported In Release:	NI 06.0.00	Technology:	PBR - Policy-Based
			Routing
Symptom:	GTP-u packet with L3 header as IPV4 and L4 header as IPv6 not		
	forwarded with the IPv6 PBR on GTP port		
Condition:	Configure IPv6 PBR and enable ingress-inner-filter on GTP port		
Workaround:	Configure any IPv4 PBR with IPv6 PBR and bind it to the same GTP		
	port		

Defect ID:	DEFECT000658203		
Technical Severity:	High	Probability:	Low
Product:	Brocade NetIron OS	Technology Group:	Management
Reported In Release:	NI 06.0.00	Technology:	Configuration
			Fundamentals
Symptom:	Management Module may reload unexpectedly with the following		
	stack trace:-		
	Exception Type 1100 (DTLB Load), telnet_0		
	0008f030: msr		
	00000000: dar		
	00000000: dsisr		
	202ed8dc: next_token	(pc)	
	202f0af8: parse_node(	lr)	
	202f0af8: parse_node		
	202f04f0: parse_node_recurse		
	202f0d3c: parse_node		
	202f04f0: parse_node_recurse		
	202f0d3c: parse_node		
	20364838: parse_input		
	2042a7e0: cli_aaa_acc	ounting_callback	
	2079f290: aaa_accounting_start		
	2042a034: cli_request_command_accounting		
	202f0964: parse_node		
	202eefb8: parser		
	20364814: parse_input	t	
	20a90aac: handle_new	<pre>/_line_from_telnet_clier</pre>	nt
	20a91408: telnet_appl	ication_control	
	20a94814: telnet_rece	ive_packet	
	20a93240: telnet_sock	et_control	
	20a97ee0: telnet_rece	ive_data_ready	
	20a97f24: telnet_tcp_i	receive_data_ready_call	back
	20ba3844: itc_process	_msgs_internal	
Condition:	1. 'aaa accounting com	mands 0 default start-st	op' is configured
	2. Debug destination is	set to TELNET	
	3. 'no telnet server' is i	ssued on the same TELN	ET session

Defect ID:	DEFECT000658216		
Technical Severity:	High	Probability:	Low
Product:	Brocade NetIron OS	Technology Group:	Management
Reported In Release:	NI 05.4.00	Technology:	CLI - Command Line
			Interface
Symptom:	Active Management Module may unexpectedly reload with the		
	following stack trace:-		
	2018052c: print_prom	pt(pc)	
	2017d6e0: print_prom	pt(lr)	
	2031f718: prompt_and	l_reprint	
	20390ac4: internal_rel	ease_page_mode	
	20390c2c: release_pag	e_mode	
	2038fa90: parse_input		
	2094b848: ssh_event_handler		
	2095a0e8: ProcessChannelData		
	20958304: ShProcessMessage		
	2095f664: ProcessClientInputData		
	2095eed8: ShFiniteStateMachine		
	208845a0: HandleProtocolAction		
	20884d84: HandleReceive		
	20884ca4: HandleWaitingForReceive		
	20884448: HandleConr	nectionTask	
	2094a5bc: ssh_connec	tion_task	
	2094ad3c: ssh_socket_	control	
	2094d4b4: ssh_receive	_data_ready	
	2094d4f8: ssh_tcp_rec	eive_data_ready_callbac	:k
	20a24f54: itc_process_	_msgs_internal	
	20a2528c: itc_process_	_msgs	
	20946a04: ssh_in_task		
	00005e18: sys_end_ta:	sk	
Condition:	Configure "ntp-interfac	e ve? command for VE i	nterface id with higher
	value		

Defect ID:	DEFECT000658409			
Technical Severity:	Medium	Probability:	Low	
Product:	Brocade NetIron OS	Technology Group:	Layer 3	
			Routing/Network	
			Layer	
<b>Reported In Release:</b>	NI 06.0.00	Technology:	BGP4 - IPv4 Border	
			Gateway Protocol	
Symptom:	BGP doesn't advertise component routes after applying the			
	'unsuppress-map' configuration			
Condition:	(1) BGP configured with 'router bgp' command			
	(2) 'aggregate-address' command configured to advertise the			
	summary route for all the component routes that fall within the			
	summary address			
	(3) Configure compone	ent routes with network	command and apply	
	the unsuppress-map co	ommand to the neighbo	rs for which	
	component routes need to be advertised			
Recovery:	Remove and reconfigure 'aggregate-address x.x.x.x summary-only?			
	command followed by	the execution of `clear i	p bgp neighbor all? or	
	device reload.			

Defect ID:	DEFECT000658414		
<b>Technical Severity:</b>	High	Probability:	Low
Product:	Brocade NetIron OS	Technology Group:	Security
Reported In Release:	NI 06.0.00	Technology:	SSH - Secure Shell
Symptom:	SSH Authentication may fail sometimes		
Condition:	with RSA public key authentication		

Defect ID:	DEFECT000658728		
Technical Severity:	High	Probability:	Medium
Product:	Brocade NetIron OS	Technology Group:	MPLS
<b>Reported In Release:</b>	NI 05.8.00	Technology:	MPLS VPLS - Virtual
			Private LAN Services
Symptom:	Line card may reload u	nexpectedly with the fol	lowing stack trace:-
	Possible Stack Trace (fu	unction call return addre	ss list)
	20f75174: traverse_all	_ports_for_local_interfa	ce(pc)
	20f75084: traverse_all	_ports_for_local_interfa	ce(lr)
	20df9abc: lp_vpls_dy_sync_tlv_port_config		
	20df7050: lp_vpls_dy_sync_tlv_process_dy_messages		
	20bb6718: process_dy_change_packet		
	20bfba30: ipc_multi_module_handler		
	20bfdcf0: ipc_process_messages		
	20bfe4b0: ipc_receive_	_packet	
	20034390: ge_process	_ipc_data_msg	
	207eeac8: lp_ipc_task		
	00040158: sys_end_tas	sk	
Condition:	1. Port has to be config	ured as a tagged port in	the VPLS VLAN
	2. Delete the port from	the VPLS VLAN using th	is CLI "no tagged eth
	<slot port="">"</slot>		

Defect ID:	DEFECT000658936		
<b>Technical Severity:</b>	High	Probability:	Low
Product:	Brocade NetIron OS	Technology Group:	Management
<b>Reported In Release:</b>	NI 05.8.00	Technology:	SNMP - Simple
			Network
			Management
			Protocol
Symptom:	SNMP task may cause High CPU		
Condition:	polling the OIDs of the tables .ipNetToPhysicalTable.(1.3.6.1.2.1.4.35)		
	and .ipNetToMediaTab	le.(1.3.6.1.2.1.4.22)	

Defect ID:	DEFECT000658954			
Technical Severity:	Medium	Probability:	Medium	
Product:	Brocade NetIron OS	Technology Group:	Traffic Management	
Reported In Release:	NI 06.0.00	Technology:	Traffic Queueing and	
			Scheduling	
Symptom:	Protocols may flap whe	en configured with very l	low timeout value less	
	than or equal to 100 m	sec and Management M	lodule may	
	unexpectedly reload w	ith the following stack tr	ace:-	
	Possible Stack Trace (fu	unction call return addre	ss list)	
	0002f89c: get_memory	/_pool_info(pc)		
	00005024: xsyscall(lr)			
	000b6558: set_memory_histogram			
	0002e140: allocate_me	emory_pool		
	0002ed40: allocate_me	emory		
	0002b124: dev_allocat	e_memory		
	00005024: xsyscall			
	203105d0: os_malloc_	zero		
	20b9eda0: itc_alloc_re	quest_state		
	20b9f10c: itc_send_ree	quest_internal		
	20ba0f20: itc_send_re	quest_and_wait_interna	l	
	20ba14e8: itc_send_re	quest_and_wait		
	20f1a22c: bfd_scb_sen	id_itc		
	205490a8: show_tm_non_empty			
	2003/eec: show_tech_support			
	2035ed7c: timer_callba	ack_wrapper		
	20ba069c: itc_process	_msgs_internal		
	20ba0f44: itc_send_re	quest_and_wait_interna		
	20ba14e8: itc_send_re	quest_and_wait		
	20f1a22c: bfd_scb_sen	id_itc		
	205490a8: show_tm_n	ion_empty		
	20037eec: show_tech_support			
	2035ed7c: timer_callba	ack_wrapper		
	20ba069c: itc_process	_msgs_internal		
	20ba0f44: itc_send_re	quest_and_wait_interna	I	
	20ba14e8: itc_send_re	quest_and_wait		
	20f1a22c: bfd_scb_sen	id_itc		
	205490a8: show_tm_n	ion_empty		
	2003/eec: snow_tecn_	support		
	2035ed/c: timer_caliba	ack_wrapper		
	20ba069c: itc_process	_msgs_internal		
	200a0144: Itc_send_re	quest_and_wait_interna	II	
	20031468: ITC_Send_re	quest_and_wait		
	2011322C: DTG_SCD_SEN	iu_itc		
	200270001 chow_tm_r	ion_empty		
	2003/eec: snow_tech_	support		
	2035ed/c: timer_callba	ack_wrapper		

