

NI OS 06.0.00d for Brocade MLXe and NetIron

Release Notes v2.0

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Contents

Document history	5
Preface	ε
Contacting Brocade Technical Support	6
Brocade resources	ε
Document feedback	7
Overview	8
Brocade MLXe Network Packet Broker	8
Behavior changes	9
Behavior changes in release	9
Software Features	g
New software features introduced in R06.0.00d	g
New software features introduced in R06.0.00c	9
New software features introduced in R06.0.00b	10
New software features introduced in R06.0.00a	10
Software features introduced in R06.0.00	13
CLI commands	16
Modified commands in R06.0.00d	16
New CLI commands R06.0.00c	16
New CLI commands R06.0.00b	16
New CLI commands R06.0.00a	16
Modified commands in Brocade Network Packet Broker R06.0.00a	17
CLI commands introduced in R06.0.00	17
Modified commands in R06.0.00	18
Deprecated commands	19
MIBs and messages	20
MIBs	20
RFCs and standards	22
Hardware support	23
Supported devices for R06.0.00a	23
Supported devices for Brocade Network Packet Broker R06.0.00a	24
Supported modules	25
Supported power supplies	31

Supported optics	31
Software upgrade and downgrade	32
Image file names	32
Migration path	38
Upgrade and downgrade considerations	38
OpenFlow upgrade and downgrade	42
Hitless upgrade support	42
Limitations and restrictions	43
Scalability	43
Compatibility and interoperability	43
Important notes	43
Hardware Notes	44
TSBs	46
TSBs—Critical issues to consider prior to installing this release	46
Defects	48
Closed with code changes R06.0.00d	48
Closed with code changes R06.0.00c	62
Closed with code changes R06.0.00b	69
Closed with code changes R06.0.00a	90
Closed with code changes R06.0.00	104
Closed without code changes	149
Known Issues	163

Document history

Version	Summary of changes	Publication date
1.0	Initial release	17 July 2017
2.0	Revised Hitless Upgrade support section.	20 July 2017

Preface

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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 6.0.00 introduces new functionalities and enhances the capabilities of Brocade MLX Series, CER 2000 Series and CES 2000 Series. Brocade continues to innovate in key technologies and Release 6.0.00 brings new features in the following areas:

- SDN,
- Data privacy with IPsec,
- IP/MPLS services,
- Network Packet Broker functionality for 4G/LTE mobile networks and
- New Optics for 40G connectivity options.

Path Computation Element Protocol and OpenFlow to MPLS LSP as logical port allow service providers to migrate to an SDN operation model while maintaining interoperability with existing MPLS networks.

Layer 2 over IPsec enables secure connections for data center interconnect and enterprises can now meet security compliances in the public clouds and virtual private clouds.

In addition, manageability and troubleshooting functions are further enhanced for efficient network operation. With these features, Brocade MLX Series Router continues as the leading platform for converged data center and service provider network services.

Brocade MIXe Network Packet Broker

Beginning with NetIron 6.0.00a two FPGA bundles will be available for download.

- Installing the Network Packet Broker (NPB) FPGA bundle will place the Brocade MLXe device chassis into Packet Broker mode.
- Installing the MAIN (default) FPGA bundle will place the Brocade MLXe device chassis into the default mode.

The global setting across the chassis can be either Network Packet Broker (NPB) mode or MAIN (default).

- The Main (default) global setting requires the MAIN FPGA manifest to be installed.
- The NPB global setting requires the NPB FPGA manifest to be installed.

Behavior changes

Behavior changes in release

 Consult the Software Features, the CLI Command, and the Upgrade and Downgrade Considerations sections of these notes for any behavior changes in this release.

There are no deprecated commands in R06.0.00d.

There are no deprecated commands in R06.0.00c.

There are no deprecated commands in R06.0.00b.

There are no deprecated commands in R06.0.00a.

Software Features

New software features introduced in R06.0.00d

Details of corrected defects are provided in Closed with Code changes R06.0.00d.

Enhanced features introduced in R06.0.00d:

- **VLAN name length change** This feature supports up to 35 characters of the VLAN name. The VLAN name character length is increased from 31 to 35 characters.
- Scaling IPv4 Max-route per VRF This feature increases the capacity of IPv4 non-default VRF routes from 650K to 750K. By default, the system-max values for ip-route and ip-cache are increased from 650K to 750K to accommodate the max-route scale.

New software features introduced in R06.0.00c

Details of corrected defects are provided in Closed with Code changes R06.0.00c.

Enhanced features introduced in R06.0.00c:

- **Saving system state to Flash** This feature aims to collect/capture system state information for debugging purposes at the customer site.
- Longest Prefix Match Next Hop Walk This feature detects inconsistencies between the software and the hardware LPM next hop programming and can generate a syslog warning or take a corrective action to clear the affected routes.

New software features introduced in R06.0.00b

Details of corrected defects are provided in Closed with Code changes R06.0.00b.

Enhanced features introduced in R06.0.00b:

- Preserving EXP bits in MPLS header Preserves the traffic class based on the EXP value from the MPLS header for the VPLS/VLL traffic from the MPLS uplink. Traffic is queued based on the extracted EXP/traffic class value from the packet.
- **Exclude PCP Marking** With this ACL option, irrespective of priority-force, the packet's pcp value will not be modified on any packet L2/L3/VPLS.
- Recovery using NP MAC FIFO reset on detecting MAC FIFO Full condition This feature
 monitors the NP Memory MAC FIFO full error condition and allows auto recovery of the system
 in cases of MAC FIFO full error. This feature will attempt to reset the FIFO for recovery when
 FIFO full condition is latched.
- Logging hardware error from Tsec statistics and LP IPC buffer corruption into syslog/console - This feature monitors Tsec (backplane LP Ethernet controller) for three types of the errors latched in Tsec like FCS error, code error and carrier sense error while receiving the packet from management card.
- **CRC check on Hi-Gig header in Rx path** This feature is disabled by default. A command has been provided to enable Hi Gig CRC check on Rx path.
- **Flow Control Status** This feature provides a consolidated view of the flow control status information, including pause frames received by the ports, at various sub-system levels of the line card.

New software features introduced in R06.0.00a

Network Packet Broker Enhancements:

Starting in the R06.0.00a release, some Network Packet Broker (NPB) features are enabled only on the NPB FPGA. If you are using any of the following features in NPB deployments on the following line cards, please ensure that you are using the correct NetIron 6.0.00a NPB FPGA files. All the other NPB features are enabled on all line cards and on both the Main and NPB FPGAs.

MLXe Module	NPB FPGA	Main FPGA
BR-MLX-10Gx20	 Packet Timestamping NVGRE stripping Source port labeling 	Following NPB features Not Present: Packet Timestamping NVGRE stripping Source port labeling
BR-MLX-40Gx4	Not Applicable	Packet Timestamping

		NVGRE strippingSource port labeling
BR-MLX-100Gx2	 Packet Timestamping NVGRE stripping Source port labeling 	Following NPB features Not Present: • Packet Timestamping • NVGRE stripping • Source port labeling

The following features are the new NPB features:

- 802.1BR and VN-Tag stripping: This feature strips 802.1br header (ether-type=0x893f) and VN-tag header (ether-type=0x8926) from ingress traffic before sending it for further processing/forwarding. This is useful in cases where the analytics tools do not understand these headers.
- Packet Timestamping: This feature allows inserting an 8-byte timestamp into ingress packets. The timestamp can be NTP time or local clock time.
- **SCTP traffic filtering:** This feature enables the user to filter SCTP traffic based on source and destination TCP/UDP ports.
- Source port labeling: Users can enable this feature to insert a 4-byte label to identify the ingress port. This source port label will hold the SNMP IfIndex value from IFMIB for the interface. Source port is used for downstream filtering.
- **NVGRE stripping:** The NVGRE header-stripping feature enables the user to strip the outer Ethernet, Outer IPv4, and the NVGRE header from incoming IPv4 NVGRE packets. This is useful in cases where the analytics tools do not understand these headers, or if the tool is only interested in the tunneled information.
- Packet Length filtering: This feature allows users to filter ingress IPv4 and IPv6 traffic based on IP Payload Length of packets. For IPv4, payload length excludes IP header length. For IPv6, there is already a Payload Length field present in the header.

The following features are the other new features:

SNMP/MIB Changes:

- PCEP MIB: This feature will provide MIB support to track the status and statistics of PCEP related information. The following tables and notifications are supported: PcePcepEntityTable, PcePcepPeerTable, PcePcepSessTable, pcePcepSessUp, pcePcepSessDown, pcePcepSessPeerOverload, pcePcepSessPeerOverloadClear"
- Auto-bandwidth MIB: This MIB (mplsLspAutoBwTable) will help monitor status and statistics of MPLS RSVP auto-bandwidth related information via SNMP

 SNMP support for CAM utilization (PRODRFE103262): CAM usage can be monitored via SNMP MIBs. This feature aligns MIBs to the current CAM partition/sub-partition structure.

OpenFlow Enhancements:

- OpenFlow: ARP to normal plus controller: With this feature along with regular
 processing of ARP (consumed by CPU or flooded in bridge/vlan domain), punting of ARP
 packets to the SDN controller is also supported when the SDN controller programs such
 a flow rule. ARP packets can be tagged or untagged coming in on configured
 unprotected VLAN.
- OpenFlow support for MPLS as switched: When ingress MPLS traffic with no interface MAC is received on an openflowL2/L23 interface, it will be switched and will not hit the MPLS OpenFlow rule.
- Primary Port LAG: This feature changes primary port in LAG with no traffic disruption.
 Prior to this release, primary port change was manual and caused traffic disruption.
 Starting with NetIron 6.0.00a, the change will be seamless with no traffic disruption.
- AAA local authentication fallback (PRODRFE103246): This feature allows the
 administrator to fallback to the local authentication method in case a server in a
 previous authentication method returned access-reject. Prior to this release this was
 done only in case there was a timeout from servers of earlier methods. In case of
 authentication success from the server, that response is considered final for that
 method and the entire authentication.
- DH group 14 for SSH in non-FIPS mode (PRODRFE103457): In earlier releases, the Diffie Hellman Group 14 is supported for FIPS and CC mode only. With this feature enhancement DH Group 14 is supported in regular mode (for example, when FIPS is not enabled) as well.
- **CE2.0 Change in MLXe**: Rate-limiting function was enhanced to meet CE2.0 guidelines to enable certification.
- Ingress ACL permit logging: This feature when enabled will log packets matching the permit rule of an access-list for IPv4 and IPv6. It is supported for ingress filtering only, and can be enabled for User ACL and rACL bindings. It is not supported for L2ACLs. Logging can be done selectively as well with optional CLI to limit CPU utilization.

PKI offline enrollment:

This feature introduces the following enhancements to PKI certificate management:

- Offline certificate Enrollment: Device will generate CSR and prints it to console and copies a file to flash in base64 format. User can manually take the CSR to CA server and can obtain the certificate. Then User can load the certificate into a device. Useful in case the CA server needs to be offline.
- Offline loading of certificates and CRLs: User can paste the PEM format certificate or CRL onto device console now.
- Certificate chain validation using CRLs: Previously when using CRL, only the revocation status of peer's client certificate is validated not the whole chain.