	20ba069c: itc_process_msgs_internal
	20ba0f44: itc_send_request_and_wait_internal
	20ba14e8: itc_send_request_and_wait
	20f1a22c: bfd_scb_send_itc
	20549104: show_tm_non_empty
	20037eec: show_tech_support
	2035ed7c: timer_callback_wrapper
	20ba069c: itc_process_msgs_internal
	20ba0f44: itc_send_request_and_wait_internal
	20ba14e8: itc_send_request_and_wait
	20f1a22c: bfd_scb_send_itc
	20549104: show_tm_non_empty
	20037eec: show_tech_support
	2035ed7c: timer_callback_wrapper
	20ba069c: itc_process_msgs_internal
	20ba0f44: itc_send_request_and_wait_internal
	20ba14e8: itc_send_request_and_wait
	20f1a22c: bfd_scb_send_itc
	20549104: show_tm_non_empty
	20037eec: show_tech_support
	2035ed7c: timer_callback_wrapper
	20ba069c: itc_process_msgs_internal
	20ba0f44: itc_send_request_and_wait_internal
	20ba14e8: itc_send_request_and_wait
	20f1a22c: bfd_scb_send_itc
	20549104: show_tm_non_empty
	20037eec: show_tech_support
	Call stack too deep!
Condition:	1. UDLD is configured with 100ms timeout by configuration command
	'link-keepalive interval 1'
	2. when any one of the following command is executed
	'show tech', 'show tm non-empty-queues' or 'show tm non-empty-
	queues detail'
Workaround:	Increase the Protocol timer expiry value accordingly.

Defect ID:	DEFECT000659364		
Technical Severity:	High	Probability:	Medium
Product:	Brocade NetIron OS	Technology Group:	Layer 3
			Routing/Network
			Layer
Reported In Release:	NI 06.0.00	Technology:	BGP4 - IPv4 Border
			Gateway Protocol
Symptom:	static routes may not be advertised into BGP		
Condition:	1. BGP neighborship is established with the neighbor		
	2. "filter-change-update-delay 0" is configured		
	3. static routes are configured and redistributed into BGP		
	4. reload the chassis		
Recovery:	clear ip route a.b.c.d/x		

Defect ID:	DEFECT000659434		
<b>Technical Severity:</b>	Medium	Probability:	High
Product:	Brocade NetIron OS	Technology Group:	Monitoring
Reported In Release:	NI 06.0.00	Technology:	Hardware Monitoring
Symptom:	A 10G interface runs at	: 1G speed	
Condition:	Specific to 20x10G line card when a port is configured for loop back		
	system		

Defect ID:	DEFECT000659435		
<b>Technical Severity:</b>	Medium	Probability:	Medium
Product:	Brocade NetIron OS	Technology Group:	Security
<b>Reported In Release:</b>	NI 06.2.00	Technology:	ACLs - Access Control
			Lists
Symptom:	IPv6 ACL accounting doesn't include PBR routed packets		
Condition:	Configure IPv6 PBR wit	h the set clause as "inter	face null0"

Defect ID:	DEFECT000659530		
<b>Technical Severity:</b>	High	Probability:	Medium
Product:	Brocade NetIron OS	Technology Group:	SDN
<b>Reported In Release:</b>	NI 06.2.00	Technology:	OpenFlow
Symptom:	Layer2/3 OpenFlow could not be enabled on a interface from BVM		
	tool and the following error message will be observed:-		
	Error: Port x/y is not untagged member in default VLAN 1		
Condition:	changing the port configuration from OpenFlow enable Layer 3 to		
	Layer 2 or vice versa fro	om BVM tool	

Defect ID:	DEFECT000659772		
Technical Severity:	High	Probability:	Low
Product:	Brocade NetIron OS	Technology Group:	Monitoring
Reported In Release:	NI 06.0.00	Technology:	Hardware Monitoring
Symptom:	Fiber Version of CES/C	Fiber Version of CES/CER may power down	
Condition:	Very rarely switch mod	lels of NI CER-2024F-4X a	and NI CES-2024F-4X
	may power down and doesn't come UP		
Workaround:	Configure the following	g fan-threshold paramet	ers.
	CES2024F-4X#show fan-threshold		
	=== Thermal Sensor Co	ontrol Block	
	(THERMAL_SENSOR_TI	EST_RULE_CPU) ===	
	Fan Speed Low: -1 - 52		
	Fan Speed Med: 48 - 5	6	
	Fan Speed Med-Hi: 53	- 60	
	Fan Speed Hi: 57 - 90		
	max_ts_shut_off_coun	nt = 1	
	shut_off_count = 0 0		
	=== Thermal Sensor Co	ontrol Block	
	(THERMAL_SENSOR_TEST_RULE_PPCR1) ===		
	Fan Speed Low: -1 - 52		
	Fan Speed Med: 48 - 56		
	Fan Speed Med-Hi: 53 - 60		
	Fan Speed Hi: 57 - 100		
	max_ts_shut_off_coun	nt = 1	
	shut_off_count = 0 0		
	=== Thermal Sensor Co	ontrol Block	
	(THERMAL_SENSOR_TEST_RULE_PPCR2) ===		
	Fan Speed Low: -1 - 52		
	Fan Speed Med: 48 - 5	6	
	Fan Speed Med-Hi: 53	- 60	
	Fan Speed Hi: 57 - 100		
	max_ts_shut_off_coun	nt = 1	
	shut_off_count = 0 0		
	=== Thermal Sensor Co	ontrol Block	
	(THERMAL_SENSOR_TI	EST_RULE_PPCR3) ===	
	Fan Speed Low: -1 - 52	c	
	Fan Speed Med: 48 - 5	b	
	Fan Speed Med-Hi: 53	- 60	
	Fan Speed HI: 57 - 100		
	max_ts_snut_off_coun	ιτ = 1	
	snut_off_count = 0 0		

Defect ID:	DEFECT000660056		
<b>Technical Severity:</b>	High	Probability:	Medium
Product:	Brocade NetIron OS	Technology Group:	Layer 2 Switching
<b>Reported In Release:</b>	NI 06.0.00	Technology:	LAG - Link
			Aggregation Group
Symptom:	LAG Load balancing may not be observed for GTP-c packets		
Condition:	1) GTP has to be enabled on the port		
	2) GTP-c TEID hashing s	should be enabled	

Defect ID:	DEFECT000660088		
Technical Severity:	High	Probability:	Low
Product:	Brocade NetIron OS	Technology Group:	Layer 3
			Routing/Network
			Layer
<b>Reported In Release:</b>	NI 06.0.00	Technology:	BGP4 - IPv4 Border
			Gateway Protocol
Symptom:	Line card may reload u	nexpectedly with the fol	lowing stack trace:-
	Possible Stack Trace (fu	unction call return addre	ss list)
	21672168: memcpy(pc	)	
	211fe30c: kbp_memcp	y(lr)	
	20b5bf9c: kbp_npxxpt_	_compare_data	
	20b5b504: kbp_npxxpt	_execute_req	
	20b5b300: kbp_npxxpt	_service_reqs	
	21547c34: kbp_xpt_se	rvice_requests	
	21546500: kbp_dm_12	k_cbwlpm	
	2152ca78: device_com	pare	
	2152dcd0: kbp_instruction_search		
	21599064: NlmNsTrieCheckAndFixRpt		
	215990f8: NlmNsTrie_	_FindIptUnderRpt	
	21599114: NlmNsTrieFindIptUnderRpt		
	21599114: NlmNsTrie_	_FindIptUnderRpt	
	21599180: NlmNsTrie_	_FindRptEntries	
	21599190: NlmNsTrie_	_FindRptEntries	

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	21599190: NImNsTrieFindRptEntries		
	215992d4: NlmNsTrieSearchAndRepairRpt		
	215a7988: kbp_ftm_search_and_repair_rpt		
	215881bc: kbp_lpm_db_advanced_search_and_repair		
	215bab14: kbp_device_advanced_fix_errors		
	21534f38: kbp_device_12k_fix_parity_errors		
	2152a538: kbp_device_fix_errors		
	20b5561c: netroute_ifsr_fix_errors		
	20ac956c: nlcam_ifsr_netroute_scan_errors		
	20ac8b90: nlcam_ifsr_fifo_poll		
	200058c0: perform_callback		
	200062c8: timer_timeout		
	00040160: sys_end_entry		
	0005e4a0: suspend		
	0005cf78: dev_sleep		
	00005024: xsyscall		
	207f3af4: main		
	00040158: sys_end_task		
Condition:	Rarely observed during the execution of 'clear BGP neighbor'		
	command when software is trying to fix a CAM error at the same time		
Workaround:	To disable soft repair feature through CLI 'cam ifsr disable'		

Defect ID:	DEFECT000660187		
<b>Technical Severity:</b>	Medium	Probability:	Low
Product:	Brocade NetIron OS	Technology Group:	Layer 3
			Routing/Network
			Layer
<b>Reported In Release:</b>	NI 05.4.00	Technology:	IP Addressing
Symptom:	Management port accepts packets corresponding to the same subnet		
	of the lowest IPv4 primary address only		
Condition:	On configuring multiple	e IPv4 primary address o	n management port

Defect ID:	DEFECT000660397		
Technical Severity:	Medium	Probability:	Medium
Product:	Brocade NetIron OS	Technology Group:	Layer 3
			Routing/Network
			Layer
<b>Reported In Release:</b>	NI 06.0.00	Technology:	OSPFv3 - IPv6 Open
			Shortest Path First
Symptom:	Routes through dead DR Other Router stays reachable in DR OSPFv3		
Condition:	DR Other Router goes down/disabled		
Workaround:	Wait for MaxAge to rer	nove dead router's LSAs	

Defect ID:	DEFECT000660494		
Technical Severity:	Medium	Probability:	Medium
Product:	Brocade NetIron OS	Technology Group:	Management
Reported In Release:	NI 06.2.00	Technology:	CLI - Command Line
			Interface
Symptom:	Route map applied through BVM on MLXe is shown as successful		
	even though it fails on device as below:-		
	"ERROR: Please remove existing I2 routemap xyz first on port 3/1		
Condition:	Applying another route	e-map to an interface the	rough BVM without
	removing the existing r	oute-map	

Defect ID:	DEFECT000660530		
<b>Technical Severity:</b>	Medium	Probability:	Medium
Product:	Brocade NetIron OS	Technology Group:	Layer 2 Switching
Reported In Release:	NI 06.2.00	Technology:	LAG - Link
			Aggregation Group
Symptom:	LAG creation through E	3VM shows successful ev	en though it is failed in
	device		
Condition:	LAG creation through E	LAG creation through BVM with participating ports do not have	
	similar properties		

Defect ID:	DEFECT000660592		
<b>Technical Severity:</b>	Medium	Probability:	Low
Product:	Brocade NetIron OS	Technology Group:	Layer 3
			Routing/Network
			Layer
<b>Reported In Release:</b>	NI 05.8.00	Technology:	Static Routing (IPv4)
Symptom:	CPU may go High with the following ITC Queue full messages:-		
	dest app id = 0x0000000c : src app id = 0x00000014 : msg type =		
	0x00140002 : error = ITC_ERR_DEST_QUEUE_FULL		
Condition:	12k IPv4 or IPv6 static	routes	

Defect ID:	DEFECT000660604		
<b>Technical Severity:</b>	High	Probability:	Medium
Product:	Brocade NetIron OS	Technology Group:	Layer 2 Switching
Reported In Release:	NI 06.2.00	Technology:	LAG - Link
			Aggregation Group
Symptom:	Link may stay Up even though it is disabled in CLI		
Condition:	"loop back system" configured on the disabled port		
Workaround:	Loop back system shou	ld be configured on ena	bled port

Defect ID:	DEFECT000661006		
<b>Technical Severity:</b>	Medium	Probability:	Medium
Product:	Brocade NetIron OS	Technology Group:	MPLS
<b>Reported In Release:</b>	NI 05.8.00	Technology:	IPv6 over MPLS VPN
Symptom:	IPv6 ping over vrf for re	emote BGP prefixes may	not work on loopback
	interfaces		
Condition:	IPV6 prefixes learnt on	user-vrf loopback interf	ace through BGP over
	MPLS		

Defect ID:	DEFECT000661318		
<b>Technical Severity:</b>	Medium	Probability:	Low
Product:	Brocade NetIron OS	Technology Group:	Layer 3
			Routing/Network
			Layer
Reported In Release:	NI 06.0.00	Technology:	BGP4 - IPv4 Border
			Gateway Protocol
Symptom:	BGP Route Reflector does not reflect VPNv4 or VPNv6 routes to		
	reflector clients		
Condition:	1. Routes should be learned in BGP Route Reflector for address family		
	VPNv4 or VPNv6		
	2. Execute 'clear ip bgp vpnv4 neighbor <neighbor-ip> soft-outbound'</neighbor-ip>		
	in BGP Route Reflector		
Recovery:	'clear ip bgp neighbor	<neighbor-ip>' in BGP Ro</neighbor-ip>	ute Reflector

Defect ID:	DEFECT000661401		
Technical Severity:	High	Probability:	Medium
Product:	Brocade NetIron OS	Technology Group:	Layer 3
			Routing/Network
			Layer
Reported In Release:	NI 06.0.00	Technology:	OSPFv3 - IPv6 Open
			Shortest Path First
Symptom:	OSPFv3 and IPV6 neighborship not formed with remote VPLS peer		
Condition:	Remote vpls peer configured with IPv6 on OSPFv3 interface with		
	MPLS ttl policy applied		
Workaround:	Either of the following can be applied		
	1. Remove the commands `vrf-propagate-ttl and label-propagate-ttl		
	enabled? under 'router mpls' configurations		
	or		
	2. Configure static ipv6	neighbors	

Defect ID:	DEFECT000661413		
Technical Severity:	Medium	Probability:	Low
Product:	Brocade NetIron OS	Technology Group:	Layer 3
			Routing/Network
			Layer
Reported In Release:	NI 05.6.00	Technology:	BGP4 - IPv4 Border
			Gateway Protocol
Symptom:	CES/CER device may ur	nexpectedly reload with	the following stack
	trace:-		
	Possible Stack Trace (fu	unction call return addre	ss list)
	20069c74: update_nh_	_hw_resource(pc)	
	20069b24: update_nh_	_hw_resource(lr)	
	20069fd8: write_nh_h	w_entry	
	200731c0: update_nh_	_hw_entry	
	20069348: update_next_hop_entry		
	2006b0d0: update_bac	cklink_table	
	2006b80c: mark_route_info_changed		
	2048dc58: lp_cam_upo	date_arp_entry_pram	
	205bb284: process_on	e_arp_update_lp	
	20591dd0: process_on	e_arp_update	
	205920ec: process_arp_dy_messages		
	2034b01c: process_dy_change_packet		
	2037facc: ipc_multi_m	odule_handler	
	2038222c: ipc_process	_messages	
	203829ec: ipc_receive	_packet	
	2037d308: ge_process	_ipc_data_msg	
	2037d690: ge_process	_ipc_msg	
	200b962c: metro_sys_	Іоор	
	200af638: main		
	00040158: sys_end_ta	sk	
Condition:	Very rarely occurs with	CER is configured as on	e of the BGP Speaker
	and processing ARP up	date messages	