With this enhancement, we validate the revocation status of entire peer certificate chain including CA certificates.

Optics Support:

Support for QSFP 28 Optics.

Software features introduced in R06.0.00

The following software features are new in this release. For information about which platforms support these features, refer to the Feature Support Matrix.

IPsec enhancements:

- L2 over IPsec The feature provides secure point to point layer 2 extension over WAN.
 The layer 2 traffic is encrypted by IPsec tunnels using the most advanced Suite-B security protocols.
- ICX IPsec interoperability ICX and MLXe have been tested to interoperate in the same IPsec tunnels for secure VPN connection for enterprise.
- vRouter IPsec interoperability vRouter and MLXe have been tested to interoperate in the same IPsec tunnels for secure VPN connection between enterprise data center and public cloud for hybrid cloud use case.
- Track IPsec tunnels for VRRP failover If the IPsec tunnel goes down, the VRRP / VRRPe priority will decrement and trigger the failover the VRRP / VRRPe peers.
- Option to display IKEv2 debug for a particular IPsec tunnel The debug option displays IKEv2 debug logs for a specific IPSec tunnel as configured by the user. The debug logs are as per the currently supported debug logs such as trace, event, error, packet et cetera.

Software-defined Network (SDN):

- Path Computing Element Communication Protocol (PCEP) Path Computing Element
 (PCE) is SDN based solution for MPLS traffic engineering. MLXe will act as the PCE client
 (PCC) that will request RSVP LSP path calculation from the PCE server. PCE server will
 inquire its own traffic engineering database and respond with the explicit path object to
 the PCC. Stateless PCE based on RFC 5440 will be supported in NI 6.0.
- OpenFlow to MPLS LSP as logical port MPLS LSP tunnels are supported in OpenFlow as logical ports.

Network Packet Broker enhancements:

- Increase traffic streams to 6K The number of traffic streams / transparent VLANs is increased to 6K to support high scale network packet broker and telemetry functions.
- Increase L2 and L3 ACL to 4K The number of Layer 2 and Layer 3 ACLs is increased to 4K to support high scale packet filtering.
- SNMP monitoring support L2 ACL SNMP monitoring is enabled for L2 ACL through MIB.

- High/low watermark thresholds for traffic statistics The high and low watermarks for the past 1 hour and past 24 hours of each physical interface will be tracked for interface statistics.
- IPv6 ACL .1p match It allows user to filter IPv6 traffic on the basis of .1p priority.

BGP diverse path:

- BGP Add-Path This enables router to advertise multiple paths for the same prefix for multi-pathing and faster convergence.
- BGP Best External The router can advertise the best external BGP path to the BGP neighbors even when it receives a better internal BGP route. This enable multiple exit paths to other AS.

GRE enhancements:

- GRE tunnel bypassing ACL An option is added to allow traffic coming in from the GRE tunnel to bypass the ACL configured on the interface.
- GRE tunnel to hand off to MPLS This allows GRE tunnel to hand off to MPLS LSP
- IPv6 over IPv4 GRE IPv6 traffic can be carried across IPv4 GRE tunnels.

IPv6 enhancements:

- IPv6 for VE over VPLS IPv6 addresses and IPv6 routing will be supported on VE over VPLS interfaces.
- IPv6 ACL deny logging The IPv6 ACL deny logging feature records traffic flows that are denied by IPv6 inbound ACLs. When a packet is denied by an ACL, a syslog entry is generated.
- IPv6 ACL per SNMP server group IPv6 ACLs can be applied to individual SNMP server group to limit access at a per group level.

New Optics:

 40G Bi-Di QSFP – 40G Bi-Di QSFP+ optics is now supported on the MLXe 4-port 40G line card.

Other features:

- BFD Support across MCT BFD is supported on routers in MCT to provide connectivity check for faster route convergence.
- Load balance VLL to a specific group of LSPs Traffic from VLL can be load balanced up to 8 LSPs.
- Radius over TCP / TLS Radius connection will be sent over TCP (RFC 6613) and also over TLS (RFC 6614) to provide encrypted RADIUS.
- Increase Netconf RPC response limit to 512K The RPC response limit to a NETCONF client has been increased to 512 Kbytes. It is 32 Kbytes in previous releases.
- LDP shortcut Router generated packets such as routing protocols and OAM packets (pings and traceroutes) can be sent over MPLS LDP tunnels instead of regular IP routing.

- Multicast snooping per flag aging The multicast snooping database will age out per flag.
- IPC stuck auto detection on LP and MP This feature generates syslog's to indicate when IPC Tx queue is stuck when the queue is non-empty.
- Show tech additions The following show tech sub-commands have been added.

Show cpu histogram hold no clear

Show cpu histogram wait noclear

Show tm log

Show tm histogram

Show tm non-empty-queue

Itc show statistics

Itc show error list

Statistics for IPC Retransmits from MP

- Show command for disabled CCEP port with MCT Spoke PW status This show command is to display the MCT spoke PW state for both L2 and L2VPN client ports.
- MCT CCEP port up delay A configurable delay is added to LACP-BLOCKED state after CCEP port is enabled to prevent duplicate L2 BUM packets.
- High CPU auto detection on MP The MP CPU is monitored regularly. If the CPU crosses a threshold, log file will be created for troubleshooting.
- LSP down syslog reason string This feature adds a reason string to LSP down syslog to explain what causes the LSP to go down
- IPC statistics show TX drops New fields are added to show the drops in reliable and unreliable transmit under the ipc show statistics command

CLI commands

The following commands are new in this release.

Modified commands in R06.0.00d

The following commands have been modified in this release.

- Vlan *vlan-id* [name *vlan-name*]
- system-max ip-vrf-route num

New CLI commands R06.0.00c

- memdump slot-slot-id
- reload-memdump
- reset-memdump
- [no] sysmon lpm nh-walk { action action-selection | auto | polling-period duration | threshold threshold-setting}
- Show sysmon Ipm nh-walk status
- [no] sysmon lpm nh-walk start

New CLI commands R06.0.00b

- [no] set-force-tc-match-label-exp
- [no] access-list 1200 permit any any etype any priority-mapping priority-force exclude-pcp-marking
- show flow-ctrl status all

New CLI commands R06.0.00a

- [no] fpga_mode_npb
- [no] lag port-primary-dynamic
- [no] port-primary-dynamic
- [no] lacp system-priority number
- [no] strip-802-1br all
- [no] strip-vn-tag slot slot-num
- [no] strip-802-1br slot slot-num device device-id
- [no] strip-vn-tag all
- [no] strip-vn-tag slot *slot-num*
- [no] strip-vn-tag slot slot-num device device-id
- show packet-encap-processing
- show packet-encap-processing strip-802-1BR

- show packet-encap-processing strip-vn-tag
- show packet-encap-processing [slot slot-num]
- show packet-encap-processing interface Ethernet
- show running-config (for config-pkt-encap-proc mode)
- ip match-payload-len
- ipv6 match-payload-len
- show ip match-payload-len
- show ip match-payload-len [interface ethernet slot | port]
- show ipv6 match-payload-len
- show ipv6 match-payload-len [interface ethernet slot | port]
- [no] config-pkt-encap-proc

Modified commands in Brocade Network Packet Broker R06.0.00a

 The show version and show flash command output will include information about whether the XPP FPGA on an LP is NPB. If there is no reference to NPB in the command output, it is the MAIN FPGA.

CLI commands introduced in R06.0.00

- additional-paths
- additional-paths select
- · advertise-best-external
- clear np qos statistics
- client-interfaces sync_ccep_early
- dead-timer
- disable-acl-for-6to4
- · disable-acl-for-gre
- enable pce
- enable-qos-statistics
- match additional-paths advertise-set
- message-bundle-support
- max-unknown-messages
- max-unknown-requests
- min-keepalive

- negotiation-deny
- neighbor additional-paths
- neighbor additional-paths advertise
- new additional-paths disable
- pce compute
- preference
- request-timer
- router pcep
- set next-hop-tvf-domain
- show acl-policy
- show tvf-domain
- suppress-ipv6-priority-mapping
- sysmon mp-high-cpu enable
- sysmon mp-high-cpu cpu-threshold
- sysmon mp-high-cpu task-threshold
- sysmon ipc rel-q-mon enable
- trv-domain
- vII-peer (load-balance)

Modified commands in R06.0.00

The following commands have been modified in this release.

- ipv6 access-list
- interface ve
- set next-hop-tvf-domain
- show cluster
- show ipsec profile
- show ip multicast
- show ip multicast vpls
- show ip route
- show ipv6 bgp neighbors
- show ipv6 bgp routes
- show np gos statistics
- show mpls vII
- show run

- sysmon np memory-errors action
- track-port
- vII-peer
- vII-peer (load balance)

Deprecated commands

There are no deprecated commands in this release.

MIBs and messages

MIBs

New MIB Objects

No MIB objects were introduced in release R06.0.00d.

New MIB Objects

No MIB objects were introduced in release R06.0.00c.

New MIB Objects

No MIB objects were introduced in release R06.0.00b.

MIB Objects

The following MIB objects are introduced in release R06.0.00a:

- fdryL2AclIfBindAclName New OID
- fdryL2NamedAclTable New table
 - fdryL2NamedAclIndex
 - fdryL2NamedAclClauseIndex
 - fdryL2NamedAclName
 - fdryL2NamedAclAction
 - fdryL2NamedAclSourceMac
 - fdryL2NamedAclSourceMacMask
 - fdryL2NamedAclDestinationMac
 - fdryL2NamedAclDestinationMacMask
 - fdryL2NamedAclVlanId
 - fdryL2NamedAclEthernetType
 - fdryL2NamedAclDot1pPriority
 - fdryL2NamedAclDot1pPriorityForce
 - fdryL2NamedAclDot1pPriorityMapping
 - fdryL2NamedAclMirrorPackets
 - fdryL2NamedAclLogEnable
 - fdryL2NamedAclRowStatus
- bgp4V2NlriRxPathIdentifier New OID
- bgp4V2NlriTxPathIdentifier New OID
- IfXWatermarkTable New Table
 - ifWatermarkCurrentHourWindowStartTime
 - ifWatermarkCurrentHourHighRxUtilTime
 - ifWatermarkCurrentHourHighInPktRate
 - ifWatermarkCurrentHourHighInBitRate
 - ifWatermarkCurrentHourLowRxInUtilTime
 - ifWatermarkCurrentHourLowInPktRate
 - ifWatermarkCurrentHourLowInBitRate
 - ifWatermarkCurrentHourHighTxUtilTime
 - ifWatermarkCurrentHourHighOutPktRate
 - ifWatermarkCurrentHourHighOutBitRate