Defect ID:	DEFECT000661452		
Technical Severity:	High	Probability:	Low
Product:	Brocade NetIron OS	Technology Group:	Layer 3
			Routing/Network
			Layer
Reported In Release:	NI 06.2.00	Technology:	BGP4 - IPv4 Border
			Gateway Protocol
Symptom:	BGP routes learnt on Route Reflector for some of the existing clients		
	might get lost		
Condition:	New route reflector client is added to the existing clients within the		
	same VRF		
Recovery:	Recovered by any one of the following steps:-		
	1.'Clear ip bgp vpnv4 neighbor all soft in'		
	2. 'Clear ip bgp vpnv4 r	neighbor all soft'	
	3. Forcing each and eve	ery Route Reflector clien	t to resend BGP
	updates		

Defect ID:	DEFECT000661617			
Technical Severity:	High	Probability:	Low	
Product:	Brocade NetIron OS	Technology Group:	Layer 3	
			Routing/Network	
			Layer	
Reported In Release:	NI 05.8.00	Technology:	OSPF - IPv4 Open	
			Shortest Path First	
Symptom:	Active Management module may unexpectedly reload with the			
	following stack trace:-			
	20ff077c: ospf_find_neighbor_from_grace_lsa(pc)			
	2104293c: age_the_link_state_database_entry(lr)			
	2104293c: age_the_link_state_database_entry			
	21041e0c: ospf_process_age_lsdb_entry			
	21041144: ospf_router_timer			
	2100a244: ospf_timer_	_callback		
	20b16280: itc_process	_msgs_internal		
	20b16720: itc_process	_msgs		
	2100a5b8: ospf_task			
	00005e18: sys_end_ta	sk		
Condition:	Occurs very rarely whe	en the OSPF process is re	started from a	
	problematic neighbori	ng device to recover		

Defect ID:	DEFECT000661713			
Technical Severity:	High	Probability:	Low	
Product:	Brocade NetIron OS	Technology Group:	Layer 3	
			Routing/Network	
			Layer	
Reported In Release:	NI 06.2.00	Technology:	IPv6 Addressing	
Symptom:	Line card module may	reload unexpectedly wit	h the following stack	
	trace:-			
	20a1cc64: ppcr_tx_pac	cket(pc)		
	20a1d658: ppcr_tx_he	ld_packet(lr)		
	20a1d658: ppcr_tx_he	ld_packet		
	20fd8ce4: nd6_forward_ppcr_pending_pkt			
	20fd940c: nd6_process_all_pending_packets			
	20fd7a40: nd6_delete_neighbor_entry_from_cache			
	20fbc928: nd6_slave_incomplete_nei_aging_handler			
	20fbcad4: nd6_slave_incomplete_nei_aging			
	20fbc9b4: nd6_slave_timer			
	20fb90b8: ipv6_slave_timer			
	20005a74: perform_callback			
	2000647c: timer_time	out		
	00040160: sys_end_er	ntry		
	0005e4a0: suspend			
	0005cf78: dev_sleep			
	00005024: xsyscall			
	207f1664: main			
	00040158: sys_end_ta	sk		
Condition:	Very rarely occurs with	large number of incom	olete ND6 (IPv6	
	neighbor discovery) en	itries		

Defect ID:	DEFECT000661716		
<b>Technical Severity:</b>	Medium	Probability:	Medium
Product:	Brocade NetIron OS	Technology Group:	Monitoring
<b>Reported In Release:</b>	NI 05.8.00	Technology:	sFlow
Symptom:	Extended MPLS VC data and Switch data's outgoing 802.1q VLAN may		
	not be observed in SFLOW forwarded packets		
Condition:	SFLOW enabled for VPI	S local switched packets	5

Defect ID:	DEFECT000661722		
<b>Technical Severity:</b>	Medium	Probability:	Low
Product:	Brocade NetIron OS	Technology Group:	Security
Reported In Release:	NI 06.0.00	Technology:	IPsec - IP Security
Symptom:	User may observe that IPSEC tunnel goes down and doesn't recover		
	to up state		
Condition:	User may observe this	on a system with scaled	IPSEC configuration

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Defect ID:	DEFECT000661730		
<b>Technical Severity:</b>	Medium	Probability:	Low
Product:	Brocade NetIron OS	Technology Group:	Management
Reported In Release:	NI 05.8.00	Technology:	NTP - Network Time
			Protocol
Symptom:	MLX, CES/CER may display incorrect Daylight/Summer time		
Condition:	for Australia (GMT+10)	and New Zealand (GMT	+12) time zones

Defect ID:	DEFECT000661859		
Technical Severity:	Medium	Probability:	Medium
Product:	Brocade NetIron OS	Technology Group:	Layer 2 Switching
Reported In Release:	NI 06.3.00	Technology:	LAG - Link
			Aggregation Group
Symptom:	For LACP based LAG de	ployment, user might ol	oserve that the device
	connected to NI device	is not showing LAG mer	nber interface in
	down/Blocked state while NI device interfaces are LACP-Blocked,		
	when the peer is configured with different key id. To observe this		
	behavior, two or more interfaces should be connected in a LAG		
	topology between NI and peer device.		
Condition:	This is a mis-configuration scenario where user has two or more		
	interfaces connected to NI device in a LAG topology and one of		
	member interface is incorrectly configured with different LAG Key.		
Workaround:	To Avoid the behavior, user should configure same key on device		
	connected to NI device		
Recovery:	User should configure	same key on device conr	nected to NI device.and
	LACP Lag should recove	er from this situation.	

Defect ID:	DEFECT000661906			
Technical Severity:	High	Probability:	Low	
Product:	Brocade NetIron OS	Technology Group:	Traffic Management	
<b>Reported In Release:</b>	NI 06.0.00	Technology:	Rate Limiting and	
			Shaping	
Symptom:	Unexpected traffic loss in transit node with Class 0 Remap index updated as "54" instead of "0" in the following rate-limit output :- LP#dm rate-limit ppcr 0 0 :			
	Class Bound CIR CBS ACCRT EIR EBS ACERT Remap Remark 0 RX 5464064 10928128 10928128 5464064 10928128 10928128 '54' 0 0 TX 5464064 10928128 10928128 5464064 10928128			
Condition:	This is very rare scenar counters multiple time limit policy in the route ex : conf t policy-map rl-icmp cir 993568 cbs 200 end conf t ip receive access-lis end	io and happens on execu s when IP Receive ACL co er. 000000 t 192 sequence 30 policy	uting clear rate-limit onfigured with Rate- y-map rl-icmp	

Defect ID:	DEFECT000661933		
<b>Technical Severity:</b>	Medium	Probability:	Low
Product:	Brocade NetIron OS	Technology Group:	Security
<b>Reported In Release:</b>	NI 06.0.00	Technology:	ACLs - Access Control
			Lists
Symptom:	The command `ipv6 receive deactivate-acl-all? may not work		
	sometimes		
Condition:	Observed after router	reload	
Recovery:	Remove and reconfigure the command ?ipv6 receive deactivate-acl-		
	all?		

Defect ID:	DEFECT000662137		
<b>Technical Severity:</b>	Medium	Probability:	Medium
Product:	Brocade NetIron OS	Technology Group:	IP Multicast
<b>Reported In Release:</b>	NI 06.2.00	Technology:	PIM - Protocol-
			Independent
			Multicast
Symptom:	Pim (*,G) entries formed in default vrf are also observed in non-		
	default vrf mcache table		
Condition:	On executing the comr	nand `clear ip pim vrf <v< th=""><th>rf-name&gt; mcache?</th></v<>	rf-name> mcache?

Defect ID:	DEFECT000662194		
<b>Technical Severity:</b>	Medium	Probability:	Low
Product:	Brocade NetIron OS	Technology Group:	Monitoring
<b>Reported In Release:</b>	NI 06.0.00	Technology:	Hardware Monitoring
Symptom:	'show optic <slot>' does not show any light levels</slot>		
Condition:	It is specific to Finisar QSFP28-CFP2 optic		

Defect ID:	DEFECT000662202		
<b>Technical Severity:</b>	Medium	Probability:	Low
Product:	Brocade NetIron OS	Technology Group:	Management
Reported In Release:	NI 06.0.00	Technology:	CLI - Command Line
			Interface
Symptom:	'show chassis' displays power supply status as "Installed (Failed or		
	Disconnected)" instead of "Installed (Shutdown)"		
Condition:	When 2100W power supply is manually powered off using command		
	'power-off power-supp	ly #'	

Defect ID:	DEFECT000663193		
Technical Severity:	High	Probability:	Low
Product:	Brocade NetIron OS	Technology Group:	Layer 3
			Routing/Network
			Layer
Reported In Release:	NI 06.0.00	Technology:	BGP4 - IPv4 Border
			Gateway Protocol
Symptom:	BGP static network routes might not get advertised to the peers		
Condition:	On Reload with BGP "static-network" routes configured		
	Note: This may be observed from NI6.0 and higher releases only.		
Recovery:	Removing and adding b	back the static-network of	command

Defect ID:	DEFECT000663296		
Technical Severity:	High	Probability:	Low
Product:	Brocade NetIron OS	Technology Group:	Traffic Management
<b>Reported In Release:</b>	NI 06.0.00	Technology:	Rate Limiting and
			Shaping
Symptom:	Traffic loss may be observed with Rate-limit policy		
Condition:	This is very rare scenario and happens on executing `clear rate-limit		
	counters? multiple times when IP Receive ACL configured with Rate-		
	limit policy.		
	ex :		
	conf t		
	policy-map aaaaa		
	cir xxxxxx cbs yyyyyyy		
	end		
	conf t		
	ip receive access-lis	t zz sequence xy policy-r	nap aaaaa
	end		

## Closed without code changes NI06.3.00

This section lists software defects with Critical, High, and Medium Technical Severity closed without a code change as of 08/30/2018 in NetIron OS 06.3.00.

Defect ID:	DEFECT000602148	<b>Technical Severity:</b>	Medium
Reason Code:	Not Reproducible	Probability:	High
Product:	Brocade NetIron OS	Technology Group:	Layer 2 Switching
Reported In Release:	NI 06.0.00	Technology:	MCT - Multi-Chassis
			Trunking
Symptom:	When Local CCEP goes DOWN and comes UP on MCT cluster device,		
	BFD session with the MCT client devices can move to DOWN state		
	and the session do not move to UP state again.		
Condition:	Condition:		
	BFD configured on MCT cluster device for static routes.		
	Trigger:		
	When Local CCEP goes DOWN and comes UP again on MCT cluster		
	device, this issue could	occur.	
Recovery:	execute "clear bfd neighbors x.x.x.r" on the device where this issue is		
	observed		

Defect ID:	DEFECT000644706	<b>Technical Severity:</b>	High
Reason Code:	Not Reproducible	Probability:	Low
Product:	Brocade NetIron OS	Technology Group:	IP Multicast
<b>Reported In Release:</b>	NI 06.0.00	Technology:	PIM6 - IPv6 Protocol-
			Independent
			Multicast
Symptom:	Customer can notice traffic loss for IPv6 multicast traffic.		
Condition:	When both IPv4 and IPv6 multicast traffic is running and IPv6		
	multicast routes are cleared using "clear ipv6 pim cache".		

Defect ID:	DEFECT000649337	<b>Technical Severity:</b>	High
Reason Code:	Not Reproducible	Probability:	High
Product:	Brocade NetIron OS	Technology Group:	IP Multicast
<b>Reported In Release:</b>	NI 06.2.00	Technology:	IPv4 Multicast
			Routing
Symptom:	User may observe drop in the traffic which is getting forwarded on an		
	IPSEC tunnel		
Condition:	This issue may be seen when failover happens for IPSEC tunnel		

Defect ID:	DEFECT000653077	Technical Severity:	High
Reason Code:	Already Fixed in	Probability:	Medium
	Release		
Product:	Brocade NetIron OS	Technology Group:	Management
<b>Reported In Release:</b>	NI 05.8.00	Technology:	SNMP - Simple
			Network
			Management
			Protocol
Symptom:	BGP session may flap		
Condition:	SNMP polling of BGP tables (bgp4PathAttrTable, bgp4V2NlriTable)		
	with 600K or more BGP route entries		
Workaround:	Disable SNMP polling for the table: bgp4PathAttrTable,		
	bgp4V2NlriTable		

Defect ID:	DEFECT000654629	Technical Severity:	High
Reason Code:	Already Fixed in	Probability:	Medium
	Release		
Product:	Brocade NetIron OS	Technology Group:	Layer 2 Switching
Reported In Release:	NI 05.8.00	Technology:	MCT - Multi-Chassis
			Trunking
Symptom:	CCP protocol does not go down on MCT cluster node		
Condition:	1. MCT cluster with L2VPN peer should be configured on both the		
	Cluster peer nodes		
	2. "client-interface shutdown" command should be issued on the		
	MCT Active Cluster node		

Defect ID:	DEFECT000654631	Technical Severity:	High	
Reason Code:	Already Fixed in	Probability:	Medium	
	Release			
Product:	Brocade NetIron OS	Technology Group:	Layer 2 Switching	
<b>Reported In Release:</b>	NI 05.8.00	Technology:	MCT - Multi-Chassis	
			Trunking	
Symptom:	"client-interface shutdown" command does not bring the CCP down			
	and MCT VLL Active/Standby switchover does not happen			
Condition:	(1) MCT cluster with VPLS and VLL should be configured on both the			
	peer nodes .			
	(2)"client-interface shutdown" command should be issued on MCT			
	Active cluster node			
Defect ID:	DEFECT000654707	Technical Severity:	High	
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Reason Code:	Already Fixed in	Probability:	Low	
	Release			
Product:	Brocade NetIron OS	Technology Group:	IP Multicast	
<b>Reported In Release:</b>	NI 05.8.00	Technology:	PIM - Protocol-	
			Independent	
			Multicast	
Symptom:	Line card may reload u	nexpectedly with the fol	lowing stack trace:-	
	21584ddc: memcpy(pc	)		
	20f48b28: pimsm_encapsulate_pkt_and_send_to_rp(lr)			
	20f4987c: pimsm_forward_multicast_pkt			
	20f4850c: pim_forward_multicast			
	20f27d98: mcast_flow_fast_forward			
	20eaeb3c: fpip_process_ip_packet_with_I2_broadcast			
	20eedb20: rx_pkt_pro	cessing		
	20d4f4a4: lp_pkt_rece	ive		
	20a0f028: ppcr_reciev	e_packet		
	207eef3c: lp_pbif_packet_task			
	00040158: sys_end_ta	sk		
Condition:	Flap the interface on M	1CT Peer repeatedly with	n multicast-routing and	
	PIM SM configured on	МСТ		