- ifWatermarkCurrentHourLowTxOutUtilTime
- ifWatermarkCurrentHourLowOutPktRate
- ifWatermarkCurrentHourLowOutBitRate
- ifWatermarkLastHourHighRxUtilTime
- ifWatermarkLastHourHighInPktRate
- ifWatermarkLastHourHighInBitRate
- ifWatermarkLastHourLowRxUtilTime
- ifWatermarkLastHourLowInPktRate
- ifWatermarkLastHourLowInBitRate
- ifWatermarkLastHourHighTxUtilTime
- ifWatermarkLastHourHighOutPktRate
- ifWatermarkLastHourHighOutBitRate
- ifWatermarkLastHourLowTxUtilTime
- ifWatermarkLastHourLowOutPktRate
- ifWatermarkLastHourLowOutBitRate
- ifWatermarkCurrentDayWindowStartTime
- ifWatermarkCurrentDayHighRxUtilTime
- ifWatermarkCurrentDayHighInPktRate
- ifWatermarkCurrentDayHighInBitRate
- ifWatermarkCurrentDayLowRxInUtilTime
- ifWatermarkCurrentDayLowInPktRate
- ifWatermarkCurrentDayLowInBitRate
- ifWatermarkCurrentDayHighTxUtilTime
- ifWatermarkCurrentDayHighOutPktRate
- ifWatermarkCurrentDayHighOutBitRate
- ifWatermarkCurrentDayLowTxOutUtilTime
- ifWatermarkCurrentDayLowOutPktRate
- ifWatermarkCurrentDayLowOutBitRate
- ifWatermarkLastDayHighRxUtilTime
- ifWatermarkLastDayHighInPktRate
- ifWatermarkLastDayHighInBitRate
- ifWatermarkLastDayLowRxUtilTime
- ifWatermarkLastDayLowInPktRate
- ifWatermarkLastDayLowInBitRate
- ifWatermarkLastDayHighTxUtilTime
- ifWatermarkLastDayHighOutPktRate
- ifWatermarkLastDayHighOutBitRate
- ifWatermarkLastDayLowTxUtilTimeifWatermarkLastDayLowOutPktRate
- ifWatermarkLastDayLowOutBitRate

Deprecated MIBs

There are no deprecated MIBs in this release.

RFCs and standards

The following RFCs and standards are newly supported in this release:

- draft-ietf-idr-add-paths-10
- draft-ietf-idr-best-external-05
- RFC 4655 A Path Computation Element (PCE) Based Architecture.
- RFC 5440 Path Computation Element (PCE) Protocol (PCEP). Fully supported except SVEC and Load-balance objects
- RFC 5521 Extensions to the Path Computation Element Protocol (PCEP) for Route Exclusions. This is partially supported; SRLG ID and Unnumbered interfaces are not supported. Explicit Exclusion Route sub-object (EXRS) is not supported.

Hardware support

Supported devices for R06.0.00a

The following devices are supported in this release:

- Brocade NetIron XMR 4000
- Brocade NetIron XMR 8000
- Brocade NetIron XMR 16000
- Brocade NetIron XMR 32000
- Brocade MLX-4
- Brocade MLX-8
- Brocade MLX-16
- Brocade MLX-32
- Brocade MLXe-4
- Brocade MLXe-8
- Brocade MLXe-16
- Brocade MLXe-32
- Brocade NetIron CES 2024C-4X
- Brocade NetIron CES 2024F-4X
- Brocade NetIron CER-RT 2024C-4X
- Brocade NetIron CER-RT 2024F-4X
- Brocade NetIron CES 2024C
- Brocade NetIron CES 2024F
- Brocade NetIron CES 2048C
- Brocade NetIron CES 2048CX
- Brocade NetIron CES 2048F
- Brocade NetIron CES 2048FX
- Brocade NetIron CER 2024C
- Brocade NetIron CER-RT 2024C
- Brocade NetIron CER 2024F
- Brocade NetIron CER-RT 2024F
- Brocade NetIron CER 2048C
- Brocade NetIron CER-RT 2048C
- Brocade NetIron CER 2048CX
- Brocade NetIron CER-RT 2048CX
- Brocade NetIron CER 2048F
- Brocade NetIron CER-RT 2048F
- Brocade NetIron CER 2048FX
- Brocade NetIron CER-RT 2048FX

Supported devices for Brocade Network Packet Broker R06.0.00a

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

Supported modules

The following interface modules are supported in this release:

Module	Description	Compatib	le devices	Generation
		MLXe with MLX or MR2-M mgmt. module	MLXe with XMR or MR2-X mgmt. module	
BR-MLX-10GX4- IPSEC-M	Brocade 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	Brocade 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	Brocade 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	Brocade 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	Compatib	ole devices	Generation
		MLXe with MLX or MR2-M mgmt. module	MLXe with XMR or MR2-X mgmt. module	
BR-MLX-100GX2- CFP2-M	Brocade MLX 2-port 100 GbE (M) CFP2 module. Supports 512,000 IPv4 routes in FIB.	Yes	Yes	3
BR-MLX-100GX2- CFP2-X2	Brocade 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-100GX1-X	Brocade MLX Series 1-port 100 GbE module with IPv4/IPv6/MPLS hardware support—requires high- speed switch fabric modules and CFP optics.	Yes	Yes	2
BR-MLX-100GX2-X	Brocade MLX Series 2-port 100 GbE module with IPv4/IPv6/MPLS hardware support—requires high- speed switch fabric modules and CFP optics.	Yes	Yes	2
BR-MLX-10GX8-X	Brocade 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	Brocade 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	Brocade 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	Brocade 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	Brocade 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	Brocade 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	ole devices	Generation
		MLXe with MLX or MR2-M mgmt. module	MLXe with XMR or MR2-X mgmt. module	
BR-MLX-1GFX24-X	Brocade 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	Brocade 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	Brocade MLXe 24-port 10 GbE module with IPv4/IPv6/MPLS hardware support—requires SFP optics. Supports 256,000 IPv4 routes in FIB.	Yes	No	За
NI-MLX-1GX48-T- A	Brocade MLX Series 48-port 10/100/1000BASE-T, MRJ21 module with IPv4/IPv6/MPLS hardware support.	Yes	No	1.1
NI-MLX-10GX8-D	Brocade 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	Compatib	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	Brocade 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	Brocade 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 NetIron XMR/MLX AC
NI-X-DCPWR-A	1200W power supply.	4-Slot NetIron XMR/MLX DC
BR-MLXE-32-ACPWR-3000	AC 3000W power supply.	32-slot NetIron
		MLXe/XMR/MLX
BR-MLXE-32-DCPWR-3000	DC 3000W power supply.	32-slot NetIron
		MLXe/XMR/MLX
NIBI-32-ACPWR-A	AC 2400W power supply.	32-Slot NetIron
		MLXe/XMR/MLX
NIBI-32-DCPWR	2400W power supply.	32-Slot NetIron
		MLXe/XMR/MLX DC

Supported optics

For a list of supported fiber-optic transceivers that are available from Brocade, refer to the latest version of the Brocade Optics Family Data Sheet available online at www.brocade.com.

The NetIron 6.0.00a release includes support for the following:

Part number	Description	
CFP2-TO-QSFP28-MOD	CFP2 to QSFP28 conversion module	

Software upgrade and downgrade

Image file names

Download the following images from <u>www.brocade.com</u>. In some cases boot and manifest images do not need to be upgraded.

Brocade MLX Series and NetIron XMR devices

NOTE: When upgrading Multi-Service Ironware for MLX Series/XMR, 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 R6.0.00d MLX Series/XMR software upgrade

Manifest File for XMR/MLX Release 06.0.00d

-NETIRON_IRONWARE_VER XMR-MLXV6.0.00d

-DIRECTORY /Boot/InterfaceModule

xmlprm05900.bin

-DIRECTORY /Boot/ManagementModule

xmprm05900.bin

#Application Images

-DIRECTORY /Combined/FPGA

lpfpga06000d.bin

-DIRECTORY /Combined/Application

xm06000d.bin

-DIRECTORY / Monitor / Interface Module

xmlb06000.bin

-DIRECTORY / Monitor / Management Module

xmb06000.bin

-DIRECTORY / Application / Management Module

xmr06000d.bin

-DIRECTORY / Application / Interface Module

xmlp06000d.bin

-DIRECTORY /FPGA/InterfaceModule

pbif4x40 06000d.bin 2.05

pbif8x10_06000d.bin 2.24

pbifmrj 06000d.bin 4.04

pbifsp2 06000d.bin 4.02

statsmrj 06000d.bin 0.09

xgmacsp2_06000d.bin 0.17

xpp2x100 06000d.bin 1.05

xpp4x40_06000d.bin 6.00

xpp4x10g3_06000d.bin 5.00

xpp8x10_06000d.bin 1.08 xppmrj_06000d.bin 1.03

xppsp2 06000d.bin 1.01

xppxsp2 06000d.bin 1.01

pbif-ber-g3_06000d.bin 2.05

xpp20x10g3 06000d.bin 6.04

xpp2x100g3 06000d.bin 6.04

-DIRECTORY /FPGA/ManagementModule

mbridge32_06000d.xsvf 36

mbridge 06000d.xsvf 37

sbridge_06000d.mcs 6

hsbridge 06000d.mcs 17

-END_OF_IMAGES

-DIRECTORY /Signatures

xmlprm05900.sig

xmprm05900.sig

xmlb06000.sig

xmb06000.sig

xmr06000d.sig

xmlp06000d.sig

lpfpga06000d.sig

hsbridge 06000d.sig

mbridge_06000d.sig

mbridge32 06000d.sig

sbridge_06000d.sig

pbif4x40 06000d.sig

pbif8x10_06000d.sig

pbifmrj_06000d.sig

pbifsp2_06000d.sig

pbif-ber-g3 06000d.sig

statsmrj_06000d.sig

xgmacsp2_06000d.sig

xpp2x100_06000d.sig

xpp20x10g3_06000d.sig

xpp2x100g3_06000d.sig

xpp4x40 06000d.sig

xpp4x10g3_06000d.sig

xpp8x10_06000d.sig

xppmrj_06000d.sig

xppsp2_06000d.sig

xppxsp2_06000d.sig

xmlprm05900.sha256

xmprm05900.sha256

xmlb06000.sha256

xmb06000.sha256

xmr06000d.sha256

xmlp06000d.sha256

lpfpga06000d.sha256

hsbridge_06000d.sha256

mbridge 06000d.sha256

mbridge32_06000d.sha256

sbridge_06000d.sha256

pbif4x40_06000d.sha256

pbif8x10_06000d.sha256

pbifmrj_06000d.sha256

pbifsp2_06000d.sha256

pbif-ber-g3_06000d.sha256

statsmrj 06000d.sha256

xgmacsp2_06000d.sha256

xpp2x100_06000d.sha256

xpp20x10g3_06000d.sha256

xpp2x100g3_06000d.sha256

xpp4x40_06000d.sha256

xpp4x10g3_06000d.sha256

xpp8x10_06000d.sha256

xppmrj_06000d.sha256

xppsp2_06000d.sha256

xppxsp2_06000d.sha256

FPGA file names and supported modules

File Name	Supported Modules
pbif4x40	4x40G modules
pbif8x10	8x10G modules
pbifmrj	24x1G and 48x1G modules
pbifsp2	2x10G, 4x10G, 4x10G-x and 20x1G modules
statsmrj	24x1G and 48x1G modules
xgmacsp2	2x10G, 4x10G-x and 4x10G modules
xpp2x100	2x100G modules (double-wide CFP-based module)
xpp4x40	4x40G modules
xpp8x10	8x10G modules
xppmrj	24x1G and 48x1G modules
xppsp2	2x10G, 4x10G, and 20x1G modules
xpp4x10g3	4x10G and 4x1G (M) IPSEC modules
xppxsp2	4x10G-x
pbif-ber-g3	20x10G and 2x100G modules (-M and -X2)
xpp20x10g3	20x10G modules
xpp2x100g3	2x100G modules (half-slot CFP2-based module)
mbridge32	MBRIDGE32
mbridge	MBRIDGE
sbridge	Switch fabric modules
hsbridge	High speed switch fabric modules

Brocade NetIron CES and NetIron CER devices

NOTE: When upgrading Multi-Service Ironware for CES/CER, 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 R6.0.00d software upgrade

-NETIRON_IRONWARE_VER CES-CERV6.0.00d

-DIRECTORY /Boot

ceb06000.bin

-DIRECTORY /Application

ce06000d.bin

-DIRECTORY /FPGA

pbifmetro_06000d.bin

-END_OF_IMAGES

-DIRECTORY /Signatures

ceb06000.sig

ce06000d.sig

pbifmetro_06000d.sig

ceb06000.sha256

ce06000d.sha256

pbifmetro_06000d.sha256 -DIRECTORY /MIBS ce06000d.mib ce06000d std.mib

Manifest for Brocade Network Packet Broker devices

NOTE: When upgrading Multi-Service Ironware for MLX Series/XMR, 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 R6.0.00d software upgrade

-NETIRON IRONWARE VER XMR-MLXV6.0.00d

-DIRECTORY /Boot/InterfaceModule

xmlprm05900.bin

-DIRECTORY /Boot/ManagementModule

xmprm05900.bin

Application Images

-DIRECTORY /Combined/FPGA

lpfpga_npb_06000d.bin

-DIRECTORY /Combined/Application

xm06000d.bin

-DIRECTORY / Monitor / Interface Module

xmlb06000.bin

-DIRECTORY / Monitor / Management Module

xmb06000.bin

-DIRECTORY / Application / Management Module

xmr06000d.bin

-DIRECTORY / Application / Interface Module

xmlp06000d.bin

-DIRECTORY /FPGA/InterfaceModule

pbif4x40 06000d.bin 2.05

pbif8x10_06000d.bin 2.24

pbifmrj 06000d.bin 4.04

pbifsp2 06000d.bin 4.02

statsmrj_06000d.bin 0.09

xgmacsp2 06000d.bin 0.17

xpp2x100 06000d.bin 1.05

xpp4x40 06000d.bin 6.00

xpp4x10g3 06000d.bin 5.00

xpp8x10 06000d.bin 1.08

xppmrj 06000d.bin 1.03

xppsp2 06000d.bin 1.01

xppxsp2 06000d.bin 1.01

pbif-ber-g3 06000d.bin 2.05

xpp20x10g3 npb 06000d.bin 6.14

xpp2x100g3_npb_06000d.bin 6.14

-DIRECTORY /FPGA/ManagementModule

mbridge32 06000d.xsvf 36

mbridge 06000d.xsvf 37

sbridge_06000d.mcs 6

hsbridge 06000d.mcs 17

-END_OF_IMAGES

-DIRECTORY /Signatures

xmlprm05900.sig

xmprm05900.sig

xmlb06000.sig

xmb06000.sig

xmr06000d.sig

xmlp06000d.sig

lpfpga_npb_06000d.sig

hsbridge_06000d.sig

mbridge_06000d.sig

mbridge32_06000d.sig

sbridge_06000d.sig

pbif4x40_06000d.sig

pbif8x10_06000d.sig

pbifmrj 06000d.sig

pbifsp2_06000d.sig

pbif-ber-g3_06000d.sig

statsmrj_06000d.sig

xgmacsp2_06000d.sig

xpp2x100_06000d.sig

xpp20x10g3_npb_06000d.sig

xpp2x100g3_npb_06000d.sig

xpp4x40_06000d.sig

xpp4x10g3_06000d.sig

xpp8x10_06000d.sig

xppmrj 06000d.sig

xppsp2_06000d.sig

xppxsp2 06000d.sig

xmlprm05900.sha256

xmprm05900.sha256

xmlb06000.sha256

xmb06000.sha256

xmr06000d.sha256

xmlp06000d.sha256

lpfpga_npb_06000d.sha256

hsbridge_06000d.sha256

mbridge 06000d.sha256

mbridge32_06000d.sha256

sbridge 06000d.sha256

pbif4x40 06000d.sha256

pbif8x10 06000d.sha256

pbifmrj 06000d.sha256 pbifsp2 06000d.sha256 pbif-ber-g3 06000d.sha256 statsmrj 06000d.sha256 xgmacsp2 06000d.sha256 xpp2x100_06000d.sha256 xpp20x10g3_npb_06000d.sha256 xpp2x100g3 npb 06000d.sha256 xpp4x40_06000d.sha256 xpp4x10g3 06000d.sha256 xpp8x10 06000d.sha256 xppmrj 06000d.sha256 xppsp2 06000d.sha256 xppxsp2 06000d.sha256 # MIBS: -DIRECTORY / MIBS xmr06000d.mib xmr06000d_std.mib

Migration path

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

Upgrade and downgrade considerations

To upgrade to 6.0.00a, a two-step approach may be required.

Scenario 1

Customers running releases 5.9.00a, 5.6.00ga, 5.6.00h, 5.8.00d, 5.7.00e or subsequent releases can directly upgrade to 6.0.00a using MLX06000a_Manifest.txt.

NOTE: If the System is not running one of the releases listed above, follow scenario 2 or scenario 3 mentioned below.

Scenario 2

To upgrade from 5.6.00c or any later release (other than the images mentioned in Scenario 1), a two-step approach is required.

- 1. Upgrade to 5.9.00b and reload the device.
- 2. Upgrade to 6.0.00a using MLX06000a_Manifest and reload the device.

Scenario 3

To upgrade to 6.0.00a from releases prior to R05.6.00c, use the following procedure.

- 1. Upgrade to 5.9.00b and reload the device.
- 2. Upgrade again to 5.9.00b 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 6.0.00a with MLX06000a_Manifest.txt and reload the device.

Scenario 4

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

- Packet Timestamping
- Source port labeling
- NVGRE stripping
- 1. Upgrade to 6.0.00a 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 NI 6.0.00a.
- 3. Configure the **fpga-mode-npb** command and save the configuration.
- 4. Upgrade to the 6.0.00a NPB image using MLX_npb_06000a_Manifest.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

```
MLX-GVR#show version
System Mode: XMR
. . .
. . .
FPGA versions:
Valid PBIF Version = 2.05, Build Time = 5/20/2015 22:20:00
Valid XPP Version = 6.14 (NPB), Build Time = 5/18/2016 17:39:00
MACXPP100G 0
MACXPP100G 1
1199 MHz MPC P2010 (version 8021/1051) 599 MHz bus
512 KB Boot Flash (MX29LV040C), 66846720 Bytes (~64 MB) Code Flash (MT28F256J3)
3072 MB DRAM, 8 KB SRAM
. . .
        : Version 5.9.0T175 Copyright (c) 1996-2015 Brocade Communications Systems,
Compiled on Mar 19 2015 at 03:17:00 labeled as xmlprm05900
 (449576 bytes) from boot flash
```

```
Monitor: Version 6.0.0T175 Copyright (c) 1996-2015 Brocade Communications Systems,
Inc.
Compiled on Jun 7 2016 at 16:09:50 labeled as xmlb06000
 (571513 bytes) from code flash
IronWare: Version 6.0.0aT177 Copyright (c) 1996-2015 Brocade Communications Systems,
Compiled on Jul 25 2016 at 11:27:22 labeled as xmlp06000a
 (9529041 bytes) from Primary
FPGA versions:
Valid PBIF Version = 2.05, Build Time = 5/20/2015 22:20:00
Valid XPP Version = 6.14 (NPB), Build Time = 5/2/2016 12:00:00
All show version done
MLX-GVR#
Output example for the show flash command
MLX-GVR#show flash
Line Card Slot 1
Code Flash: Type MT28F256J3, Size 66846720 Bytes (~64 MB)
  o IronWare Image (Primary)
   Version 6.0.0aT177, Size 9529041 bytes, Check Sum a2c5
   Compiled on Jul 25 2016 at 11:27:22 labeled as xmlp06000a
  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 6.0.0T175, Size 571513 bytes, Check Sum 4875
    Compiled on Jun 7 2016 at 16:09:50 labeled as xmlb06000
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 = 2.05, Build Time = 5/20/2015 22:20:00
XPP Version = 6.14 (NPB), Build Time = 5/18/2016 17:39:00
Line Card Slot 2
Code Flash: Type MT28F256J3, Size 66846720 Bytes (~64 MB)
  o IronWare Image (Primary)
   Version 6.0.0aT177, Size 9529041 bytes, Check Sum a2c5
   Compiled on Jul 25 2016 at 11:27:22 labeled as xmlp06000a
  o IronWare Image (Secondary)
   Version 5.7.0T177, Size 7794476 bytes, Check Sum 5e0c
```

Compiled on Jun 26 2014 at 12:16:28 labeled as xmlp05700

```
o Monitor Image
   Version 6.0.0T175, Size 571513 bytes, Check Sum 4875
   Compiled on Jun 7 2016 at 16:09:50 labeled as xmlb06000
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 = 2.05, Build Time = 5/20/2015 22:20:00
XPP Version = 6.14 (NPB), Build Time = 5/2/2016 12:00:00
Line Card Slot 16
Code Flash: Type MT28F256J3, Size 66846720 Bytes (~64 MB)
 o IronWare Image (Primary)
   Version 6.0.0aT177, Size 9529041 bytes, Check Sum a2c5
   Compiled on Jul 25 2016 at 11:27:22 labeled as xmlp06000a
 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 6.0.0T175, Size 571513 bytes, Check Sum 4875
    Compiled on Jun 7 2016 at 16:09:50 labeled as xmlb06000
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 = 2.05, Build Time = 5/20/2015 22:20:00
XPP Version = 6.14 (NPB), Build Time = 5/18/2016 17:39:00
All show flash done
MLX-GVR#
```

Output example for the show module command

MLX-GVR#show module 90 Module Status Ports Starting MAC M1 (upper):BR-MLX-MR2-X Management Module Active M2 (lower):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-10Gx20 20-port 1/10GbE Module CARD STATE UP 20 cc4e.2445.2300 S2: BR-MLX-100Gx2-CFP2 2-port 100GbE Module CARD STATE UP cc4e.2445.2330

```
...
...
S15: BR-MLX-100Gx2-CFP2 2-port 100GbE Module CARD_STATE_UP
2 cc4e.2445.25a0
S16: BR-MLX-10Gx20 20-port 1/10GbE Module CARD_STATE_UP
20 cc4e.2445.25d0
MLX-GVR#
```

OpenFlow upgrade and downgrade

When downgrading the system from R06.0.00a to R05.8.00, 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.