Defect ID:	DEFECT000654817	Technical Severity:	High
Reason Code:	Already Fixed in	Probability:	Low
	Release		
Product:	Brocade NetIron OS	Technology Group:	Layer 3
			Routing/Network
			Layer
Reported In Release:	NI 05.8.00	Technology:	OSPF - IPv4 Open
			Shortest Path First
Symptom:	CES/CER may unexpect	edly reload with the foll	owing stack trace :-
	205e15d8: time_tree_	delete_first_entry_and_	add(pc)
	205e1de8: trace_util_a	add_entry_avl(lr)	
	205e1de8: trace_util_a	add_entry_avl	
	20598540: IPTRACE_A	VL	
	20598294: IPTRACE_A	L_USING_RT_ENTRY	
	204cacd8: lp_cam_add	_ip_nexthop_route	
	204ca61c: lp_cam_add	ip_route	
	205b0674: ip_update_	pram_for_route_entry_	puma
	205b08ec: ip_update_	pram_for_route_entry	
	206497bc: dp_trie_process_one_route_update		
	2064a124: dp_trie_process_route_update		
	2064a2bc: process_tre	e_dy_messages	
	203793cc: process_dy_	_change_packet	
	203ae898: ipc_multi_n	nodule_handler	
	203b0e74: ipc_process_messages		
	203b1634: ipc_receive_packet		
	203abef0: ge_process_	_ipc_data_msg	
	203ac278: ge_process_	_ipc_msg	
	200bb704: metro_sys_	loop	
	200b10e0: main		
	00040158: sys_end_ta:	sk	
Condition:	It is very rarely observe	ed with the following sca	le on CES/CER MCT
	Cluster by flapping ICL	interface repeatedly	
	250 VPLS instances		
	100 VLL		
	500 IGMP group		
	250 MLD group		

Defect ID:	DEFECT000655355	<b>Technical Severity:</b>	Medium
Reason Code:	Already Fixed in	Probability:	Medium
	Release		
Product:	Brocade NetIron OS	Technology Group:	Monitoring
<b>Reported In Release:</b>	NI 06.0.00	Technology:	OAM - Operations,
			Admin &
			Maintenance
Symptom:	Port of 20X10G Line card Module may not come up		
Condition:	It is very rarely observed when a new connection is made on a port of		
	20X10G		
Recovery:	Any one of the following methods can help in recovery:-		
	1. Removal and Re-insert of SFPP		
	2. Swap SFPP by SFP and re-swap SFP by SFPP.		
	3. Reload Line card Module.		

Defect ID:	DEFECT000658063	Technical Severity:	Medium
Reason Code:	Already Fixed in	Probability:	Medium
	Release		
Product:	Brocade NetIron OS	Technology Group:	Security
<b>Reported In Release:</b>	NI 05.8.00	Technology:	ACLs - Access Control
			Lists
Symptom:	May observe the following syslog message:-		
	Apr 2 00:33:12 Dut list 0 denied all 0.0.0.0(xyz)(Ethernet x/y		
	0000.0000.0000) -> 0.0.0.0(n), abc event(s)		
Condition:	Two ACL's with deny rule binded to the same interface with deny		
	logging enabled		

Defect ID:	DEFECT000658976	Technical Severity:	Medium
Reason Code:	Already Fixed in	Probability:	Medium
	Release		
Product:	Brocade NetIron OS	Technology Group:	Monitoring
<b>Reported In Release:</b>	NI 05.6.00	Technology:	Hardware Monitoring
Symptom:	Observed incorrect Timestamp in 'show tm log' output		
Condition:	On execution of ?show tm log?		

Defect ID:	DEFECT000659925	Technical Severity:	Medium
Reason Code:	Design Limitation	Probability:	Medium
Product:	Brocade NetIron OS	Technology Group:	Layer 3
			Routing/Network
			Layer
<b>Reported In Release:</b>	NI 06.2.00	Technology:	BFD - BiDirectional
			Forwarding
			Detection
Symptom:	BFD neighbor session would take 3 minutes to come up on bringing		
	up the interface		
Condition:	(1) bring up the BFD session between the neighbors with the image		
	below 5.7 or above loaded		
	(2) bring DOWN the interface		
	(3) bring UP the interface		

## Known issues NI06.3.00

This section lists open software defects with Critical, High, and Medium Technical Severity as of 08/30/2018 in NetIron OS 06.3.00.

Defect ID:	DEFECT000605799		
Technical Severity:	High	Probability:	Medium
Product:	Brocade NetIron OS	Technology Group:	IP Multicast
Reported In Release:	NI 06.1.00	Technology:	PIM - Protocol-
			Independent
			Multicast
Symptom:	Momentary traffic loss will be seen when device switch-over from		
	active MP to standby MP.		
Condition:	During MP switch-over, hardware reprogramming of some of the		
	existing multicast entri	es can cause momentary	y traffic loss.

Defect ID:	DEFECT000622581			
Technical Severity:	High	Probability:	Medium	
Product:	Brocade NetIron OS	Technology Group:	IP Multicast	
Reported In Release:	NI 06.1.00	Technology:	PIM6 - IPv6 Protocol-	
			Independent	
			Multicast	
Symptom:	After reload, traffic flow for some groups gets delayed until the PIM			
	mcache is populated. This can take a maximum of 125s or the IGMP			
	query interval time configured.			
Condition:	This can happen on the PIM router receiving the IGMP report when it			
	is not the RP in the PIM network and IGMP reports are received			
	before the RPF path to	before the RPF path towards the RP is available		

Defect ID:	DEFECT000623241			
<b>Technical Severity:</b>	High	Probability:	Medium	
Product:	Brocade NetIron OS	Technology Group:	Management	
<b>Reported In Release:</b>	NI 06.1.00	Technology:	NTP - Network Time	
			Protocol	
Symptom:	CES/CER does not synchronize time with NTP broadcast server.			
Condition:	NTP broadcast client co	NTP broadcast client configuration on default or non default VRF.		

Defect ID:	DEFECT000623781		
<b>Technical Severity:</b>	Medium	Probability:	High
Product:	Brocade NetIron OS	Technology Group:	Security
<b>Reported In Release:</b>	NI 05.9.00	Technology:	ACLs - Access Control
			Lists
Symptom:	ingress packets could be dropped when allow-all-vlan pbr is		
	configured		
Condition:	ingress packets could be dropped when allow-all-vlan pbr is		
	configured on a 4x40 module.		

Defect ID:	DEFECT000631492		
<b>Technical Severity:</b>	High	Probability:	Medium
Product:	Brocade NetIron OS	Technology Group:	IP Multicast
<b>Reported In Release:</b>	NI 06.0.00	Technology:	IGMP - Internet
			Group Management
			Protocol
Symptom:	(*, G) and (S, G) entries may not be removed from IGMP snooping		
	VLAN database		
Condition:	IGMP leave message received from the last receiver port		

Defect ID:	DEFECT000632633		
Technical Severity:	High	Probability:	Medium
Product:	Brocade NetIron OS	Technology Group:	IP Multicast
<b>Reported In Release:</b>	NI 06.0.00	Technology:	PIM6 - IPv6 Protocol-
			Independent
			Multicast
Symptom:	IPv6 multicast traffic dropped on scaled system		
Condition:	The cam profiling is configured as "multi-service-6"		
	Card type is NI-MLX-10Gx8-M		
	IPV6 multicast CAM size is allocated more than 4k		

Defect ID:	DEFECT000633774			
Technical Severity:	High	Probability:	Medium	
Product:	Brocade NetIron OS	Technology Group:	Layer 3	
			Routing/Network	
			Layer	
Reported In Release:	NI 05.8.00	Technology:	BGP4 - IPv4 Border	
			Gateway Protocol	
Symptom:	Standby Management	Module may unexpected	lly reload with the	
	following stack trace:-			
	Possible Stack Trace (fu	unction call return addre	ss list)	
	20ec94d4: bgp_check_for_fwd_address(pc)			
	20ec93ec: bgp_check_for_fwd_address(lr)			
	20efbd18: bgp_RIB_in_delete_route			
	20f7952c: bgp_check_for_aggrgation			
	20effd40: bgp_remove_route_advertisement			
	20efbdf4: bgp_RIB_in_delete_route			
	20efda08: bgp_vrf_RIB_in_delete_all_self_nlris			
	20eb4e88: bgp_clear_a	all_vrf_neighbors		
	20f57744: bgp_clear_n	eighbor_itc_request_ca	llback	
	20b14584: itc_process_msgs_internal			
	20b14a24: itc_process_msgs			
	20f73ed8: bgp_task			
	00005e18: sys_end_tag	sk		
Condition:	Execution of "clear ip b	ogp neighbor all" comma	nd	

Defect ID:	DEFECT000636007		
Technical Severity:	High	Probability:	Medium
Product:	Brocade NetIron OS	Technology Group:	Management
Reported In Release:	NI 05.8.00	Technology:	CLI - Command Line
			Interface
Symptom:	InOctet and OutOctet	counter values do not inc	clude the Ethernet
	framing overhead bytes.		
Condition:	When executing ?show statistics? command after enabling include-		
	ethernet-framing-overhead configuration command.		
	OR		
	When polling the below SNMP OID?s after enabling include-ethernet-		
	framing-overhead configuration command.		
	? ifInOctets		
	? ifOutOctets		
	? ifHCInOctets		
	? ifHCOutOctets		
	? snSwlfInOctets	5	
	? snSwlfOutOcte	ets.	

Defect ID:	DEFECT000638634		
<b>Technical Severity:</b>	High	Probability:	Medium
Product:	Brocade NetIron OS	Technology Group:	Layer 2 Switching
Reported In Release:	NI 05.8.00	Technology:	LAG - Link
			Aggregation Group
Symptom:	The LAG port may not go down on receiving the timed-out LACP		
	BPDU from peer with reset of collecting and distributing bits		
Condition:	Mac access-list with ex	plicit deny all is configur	ed on a LAG port

Defect ID:	DEFECT000642613		
<b>Technical Severity:</b>	Medium	Probability:	Medium
Product:	Brocade NetIron OS	Technology Group:	Layer 3
			Routing/Network
			Layer
<b>Reported In Release:</b>	NI 05.6.00	Technology:	VRRPv3 - Virtual
			Router Redundancy
			Protocol Version 3
Symptom:	High CPU usage causing dual master VRRP and VRRPv3 dual master .		
Condition:	Number of ND6 entries	s is greater than 12000 o	n CES/CER

Defect ID:	DEFECT000643261		
Technical Severity:	High	Probability:	Medium
Product:	Brocade NetIron OS	Technology Group:	IP Multicast
Reported In Release:	NI 06.0.00	Technology:	IPv4 Multicast VLAN
			Traffic Reduction
Symptom:	A host receives multica	ist traffic for an IGMP gro	oup for which it has
	not sent an IGMP JOIN message.		
Condition:	A PC Host receives multicast traffic, even if it has not sent an IGMP		
	Join message for the multicast group.		
	Conditions:		
	a. An active receiver on one of the ports of vlan. (with IGMP snooping		
	enabled). Other ports of	of vlan do not receive mu	ulticast traffic.
	b. Disable IGMP snooping on the vlan. MC traffic resumes(due to		
	default flooding behavior on vlan).		
	c. Re-enable the IGMP snooping configuration.		
	d. All the ports of vlan	continue to receive the r	nulticast traffic.

Defect ID:	DEFECT000643881		
<b>Technical Severity:</b>	Medium	Probability:	Medium
Product:	Brocade NetIron OS	Technology Group:	Layer 3
			Routing/Network
			Layer
Reported In Release:	NI 05.8.00	Technology:	OSPF - IPv4 Open
			Shortest Path First
Symptom:	Inconsistent behavior may be observed between OSPFV2 and OSPFV3		
Condition:	Configuration of 'max-	metric' command	

Defect ID:	DEFECT000652797		
Technical Severity:	High	Probability:	Medium
Product:	Brocade NetIron OS	Technology Group:	Monitoring
Reported In Release:	NI 06.2.00	Technology:	sFlow
Symptom:	When sFlow is enabled	for IPV6 traffic sampling	g on an interface which
	is associated with a VE	and user defined VRF, t	he LP CPU usage may
	go high up to 50%.		
Condition:	When sFlow is enabled on an interface which is associated with a VE		
	and user defined VRF and IPV6 traffic is sampled whose destination is		
	1+ hops away, the LP CPU usage (for the LP where sampling is taking		
	place) could be considerably high (about 7 times) compared to when		
	the interface is not associated with a VE.		
Workaround:	LP CPU usage can be reduced by either reducing the sampling		
	frequency (via increasing the 'sampling rate' configuration) or by		
	removing the VE configuration on sFlow forwarding port.		
Recovery:	Disable sFlow, reconfigure as needed and re-enable sFlow.		

Defect ID:	DEFECT000656284		
<b>Technical Severity:</b>	High	Probability:	Low
Product:	Brocade NetIron OS	Technology Group:	Traffic Management
<b>Reported In Release:</b>	NI 05.8.00	Technology:	Rate Limiting and
			Shaping
Symptom:	Rate limit traffic drops may not be observed on the configured port		
Condition:	On execution of `clear rate-limit counters?		
Workaround:	Reload the line card		

Defect ID:	DEFECT000657027		
<b>Technical Severity:</b>	High	Probability:	Low
Product:	Brocade NetIron OS	Technology Group:	IP Multicast
Reported In Release:	NI 06.2.00	Technology:	PIM - Protocol-
			Independent
			Multicast
Symptom:	(S,G) for some groups are not formed in intermediate CER router		
Condition:	Rarely observed with PIM-DM enabled on all the interfaces during		
	router upgrade		

Defect ID:	DEFECT000657175		
<b>Technical Severity:</b>	High	Probability:	Low
Product:	Brocade NetIron OS	Technology Group:	IP Multicast
<b>Reported In Release:</b>	NI 06.2.00	Technology:	PIM - Protocol-
			Independent
			Multicast
Symptom:	Multicast traffic drops in a multicast snooping enabled switch which is		
	directly connected to Source		
Condition:	Rarely observed on a Multicast snooping enabled switch configured		
	with multicast passive	on VLAN	

Defect ID:	DEFECT000657277		
Technical Severity:	High	Probability:	Medium
Product:	Brocade NetIron OS	Technology Group:	SDN
Reported In Release:	NI 05.8.00	Technology:	OpenFlow
Symptom:	Sometimes Open flow rules may not get installed		
Condition:	On receiving the update action within a second, while processing the		
	same Open flow rule with same priority and priority should be less		
	that the existing flow		

Defect ID:	DEFECT000657631		
Technical Severity:	High	Probability:	Low
Product:	Brocade NetIron OS	Technology Group:	Layer 2 Switching
Reported In Release:	NI 06.2.00	Technology:	MCT - Multi-Chassis
			Trunking
Symptom:	VPLS traffic may be dropped on the MCT peer node		
Condition:	1) MCT over VPLS should be configured		
	2) 'Client interface shutdown' has to be configured on VPLS active		
	node to make the CCEP port disable		
	3) After traffic switched to the MCT peer node which is the new active		
	node, reload the current passive MCT VPLS node		

Defect ID:	DEFECT000658979		
<b>Technical Severity:</b>	High	Probability:	Low
Product:	Brocade NetIron OS	Technology Group:	MPLS
Reported In Release:	NI 06.0.00	Technology:	MPLS Traffic
			Engineering
Symptom:	LSP session may not go down		
Condition:	1) MPLS LSP tunnel should be established with the remote peer		
	2) Disable the loop back interface (peer IP) on the remote device		

Defect ID:	DEFECT000659209		
<b>Technical Severity:</b>	High	Probability:	Low
Product:	Brocade NetIron OS	Technology Group:	IP Multicast
<b>Reported In Release:</b>	NI 06.0.00	Technology:	IPv4 Multicast
			Routing
Symptom:	Multicast traffic may drop in PIM router below RP which is connected		
	towards the receiver in non-default VRF		
Condition:	Rarely observed after PIM RP node reloads		
Workaround:	Execute clear ip pim mcache vrf <vrf-name> in downstream router</vrf-name>		
	after RP		