Brocade 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 Brocade NetIron Software Upgrade Guide.

Hitless upgrade support

Hitless Upgrade is supported from R06.0.00b and R06.0.00c to R06.0.00d.

Limitations and restrictions

Scalability

All scalability limits are subject to change. The limits noted in this section apply to all the platforms listed unless otherwise specified.

Scalability limits	Brocade MLXe Series
IPv4 non-default VRF routes	750K
System max ip-route and ip-cache	750K
Address family IPv4 max-route	750K

Compatibility and interoperability

- Mlxe (NI6.0) and Vyatta (4.2R1) IPsec interop
- Mlxe (NI5.9.0a) and ICX (8.0.41) IPsec interop
- Mlxe (NI6.0) and BFO 1.2 interop

802.1BR and VN-tag header processing have the following limitations.

- If the ingress port is on a 24x10 module, it is recommended to use a catch all Layer 2 Policy Based Routing (L2 PBR) to forward that traffic to a service port for VNTAG and 802.1BR header removal, followed by L2 and L3 PBR on the service port.
- Other ingress modules (8X10G etc) can separate the 802.1BR and VNTAG traffic to the service port using L2 PBR, and conduct L2/L3 PBR matching on the remaining traffic.
- 802.1BR header stripping and VN-tag header stripping features are supported in BR-MLX-40Gx4, BR-MLX-10Gx20, and BR-MLX-100Gx2-CFP2 modules.
- When using the 802.1BR header stripping and VN-tag header stripping features with loopback system configuration (intermediate card), support is only available on the BR-MLX-40Gx4 module. The 802.1BR header stripping and VN-tag header stripping configuration with loopback system is not supported on the BR-MLX-10Gx20 and BR-MLX-100Gx2-CFP2 modules.

Important notes

Brocade NetIron CES device (512M memory) recommendations.

- Brocade NetIron CES configured with any MPLS feature AND any Layer 2 or Layer 3 scalability running at maximum system values will run at borderline or below the threshold memory for normal runtime operation. This is NOT a recommended configuration in NetIron 6.0.00x.
 Customers on earlier NetIron versions should not upgrade to NetIron 6.0.00x.
- Brocade NetIron CES configured with any MPLS feature and any Layer 2 or Layer 3 scalability running at default system values will run above threshold memory for normal runtime operation. This is a supported configuration for NetIron 6.0.00x.
- Brocade NetIron CES configured with any Layer 2 or Layer 3 scalability running at maximum system values and without any MPLS feature will run above threshold memory for normal runtime operation. This is a supported configuration for NetIron 6.0.00x.

- MCT timers for CES/CER: Recommended timers for scaled environments are 1s for 3 tries.
- BFD for CES/CER: In highly scaled CES/CER environments, the implementation of BFD is not recommended.
- IPSec and Hitless Upgrade: A few IPsec tunnels may flap during HLOS window for certain highly scaled scenarios with short rekey timers.

Optics adapters

• The NetIron 6.0.00a release includes support for the CFP2-TO-QSFP28-MOD optics adapter. Upon installation, expect a linkup time of approximately 10 seconds.

Hardware Notes

MR management module is supported until R05.7.00, and not supported in NI R05.8.00 and later. The MR2 management module is required in NI R05.8.00 and later releases.

- If Gen1.1 line cards are present in a chassis, Gen3 modules cannot go to –X2 scale. In such cases, only the scale defined for Gen1.1 cards can be achieved. Gen1.1 cards will have to be removed from the chassis to achieve –X2 scale.
- On a chassis with Gen1.1 cards, it is strongly recommended to keep system-max values within the maximum supported in the CAM profile being used.
- With 1.8M IPv6 routes, during an MP switchover, protocol flaps or ND flaps could be encountered. The workaround is to use the following timer configuration –

```
ipv6 nd reachable-time 3000
!
!
!
address-family ipv6 unicast
graceful-restart restart-time 1800
graceful-restart stale-routes-time 1900
graceful-restart purge-time 1950
```

- With –X2 scaling, it is recommended to limit BFD timers to >= 200ms using the command bfd interval 200 min-rx 200 multiplier 3
- With 2.4M IPv4 routes, BGP can take 3 to 4 minutes to learn routes on MP and 10 to 15 minutes to program routes on the LP. If the routes have MPLS next hops with several ECMP paths, learning can take up to 25 minutes.
- With 2M VPN routes configured, deleting 1000 VRFs or more within a few seconds might result in the MP and LP being out-of-sync. Workaround would be to leave a 5 second gap between deletion of every VRF.
- With –X2 scaling, LACP (short timer) flaps may be seen when an LP on which 2.4M IPv4 routes have been learned is reloaded.
- On BR-MLX-10Gx4-M-IPSEC, in 1G mode, when unencrypted traffic exceeds 99.9%, InErrors, may be seen in the "show statistics" output. These are seen as FCS errors (as shown below).
 This issue can be seen on the four 1G ports, as well as the four 10G/1G ports when operating in 1G mode, with non-IPsec traffic.
- 100% throughput can be achieved on BR-MLX-10Gx4-M-IPSEC with IPsec traffic.

InBroadcastPkts	0	OutBroadcastPkts	0
InMulticastPkts	0	OutMulticastPkts	0
InUnicastPkts	870131	OutUnicastPkts	870218
InDiscards	0	OutDiscards	0
InErrors	126	OutErrors	0
InCollisions	0	OutCollisions	0
		OutLateCollisions	0
Alignment	0	FCS	126
InFlowCtrlPkts	0	OutFlowCtrlPkts	0
GiantPkts	0	ShortPkts	0
InBitsPerSec	997746326	OutBitsPerSec	997737206
InPktsPerSec	13859	OutPktsPerSec	13857
InUtilization	99.99%	OutUtilization	99.99%

• 100G CFP2 ER4 optic is supported on the MLXe 2-port 100GbE CFP2 line card with hardware revision 15 or later only. Use the *show version slot* command to check the hardware version of the line card and confirm that the part number (underlined in the example below) is -15 or later.

Syntax: **show version slot** <*slot number*>

```
MLX#sh ver sl 4
______
SL 4: BR-MLX-100Gx2-CFP2 2-port 100GbE Module (Serial #: CWC0440K027, Part #:
60-1002934-15)
License: 2x100GbE-X2-Scaling-UPG (LID: eyeFJJFmFHM)
        : Version 5.9.0T175 Copyright (c) 1996-2015 Brocade Communications
Systems, Inc.
Compiled on Mar 19 2015 at 03:17:00 labeled as xmlprm05900
 (449576 bytes) from boot flash
Monitor: Version 5.9.0T175 Copyright (c) 1996-2015 Brocade Communications
Systems, Inc.
Compiled on Mar 19 2015 at 03:17:18 labeled as xmlb05900
 (568786 bytes) from code flash
IronWare: Version 5.9.0pT177 Copyright (c) 1996-2015 Brocade Communications
Systems, Inc.
Compiled on Nov 18 2015 at 17:02:00 labeled as xmlp05900p112
 (9481314 bytes) from Primary
FPGA versions:
Valid PBIF Version = 2.05, Build Time = 5/20/2015 22:20:00
Valid XPP Version = 4.05, Build Time = 11/4/2015 13:51:00
MACXPP100G 0
MACXPP100G 1
1199 MHz MPC P2010 (version 8021/1051) 599 MHz bus
512 KB Boot Flash (MX29LV040C), 66846720 Bytes (~64 MB) Code Flash (MT28F256J3)
3072 MB DRAM, 8 KB SRAM, 286331153 Bytes (~274 MB) BRAM
LP Slot 4 uptime is 19 days 1 minutes 57 seconds
```

TSBs

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 http://my.brocade.com under the "Technical Documentation" section of the "documentation" tab (note that TSBs are generated for all Brocade platforms and products, so not all TSBs apply to this release).

TSB issues resolved in 6.0c

TSB	Summary
TSB 2016-249-A	On a NetIron device running NetIron 05.8.00 and later releases up to and including 06.1.00, the management module may unexpectedly reload when a scanning tool is accessing the NetIron device to scan SSH port 22 continuously, corrupting the data structure of an existing SSH session. This may result in an unexpected reload.
TSB 2016-248-A	On a NetIron XMR/MLX device running NI 05.8.00 or later versions up to 06.1.00, GRE and IPv6-over-IPv4 traffic transiting through a non-default VRF will be dropped if "tunnel-mode" is configured.

TSB issues resolved in 6.0ab

TSB	Summary
TSB 2016-242-A	For a critical defect (DEFECT 617836) causing
	unexpected MLX Line Card reloads. Brocade strongly recommends that all customers running the affected releases upgrade to releases with the fix, whether IPSec is configured or not.

TSB issues resolved in 6.0

TCD	C	
128	Summary	

TSB 2016-232-A [1]	When upgrading to NetIron 5.7.00 or later from any version prior to NetIron 5.7.00, any ACL with a name starting with a number will not be applied after reload.
TSB 2016-233-A	With the default configuration, in 5.8.00d the MAC Port Security feature does not block non-secure MACs.
TSB 2015-212-A [1]	This concerns a vulnerability in the Network Time Protocol (NTP) Project NTP daemon (ntpd) documented by CVE-2014-9296. The ntpd version 4.2.7 and previous versions allow attackers to overflow several buffers in a way that may allow malicious code to be executed.
	The NTP Project daemon implementation is widely used in operating system distributions and network products. This vulnerability affects ntpd acting as a server or client on a system in which not only is authentication configured, but an authentication error occurs.

Defects

Closed with code changes R06.0.00d

This section lists software defects with Critical, High, and Medium Technical Severity closed with a code change as of 07/17/2017 in NI 6.0.00d.

Defect ID: DEFECT000599403		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: IP Multicast	
Reported In Release: NI 05.8.00 Technology: IPv4 Multicast Routing		
Symptom: High LP CPU due to multicast traffic		
Condition: 1. Multiple PIM over MCT devices are connected through a Layer 2 network.		
2. Sources and receivers are behind different PIM over MCT nodes.		

Defect ID: DEFECT000607807		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Management	
Reported In Release: NI 05.7.00	Technology: SNMP - Simple Network Management	
	Protocol	
Symptom: SNMP query timeout and queue full condition may be seen with 20x10 modules.		
Condition: High rate of optic data query through multiple SNMP pollers.		
Workaround: Reduce polling frequency of optic information.		

Defect ID: DEFECT000614083	
Technical Severity: Medium	Probability: High
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NI 05.8.00	Technology: IPv6 Addressing

Symptom: Line card may reset and become stuck in a rolling reboot with the following stack trace:

Exception Type 1200 (Data TLB error), lp

0202d030: msr 00000c06: dear 00800000: esr

2072bc50: nh6_get_cpu_no_rl_nh_index_by_vrf(pc) 2072bc48: nh6_get_cpu_no_rl_nh_index_by_vrf(lr)

204c64b4: lp_cam_add_ipv6_route 20746318: ip6_add_cache_to_cam 2074ed30: ipv6_add_address_to_cache

2074ef0c: ipv6_slave_setup_link_local_address_for 20738aec: ipv6_slave_do_port_state_change

2073d6b4: ipv6_ipc_port_config 203ae4c8: ipc_multi_module_handler 200b13c8: lp_assist_ipc_request_send

203b0a7c: ipc_process_messages 203b1264: ipc_receive_packet 203abb20: ge_process_ipc_data_msg 203abea8: ge_process_ipc_msg

200bb6ac: metro_sys_loop 200b1088: main 00040158: sys_end_task

Condition: (1) CER device - NetIron CER 2024F

(2) After device reload with IPv6 configuration enabled on VRF interface

(3) This defect is applicable for NetIron 05.8.00d and later releases up to and including 06.1.00

Recovery: Remove and add the IPv6 configuration after reload.

Defect ID: DEFECT000614901		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Management	
Reported In Release: NI 05.8.00	Technology: CLI - Command Line Interface	
Symptom: Interfaces stay down on MLX 10Gx20 with 1G SFPs and do not come up even on disable/enable.		
Condition: The issue is seen when		
- chassis is loaded with default config,		
- MLX 10x20G card is inserted without the optics, and		
- 1G SFPs are then inserted fairly fast on the interfaces.		

Defect ID: DEFECT000623761		
Technical Severity: High	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer	
Reported In Release: NI 06.0.00	Technology: GRE - Generic Routing Encapsulation	
Symptom: GRE and IPv6-over-IPv4 traffic transiting through a non-default VRF on a NetIron XMR/MLX is		
dropped.		
Condition: When a tunnel (GRE or IPsec) is configured on a Net Iron XMR/MLX device using the command		
"tunnel-mode", GRE and IPv6-over-IPv4 traffic transiting through non-default VRFs in the device		
will be dropped.		
Workaround: Encapsulated (GRE, IPv6-over-IPv4) traffic ingressing the device through default VRF is not		
affected.		

Defect ID: DEFECT000626659		
Technical Severity: High	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: MPLS	
Reported In Release: NI 05.6.00	Technology: IP over MPLS	
Symptom: L3VPN Traffic loss.		
Condition: An L3VPN VRF in PE has both EBGP as well as connected route for a prefix and connected routes		
are redistributed into BGP. Later if the redistribution of connected routes into BGP is removed in that		
L3VPN VRF, traffic loss will occur for that prefix, though an alternate EBGP route exists.		

Defect ID: DEFECT000627602		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Management	
Reported In Release: NI 05.8.00	Technology: Configuration Fundamentals	
Symptom: On configuring "phy-mode wan", the line	e card may unexpectedly reload with the below stack trace:	
Possible Stack Trace (function call return	n address list)	
209ad868: phy_wan_process_10g_alarm	n(pc)	
209ad7c0: phy_wan_process_10g_alarm	(lr)	
20a21ac4: port_alarm_status_poll	20a21ac4: port_alarm_status_poll	
200058b0: perform_callback		
200062b8: timer_timeout		
00040160: sys_end_entry		
0005e49c: suspend		
0005cf74: dev_sleep		
00005024: xsyscall		
207ebd44: main		
00040158: sys_end_task		
Condition: When "phy-mode wan" is configured on	a 20x10G linecard module for any of the ports between 9 to	
20.		
NOTE: Applicable only for 20x10G mod	lule.	

Defect ID: DEFECT000629158	
Technical Severity: High	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Security
Reported In Release: NI 05.8.00	Technology: SSH - Secure Shell
Symptom: Unable to establish SSH\TELNET connection to the device due to low memory condition on	
Management Module	
Condition: SSH connections are repeatedly established and terminated using DSA host keys.	
Workaround: Configure RSA host key instead of DSA host key to establish SSH connection.	

Defect ID: DEFECT000629952	
Technical Severity: High	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: UDP fragmented packets are dropped in MLX.	
Condition: (1) Layer 4 ACL applied on egress interface	
(2) acl-frag-conservative command is configured under acl-policy	

Defect ID: DEFECT000631585	
Technical Severity: High	Probability: Low
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NI 06.0.00	Technology: Static Routing (IPv4)

Symptom: Device reloads unexpectedly with the following stack trace:-

Possible Stack Trace (function call return address list)

20089f50: puma_add_next_hop_route_entry(pc)

20089ee8: puma_add_next_hop_route_entry(lr)

200861f0: puma_vpram_write

202e1588: chancer_ppcr_update_pram_entry

204d3e18: lp_update_host_entry_puma

2006ad5c: lp_update_rpf_entry_host_puma

2006af6c: update_next_hop_hosts

2007372c: nh_set_and_update_loose_urpf_mode

205d8084: increment_loose_mode_count

205d4830: metro_ip_rpf_change_port_rpf_mode

2052a200: velp_ipc_set

203b3b24: ipc_multi_module_handler

200ae07c: lp_assist_ipc_request_send

203b6330: ipc_process_messages

203b6b3c: ipc_receive_packet

203b1180: ge_process_ipc_data_msg

203b1544: ge_process_ipc_msg

200b86dc: metro_sys_loop

200add3c: main

Condition: On a CES/CER device, when RPF loose mode is enabled on a VE interface like shown below:-

Conf t

reverse-path-check interface ve 10 rpf-mode loose

Defect ID: DEFECT000632071	
Technical Severity: High	Probability: Medium
Product: Brocade NetIron OS	Technology Group: IP Multicast
Reported In Release: NI 06.0.00	Technology: IGMP - Internet Group Management
	Protocol

Symptom: IGMP snoop (S,G) entries are also added in untagged VLAN for tagged VLAN traffic.

Condition: 1.Enable sFlow globally

2.Enable sFlow forwarding on interface 3.Start the multicast traffic for tagged vlan

For instance:-

vlan 102 name igmpsnoop tagged ethe 1/13 to 1/14 ethe 2/1

multicast passive

!

D 6 4 ID DEFECTION (2004)

vlan 111 name untag untagged ethe 1/13 to 1/14

multicast passive >> S,G entry created for untagged VLAN 111 as well, when traffic is received

with tagged VLAN 102

Defect ID: DEFECT000632073	
Technical Severity: High	Probability: Medium
Product: Brocade NetIron OS	Technology Group: IP Multicast
Reported In Release: NI 05.8.00	Technology: PIM - Protocol-Independent Multicast
Symptom: High LP CPU due to multicast traffic hitting around every 30seconds.	
Condition: PIM over MCT with intermediate PIM router.	

Defect ID: DEFECT000632261	
Technical Severity: Medium	Probability: Low
Product: Brocade NetIron OS	Technology Group: Monitoring
Reported In Release: NI 05.8.00	Technology: Syslog
Symptom: Periodic syslog messages are observed like below:	
Jan 4 00:42:00:E:OPTICAL MONITORING Wavelength error: 0.000nm.	: Tunable SFP+ port 1/7 Frequency error : 25.5 GHz.

Jan 3 18:14:57:E:OPTICAL MONITORING: Tunable SFP+ port 1/7 Frequency error : -25.6 GHz. Wavelength error: 0.000nm.

Condition: Tunable SFP+ optic connected to a port.

Defect ID: DEFECT000633392		
Technical Severity: Medium	Probability: Low	
Product: Brocade NetIron OS	Technology Group: Traffic Management	
Reported In Release: NI 05.4.00	Technology: Traffic Queueing and Scheduling	
Symptom: The "show tm-voq-stat src_port eth x/y <queue-name>" doesn't displays correct packet counter value</queue-name>		
for CPU queues		
Condition: On Line cards like 24x1GC, 24x1GF, 48x1GC and 4x10G with CPU traffic.		

Defect ID: DEFECT000633962	
Technical Severity: Medium	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Management
Reported In Release: NI 05.7.00	Technology: SNMP - Simple Network Management
	Protocol
Symptom: The OID bgp4V2PeerAdminStatus does not return correct value.	
Condition: Polling SNMP OID bgp4V2PeerAdminStatus when BGP neighbor is administratively down.	

Defect ID: DEFECT000633986	
Technical Severity: Medium	Probability: Low
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NI 05.6.00	Technology: OSPFv3 - IPv6 Open Shortest Path First
Symptom: The ASBR IPv6 router will not set the intended metric (ex: 1000) in its origination of EXT-LSA that	
was applied through a route-map, instead the origination contains the default (i.e 0) metric.	
Condition: (1) The device is configured as an IPv6 OSPF router with route-map applied on the redistribution of	
either connected or static routes.	
(2) The route-map has the match condition on IPv6 access-list with set metric for some value.	

Defect ID: DEFECT000634244	
Technical Severity: High	Probability: High
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NI 06.0.00	Technology: RIP - IPv4 Routing Information Protocol
Symptom: The neighbor router doesn't learn the route advertised by NetIron routers.	
Condition: (1) NetIron router has 2 routers as its neighbors and RIP is configured on all the routers.	
(2) One of the router advertises a route to NetIron router.	

Defect ID: DEFECT000634653		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Monitoring	
Reported In Release: NI 05.8.00	Technology: Hardware Monitoring	
Symptom: Delay link event configuration works at 25ms per unit instead of 50ms as mentioned in CLI and		
Manual.		
Condition: When delay link event is configured on CES/CER device as below.		
CES2(MLX)(config-if-e10000-1/1)#delay-link-event		
DECIMAL delay time in number of 50-ms units (0 - 200)		
·		
NOTE: This defect is not applicable for MLX.		

Defect ID: DEFECT000634992		
Technical Severity: Medium	Probability: High	
Product: Brocade NetIron OS	Technology Group: Security	
Reported In Release: NI 05.8.00 Technology: ACLs - Access Control Lists		
Symptom: Ipv6 access-list accounting does not include TCP packet counts.		
Condition: IPv6 ACL rule for TCP port number with "established" option like below:		
permit enable-accounting tcp x:x:x:x:/y z:z:z:z:/y eq telnet established		
Note: This is applicable for CES/CER device only.		

Defect ID: DEFECT000635130	
Technical Severity: Medium	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching
Reported In Release: NI 05.8.00	Technology: xSTP - Spanning Tree Protocols
Symptom: OSPF Packets are sent through RSTP blocked port causing frequent MAC movements in the network.	
Condition: 1. RSTP configured on the device	
2. OSPF must be enabled on the device	

Defect ID: DEFECT000636007	
Technical Severity: High	Probability: High
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 i	nclude the Ethernet framing overhead bytes.
Condition: When executing "show statistics" command configuration command. OR When polling the below SNMP OID's after execution command. ifInOctets ifOutOctets ifHCInOctets ifHCOutOctets snSwIfInOctets snSwIfInOctets	

Defect ID: DEFECT000636699	
Technical Severity: Medium	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Management
Reported In Release: NI 05.8.00	Technology: SNMP - Simple Network Management
	Protocol
Symptom: SNMP Auth. failure messages are observed in syslog like below:-	
Jun 28 01:40:17:I:SNMP: Auth. failure, intruder IP: a.b.c.d, Interface: 1/8	
Condition: When SNMP packets are dropped by ACL rule.	