Defect ID:	DEFECT000659554			
<b>Technical Severity:</b>	High	Probability:	Medium	
Product:	Brocade NetIron OS	Technology Group:	Management	
<b>Reported In Release:</b>	NI 06.0.00	Technology:	CLI - Command Line	
			Interface	
Symptom:	'fan-threshold' configuration is not saved in running-configuration			
	after reload			
Condition:	Fan speed is manually	Fan speed is manually configured using 'fan-threshold' command		

Defect ID:	DEFECT000661201			
<b>Technical Severity:</b>	Medium	Probability:	Low	
Product:	Brocade NetIron OS	Technology Group:	Layer 3	
			Routing/Network	
			Layer	
<b>Reported In Release:</b>	NI 06.0.00	Technology:	BGP4+ - IPv6 Border	
			Gateway Protocol	
Symptom:	Ipv6 BGP peering session may encounter "Optional attribute error"			
Condition:	1. IPv6 Additional-Paths option is enabled			
	2. Processed withdraw	2. Processed withdraw message from neighbor		

Defect ID:	DEFECT000661407		
<b>Technical Severity:</b>	High	Probability:	Medium
Product:	Brocade NetIron OS	Technology Group:	Layer 3
			Routing/Network
			Layer
<b>Reported In Release:</b>	NI 06.0.00	Technology:	OSPFv3 - IPv6 Open
			Shortest Path First
Symptom:	IPv6 traffic may not be forwarded over VEoVPLS interface		
Condition:	MPLS LSP primary path goes down on disabling the VEoVPLS interface		
Workaround:	clear mpls lsp <lsp-nam< th=""><th>1e&gt;</th><th></th></lsp-nam<>	1e>	

Defect ID:	DEFECT000661679		
<b>Technical Severity:</b>	High	Probability:	Medium
Product:	Brocade NetIron OS	Technology Group:	Management
<b>Reported In Release:</b>	NI 06.2.00	Technology:	SNMP - Simple
			Network
			Management
			Protocol
Symptom:	ifPhysAddress may return primary port physical MAC address		
Condition:	for all the member ports other than primary port in a LAG		

Defect ID:	DEFECT000661865		
Technical Severity:	Medium	Probability:	Low
Product:	Brocade NetIron OS	Technology Group:	Layer 3
			Routing/Network
			Layer
<b>Reported In Release:</b>	NI 06.0.00	Technology:	ICMP - Internet
			Control Message
			Protocol
Symptom:	IPv6 traffic may not be forwarded to destined port		
Condition:	Specific to Ipv6 Hop-by-hop and fragmented packets		
Workaround:	Frequency of this issue can be lowered by configuring maximum value		
	in the below configuration command		
	"ipv6 nd reachable-time <secs>"</secs>		

Defect ID:	DEFECT000662001		
Technical Severity:	High	Probability:	Medium
Product:	Brocade NetIron OS	Technology Group:	Security
Reported In Release:	NI 06.2.00	Technology:	ACLs - Access Control
			Lists
Symptom:	Traffic loss with TX ACL drops may be observed in 'show np stat'		
Condition:	1) Ingress port has to be configured with PBR route-map with flood		
	vlan		
	2)Transparent vlan flooding has to be enabled on the egress vlan		
	3)Egress port should be 40G and configured with loopback system		

Defect ID:	DEFECT000662025		
<b>Technical Severity:</b>	High	Probability:	Medium
Product:	Brocade NetIron OS	Technology Group:	MPLS
<b>Reported In Release:</b>	NI 06.0.00	Technology:	MPLS Traffic
			Engineering
Symptom:	FRR Facility backup LSP is not up		
Condition:	When "ip ospf passive" is configured on interface, there is no		
	notification sent to MPLS deamon to cause TE flush or rsvp igp sync		
	reaction.		

Defect ID:	DEFECT000662210		
Technical Severity:	Medium	Probability:	Medium
Product:	Brocade NetIron OS	Technology Group:	Layer 3
			Routing/Network
			Layer
Reported In Release:	NI 06.0.00	Technology:	BGP4+ - IPv6 Border
			Gateway Protocol
Symptom:	BGP multipaths are not happened properly for BGP IPv6 routes that		
	are learned in VRF		
Condition:	1. iBGP neigborship established with 2 neighbors in VRF		
	2. BGP multipaths are enabled		
	3. The same route is advertised from both the neighbors with the		
	same local_pref, MED, ORIGIN, weight		
Workaround:	Configure "always-com	pare-med" in 'router bg	p'

Defect ID:	DEFECT000662260			
<b>Technical Severity:</b>	Medium	Probability:	Medium	
Product:	Brocade NetIron OS	Technology Group:	Traffic Management	
<b>Reported In Release:</b>	NI 06.2.00	Technology:	Rate Limiting and	
			Shaping	
Symptom:	Burst traffic may be forwarded more than the configured rate on			
	CES/CER			
Condition:	Bursty traffic with Rate	Bursty traffic with Rate-limit is configured on the interface		

Defect ID:	DEFECT000662321			
<b>Technical Severity:</b>	Medium	Probability:	Medium	
Product:	Brocade NetIron OS	Technology Group:	Layer 3	
			Routing/Network	
			Layer	
<b>Reported In Release:</b>	NI 05.8.00	Technology:	DHCP - Dynamic Host	
			Configuration	
			Protocol	
Symptom:	High CPU may be observed on CER			
Condition:	Processed high rate of	Processed high rate of fragmented DHCP protocol packets		

Defect ID:	DEFECT000662992		
Technical Severity:	High	Probability:	Medium
Product:	Brocade NetIron OS	Technology Group:	Layer 3
			Routing/Network
			Layer
<b>Reported In Release:</b>	NI 06.3.00	Technology:	IS-IS - IPv4
			Intermediate System
			to Intermediate
			System
Symptom:	User may observe reload of standby MP		
Condition:	User may observe this issue on a system with scaled IS-IS		
	configuration when "clear isis all" is issued		

Defect ID:	DEFECT000664218		
<b>Technical Severity:</b>	Low	Probability:	Low
Product:	Brocade NetIron OS	Technology Group:	Monitoring
<b>Reported In Release:</b>	NI 06.2.00	Technology:	Syslog
Symptom:	telnet client may not be observed in 'show logging' as configured		
Condition:	'telnet client <ip-address>' is configured from a telnet session.</ip-address>		

Defect ID:	DEFECT000664742		
Technical Severity:	High	Probability:	High
Product:	Brocade NetIron OS	Technology Group:	Layer 3
			Routing/Network
			Layer
Reported In Release:	NI 06.3.00	Technology:	IS-IS - IPv4
			Intermediate System
			to Intermediate
			System
Symptom:	User may observe that IS-IS routes are not advertised to the		
	neighbors		
Condition:	User may observe this issue on a system with scaled IS-IS		
	configuration and many loopback interfaces.		
Recovery:	User can issue "clear isis all" on the system that is not advertising IS-IS		
	routes to the neighbors		

Defect ID:	DEFECT000665208		
<b>Technical Severity:</b>	High	Probability:	Medium
Product:	Brocade NetIron OS	Technology Group:	Layer 2 Switching
<b>Reported In Release:</b>	NI 06.0.00	Technology:	VLAN - Virtual LAN
Symptom:	Sometimes SSH session may not respond		
Condition:	1. Pasting large configuration list of commands around 20K lines		
	2. Another session is opened for the same device		

Defect ID:	DEFECT000665302		
Technical Severity:	High	Probability:	Medium
Product:	Brocade NetIron OS	Technology Group:	Layer 3
			Routing/Network
			Layer
<b>Reported In Release:</b>	NI 06.3.00	Technology:	Multi-VRF
Symptom:	Route for loopback interfaces might not be advertised to BGP peers		
	after a router reload.		
Condition:	With a BGP configuration over 100 BGP VRFs and a large		
	configuration file		
Recovery:	a. disable/enable the loopback interfaces, or		
	b. clear ip bgp neighbor all soft out, or		
	c. clear ip bgp local rou	ites	