Defect ID: DEFECT000636927		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer	
Reported In Release: NI 06.0.00	Technology: OSPF - IPv4 Open Shortest Path First	
Symptom: "show running-config", doesn't display the OSPFv2 & v3 cost configured on the IP interfaces, if the		
configured cost is 1.		
Condition: (1) The device should be configured as OSPFv2/v3 router.		
(2) Configure the OSPFv2/v3 cost as 1 on the OSPF interface using the commands, "ip ospf cost 1"		
and/or "ipv6 ospf cost 1".		
Workaround: Any other cost other than 1 will display in the show running-config		

D. A. A. D. DEFECTION CONCESS		
Defect ID: DEFECT000637658		
Technical Severity: Medium	Probability: Low	
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching	
Reported In Release: NI 05.7.00	Technology: xSTP - Spanning Tree Protocols	
Symptom: Both the MCT CEP ports are stayed in Forwarding state and hence, causing a STP loop.		
Condition: 1. The ring formed through MCT CEP ports are part of CLUSTER MEMBER VLAN		
2. STP is enabled only on MCT nodes		
3. Flapping the CEP port which is in Forwarding state on STP root node.		
Workground: Enable STP on all other nodes which are part of CLUSTER MEMBER VLAN to avoid STP loop		

Defect ID: DEFECT000638404		
Technical Severity: High	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Management	
Reported In Release: NI 05.8.00	Technology: Software Installation & Upgrade	
Symptom: "lp auto-upgrade" on 20x10G module encoun	ters below error:	
Warning: The new LP XPP-20X10_G3 FPGA will not be compatible with the new LP 6 application. Parsing bundle:Error:Invalid FPGA image in LP auto upgrade destination. Copy correct FPGA in LP auto upgrade destination to recover. LP Auto-upgrade will try to recover from this error.		
Condition: 1.Presence of MR2 management module 2.Presence of Gen3 cards like 20x10G, 2x100G-CFP2, 10Gx4-M-IPSEC		
3."lp auto-upgrade slot1 2" in running configuration.		

Defect ID: DEFECT000638919		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching	
Reported In Release: NI 05.8.00	Technology: MRP - Metro Ring Protocol	
Symptom: Sometimes packets are getting forwarded on a blocked port in MRP ring and causing loop in the		
network.		
Condition: 1) MRP ring should be configured on all the nodes in same VLAN.		
2) Configure MRP Master in only one node in a ring.		
3) Execute the "trace-12 vlan <vid>"on MRP configured VLAN which shows the loop in the network</vid>		
intermittently.		

Defect ID: DEFECT000638945	
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 Resolution Protocol
Symptom: Traffic destined to directly connected hosts may get dropped after a Hitless upgrade is performed.	
Condition: When a line card's CAM mode is configured as "Algorithmic mode" using the CLI "cam-mode amod	
slot <slot_number>" and a hitless upgrade is performed on the device.</slot_number>	

Defect ID: DEFECT000639058	
Technical Severity: Medium	Probability: High
Product: Brocade NetIron OS	Technology Group: Management
Reported In Release: NI 06.0.00	Technology: SNMP - Simple Network Management
	Protocol

Symptom: "snmp- server community" configurations are not displayed completely when show running-

configuration command is executed.

For instance:-

snmp-server

snmp-server community ro ipv6 V6-SNMP-ACCESS "SNMP-ACCESS"

default snmp-server community configuration and snmp-server community keyword is missing before IPV4 ACL "SNMP-ACCESS".

Condition: When both IPv6 ACL and IPv4 ACL is applied to the same SNMP community.

Defect ID: DEFECT000639158	
Technical Severity: Medium	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Security
Reported In Release: NI 06.2.00	Technology: ACLs - Access Control Lists

Symptom: IPv6 ACL doesn't work on Layer2 traffic with this configuration "if-acl-inbound include-switched-

traffic" enabled on physical interface.

Condition: When IPv4 ACL with different set of ports is bounded to the same VE interface Where IPV6 ACL is

also applied.

For instance:-

vlan 1000

untagged ethe 2/1 to 2/4 router-interface ve 10

interface ve 10

ip access-group ve-traffic

ip access-group 100 in ethernet 2/3 to 2/4 >> IPV4 ACL is not applied to 2/1

ipv6 enable

ipv6 traffic-filter ipv6 acl in

>> IPV6 ACL should be applied to all ports from 2/1 to 2/4.

interface ethernet 2/1

enable

if-acl-inbound include-switched-traffic ipv6

Defect ID: DEFECT000639343	
Technical Severity: High	Probability: High
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NI 05.8.00	Technology: OSPFv3 - IPv6 Open Shortest Path First
Symptom: Connected prefixes redistributed by a PE are not getting calculated on other PEs in the network.	
Condition: 1. Both the routers - originator of external information and the calculating router - are in ospf instance	
associated with user-defined vrfs	
2. Connected routes are redistributed into ospf in the user-defined vrf instance at the originator router.	
Workaround: Configure vrf-lite under ospf instance.	
Recovery: Configure vrf-lite under ospf instance.	

Defect ID: DEFECT000641296	
Technical Severity: Medium	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Security
Reported In Release: NI 05.8.00	Technology: ACLs - Access Control Lists

Symptom: Management Module reloads unexpectedly with the following stack trace:-

Possible Stack Trace (function call return address list)

22390730: strncpy(pc)

206c626c: cli_rl_in_acl_policymap(lr)

202d4e9c: call_action_func 202d5994: parse_node

202d5410: parse_node_recurse

202d5c5c: parse_node

202d5410: parse_node_recurse

202d5c5c: parse_node

202d5410: parse node recurse

202d5c5c: parse node

202d5410: parse_node_recurse

202d5c5c: parse_node

202d5410: parse_node_recurse

202d5c5c: parse_node 2034778c: parse_input

204013b8: cli_aaa_accounting_callback

2073c4cc: aaa_accounting_start

20400c0c: cli_request_command_accounting

202d5884: parse_node
202d3f98: parser
20347768: parse_input
20a1d8b4: ssh_event_handler
20a30174: ProcessChannelData
20a2da84: ShProcessMessage
20a3672c: ProcessClientInputData
20a35ee4: ShFiniteStateMachine
2093f520: HandleProtocolAction
2093f300: HandleConnectionTask
20a1c4b8: ssh_connection_task

20a1cc04: ssh_sock

Condition: While applying a rate-limit configuration with Invalid ACL or Non-existing ACL index.

For instance:-

1. Invalid ACL – where 4011 is out of UDA ACL range rate-limit input access-group 4011 priority q1 499992736 33553900

2. Non-existing ACL – where there is no such ACL 198 is configured rate-limit input access-group 198 priority q1 499992736 33553900

Defect ID: DEFECT000642955	
Technical Severity: Medium	Probability: Medium
Product: Brocade NetIron OS	Technology Group: MPLS
Reported In Release: NI 05.7.00	Technology: MPLS VPLS - Virtual Private LAN
	Services
Symptom: Device may unexpectedly reload with the fol	lowing stack trace:-
Possible Stack Trace (function call return add	· ·
214abf9c: mpls_find_ldp_pkt_filter_data(pc)	
214abf8c: mpls_find_ldp_pkt_filter_data(lr)	
214ac294: mpls_trace_match_pkt	
214af97c: mpls_trace_match_filter_args	
213a5314: ntl_filter	
219fe3c0: rcsn_process_msg	
219fc798: rcsn_parse_received_buffer	
21a0b61c: rcsn_rcv_session_sck_msg	
21a0a70c: rcsn_rcv_sck_msg	
21a2c650: rcsp_fwd_ips_to_sub_cmpnt	
21a2bfa0: rcsp_fwd_ip_sock_on_sock_type	
21a2bc84: rcs_receive_proc	
212f6020: nbb_dispatch_process	
212f5504: nbb_schedule_one	
212f5938: nbb_scheduler	
213036d4: nbb_spin_start	
212f8ee4: nbs_spin_start	
214fc6c4: ldp_tcp_receive_callback	
214cf9e4: mpls_tcp_receive_data_ready_itc_	_callback
20a4b768: itc_process_msgs_internal	
20a4baa0: itc_process_msgs	
215328d0: mpls_task	
00005e18: sys_end_task	
Condition: (1) MPLS is running with LDP as control pro	
(2) The following LDP packet debug is enabled	
debug mpls ldp packets direction send lsr-id	
debug mpls ldp packets direction receive lsr-	id x.x.x.x 0
debug mpls ldp state lsr-id x.x.x.x 0	
(3) Issue the show command "show mpls cor	afig in xxx".

Defect ID: DEFECT000643850	
Technical Severity: High	Probability: Medium
Product: Brocade NetIron OS	Technology Group: MPLS
Reported In Release: NI 05.7.00	Technology: MPLS Traffic Engineering

Symptom: High CPU usage condition is observed in MPLS task, in the range of 85 to 97%. Due to this some protocol sessions like LDP, VLL might flap.

Condition: High CPU condition is seen when below all conditions are met

- 1. Large number (more than 1000) of facility backup FRR LSPs are at ingress and/or transiting the node.
- 2. Dynamic bypass is enabled at outgoing interfaces of FRR LSPs
- 3. MPLS TE Database is very large (say more than 50 nodes and/or 150 links)
- 4. Multiple facility backup LSPs need separate dynamic bypass LSPs to use OR CSPF Route is not available for the backup requested dynamic bypass LSPs to be created and established.

Workaround: By increasing the backup-retry-time under mpls policy config mode to 600 seconds would help to reduce the CPU usage.

Additionally by increasing the revert-timer of the ingress FRR LSP from default 5 seconds to a higher value would also help to reduce the CPU usage.

Please note that above two measure may not stop the high CPU condition completely.

Recovery: System can be recovered by disabling dynamic bypass globally on the router, after making sure FRR LSPs are not actively using dynamic bypass LSP for their traffic.

This would make all facility backup LSPs to be unprotected if there are no already setup static bypass LSPs to protect them.

Defect ID: DEFECT000644262	
Technical Severity: Medium	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching
Reported In Release: NI 06.0.00	Technology: VLAN - Virtual LAN
Symptom: Observing the error "Exceeding Openflow Sy	stem-max for Unprotected VLANs".
Condition: 1. On CES/CER with Openflow disabled	
2. Adding untagged port on VLAN within ESI	
For instance:-	
conf t	
esi NAME encapsulation svlan	

NI OS 06.0.00d for Brocade MLXe and NetIron v2.0

vlan 4 name VLAN_NAME

untagged eth 1/6

Defect ID: DEFECT000644828

Technical Severity: High Probability: Medium

Product: Brocade NetIron OS Technology Group: IP Multicast

Reported In Release: NI 06.0.00 Technology: PIM - Protocol-Independent Multicast

Symptom: Device may unexpectedly reload with the following stack trace:-

Possible Stack Trace (function call return address list) 206f3f1c: lp_cam_add_ip_multicast_session_entry(pc) 206f3ee0: lp_cam_add_ip_multicast_session_entry(lr)

206ebe6c: mcast_filter_install_cam_entry

206eb7f4: mcast_filter_entry_add 206eb1e8: mcastlp_process_filter 206fa250: pim_port_state_notify 206ff160: process_one_vif_update

206ff494: process_vif_dy_messages_internal

20700c8c: process_vif_dy_messages 203835b4: process_dy_change_packet 203b9320: ipc_multi_module_handler 203bbb5c: ipc_process_messages 203bc338: ipc_receive_packet 203b6958: ge_process_ipc_data_msg 203b6d1c: ge_process_ipc_msg 200bc2f0: metro_sys_loop

200b1950: main

00040158: sys end task

Condition: Configure "pim multicast filter" and apply it on a GRE tunnel interface.

Note: This is applicable only for CES/CER devices.

Technical Severity: High Probability: Medium

Product: Brocade NetIron OS Technology Group: Layer 3 Routing/Network Layer

Reported In Release: NI 06.1.00 Technology: GRE - Generic Routing Encapsulation

Symptom: Traffic coming through a GRE tunnel terminating on MCT peer, destined to MCT clients is not forwarded out on MCT peer (CER/CES).

Condition: When a GRE tunnel is configured to be terminating on the ICL port on an MCT peer (CER/CES), the encapsulated traffic coming on the GRE tunnel that is further destined to MCT clients are not forwarded out of the MCT peer.

Defect ID: DEFECT000645319	
Technical Severity: Critical	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Management
Reported In Release: NI 06.0.00	Technology: SNMP - Simple Network Management
	Protocol

Symptom: Management module may reload unexpectedly with the following stack trace:-

Possible Stack Trace (function call return address list)

216063fc: mpls_get_tunnel_mask(pc) 216063ac: mpls_get_tunnel_mask(lr)

20ae30f4: mpls_vll_stat_get_inbound_stats_from_lp

20ae3878: get_mpls_vll_stat_from_lp 20ae3e50: cu_get_mpls_vll_specific_stat

208947fc: ag_get_l2vpn_stats_if_needed_internal

20894e44: fdryVllEndPointEntry_next 20956744: SNMP_Process_Next_PDU 20959c38: process_packet_two 2095a0f0: process_packet_one

2095a43c: Process_Rcvd_SNMP_Packet_Async 209580d8: Process_Received_SNMP_Packet

20984544: snmp_receive_message

20986f28: snmp_udp_recv_callback_common

20987034: snmp_udp_recv_callback 20b9321c: itc_process_msgs_internal

20b936c8: itc_process_msgs 20983bbc: snmp_task 00005e18: sys_end_task

Condition: 1) MPLS is enabled on VE interface 4040 and above range.

2) When polling SNMP table: fdryVllEndPointTable (OID: 1.3.6.1.4.1.1991.1.2.15.2.1.1) with VLL configured on the device.

Workaround: Disable SNMP polling for the table: "fdryVllEndPointTable" by applying below configuration command.

Router(config)#snmp-server disable mib vll-ep

Closed with code changes R06.0.00c

This section lists software defects with Critical, High, and Medium Technical Severity closed with a code change as of 03/17/2017 in NI 6.0.00c.

Defect ID: DEFECT000561392		
Technical Severity: Medium	Probability: High	
Product: Brocade NetIron OS	Technology Group: Monitoring	
Reported In Release: NI 05.6.00	Technology: RAS - Reliability, Availability, and	
	Serviceability	
Symptom: Port with non-brocade TWINAX SFPP optic may go down.		
Condition: Presence of non-brocade TWINAX SFPP optic on 8x10G line card module.		

Defect ID: DEFECT000573260		
Technical Severity: High	Probability: High	
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer	
Reported In Release: NI 05.4.00	Technology: IP Addressing	
Symptom: When pinging a device directly connected to the CES from a host several router hops away, the ping traffic gets stuck in a routing loop.		
Condition: On CER/CES platform, with non-major network subnets (subnets that are not /8, /16, /24 or /32) present in network with 100s of hosts directly connected to the node.		
Recovery: clear ip ospf route all.		

Defect ID: DEFECT000603754		
Technical Severity: Medium	Probability: High	
Product: Brocade NetIron OS	Technology Group: SDN	
Reported In Release: NI 06.0.00	Technology: OpenFlow	
Symptom: Customer may not see syslog when SSL session gets closed due to some issues. When a controller or		
its TCP/IP stack runs into ar	its TCP/IP stack runs into an issue and terminates the TCP or SSL session, this remote event was not	
handled by the switch to log the informational event of closing the connection.		
While normal close and keep-alive timeouts have been handled and working.		
Condition: Abnormal closure of SSL/TCP connection initiated by the Openflow controller. This event might not		
be logged by the switch.		

Defect ID: DEFECT000612470	
Technical Severity: High	Probability: High
Product: Brocade NetIron OS	Technology Group: MPLS
Reported In Release: NI 05.8.00	Technology: MPLS Traffic Engineering
Symptom: LSP will not be established if LSP destination address is not the router id but any other address on the	
destination router.	
Condition: 1) Destination address of the LSP is not same as the router id of that destination router, but some	
other address on the router.	
2) LSP nexthops are calculated if that destination router is the DR on that interface. Otherwise, LSP	
nexthops are not calculated.	

D. 6. 4 TD. DEFECTAGO (1507)		
Defect ID: DEFECT000615076		
Technical Severity: High	Probability: Low	
Product: Brocade NetIron OS	Technology Group: IP Multicast	
Reported In Release: NI 05.6.00	Technology: PIM - Protocol-Independent Multicast	
Symptom: With PIM-DM, "show ip pim meache" shows OIFs continually added and deleted for a group. There		
is no traffic impact.		
Condition: If PIM-DM is configured and multicast boundary for the group is applied only on incoming interface.		
Workaround: Apply multicast boundary for the group on both incoming and outgoing PIM-DM interfaces.		

Defect ID: DEFECT000621970	
Technical Severity: Critical	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Security
Reported In Release: NI 05.9.00	Technology: SSH - Secure Shell

Symptom: Management module may unexpectedly reload with below stack trace:-

EXCEPTION 1200, Data TLB error

Task: ssh_0

Possible Stack Trace (function call return address list)

20a7239c: ShFinishPacket(pc)

20a6b0bc: ShBuildDhKeyExchangeReply(lr) 20a6b0bc: ShBuildDhKeyExchangeReply 20a6e620: ProcessClientDhMessage

20a66620: ProcessClientDhMessag 20a6d9ec: ShProcessMessage 20a76b20: ProcessClientInputData 20a76414: ShFiniteStateMachine 20979d98: HandleProtocolAction 20979b78: HandleConnectionTask 20a5c364: ssh_connection_task 20a5cab0: ssh_socket_control 20a5f718: ssh_receive_data_ready

20a5f75c: ssh_tcp_receive_data_ready_callback

20b55668: itc_process_msgs_internal

20b55b14: itc_process_msgs 20a57d24: ssh_in_task 00005e18: sys_end_task

Condition: This can happen if a port scanning tool is scanning the SSH port on the device. The unexpected reset is seen after more than one SSH session has been opened and closed and while at least one session is active or in the process of being established.

Note: - This defect is applicable for NetIron 05.8.00 and later releases up to and including 06.1.00.

Workaround: Stop any known port-scanning tools scanning SSH port 22 to the device. Restrict SSH access only to authorized users by using access-list.

To configure an ACL to permit allowed hosts, enter commands such as the following: device(config)# access-list 12 permit host x.x.x.x

device(config)# ssh access-group 12 device(config)# write memory

Defect ID: DEFECT000623395		
Technical Severity: High	Probability: High	
Product: Brocade NetIron OS	Technology Group: Security	
Reported In Release: NI 06.0.00	Technology: ACLs - Access Control Lists	
Symptom: After line card reload, traffic is not rate limited based on L2 ACL on secondary LAG member ports.		
Condition: Bind an L2 ACL rate-limit on a multi slot LAG with primary and secondary ports in different slot and		
then reboot the line Card which has secondary port of LAG.		

Defect ID: DEFECT000623624		
Technical Severity: High	Probability: High	
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer	
Reported In Release: NI 05.6.00	Technology: ARP - Address Resolution Protocol	
Symptom: When initiating a flow to a remote host across an MCT cluster, the first few packets may get lost (for		
example, no response is received for the first few pings).		
Condition: This occurs in MCT topology and affects routed packets when the ARP response from the host takes		
the path through ICL port.		
This is seen on MLXe and CER/CES platforms across all releases.		

Defect ID: DEFECT000623760		
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 on VEoVPLS gets stuck in EXCH/EXST state.		
Condition: (1) OSPFv3 neighborship is to be configured between the PE router.		
(2) PE on the other end has a connection to a router on which OSPFV3 is enabled and not part of		
MPLS domain.		

Defect ID: DEFECT000624330		
Technical Severity: High	Probability: High	
Product: Brocade NetIron OS	Technology Group: Traffic Management	
Reported In Release: NI 05.7.00	Technology: Traffic Queueing and Scheduling	
Symptom: Egress traffic capped at 11% on port in BR-MLX-10Gx20 card even though the port is running at 10G speed.		
Condition: Issue noticed when the particular port on the BR-MLX-10Gx20 card in which the egress traffic is capped at 11% was booted up with a 1G optic and the 1G optic was replaced with a 10G optic after the line card became operationally "UP".		

Defect ID: DEFECT000624548		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: MPLS	
Reported In Release: NI 05.8.00	Technology: MPLS Traffic Engineering	
Symptom: MPLS LSPs may flap between primary path and bypass path for no obvious reason when ISIS is used		
as IGP and MPLS LSPs configured through ISIS path with ISIS MD5 authentication enabled at		
global level and MPLS "handle-isis-neighbor-down" is enabled.		
Condition: 1. ISIS is used as IGP.		
2. ISIS MD5 authentication enabled at global level.		
3. MPLS "handle-isis-neighbor-down" is enabled.		
Workaround: Disable "handle-isis-neighbor-down" inside MPLS.		
Recovery: Disable "handle-isis-neighbor-down" inside MPLS.		

Defect ID: DEFECT000624852		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching	
Reported In Release: NI 05.4.00	Technology: MRP - Metro Ring Protocol	
Symptom: High LP CPU on MRP ring ports due to multicast traffic hitting through secondary path.		
Condition: If the MRP ring ports are trunk ports and multicast traffic is received through secondary path due to		
primary path down.		
Workaround: Configure the MRP ring ports as non-trunk interfaces.		
Recovery: Clear the pim mcache on upstream PIM router in MRP ring which is wrongly forwarding traffic.		

Defect ID: DEFECT000625240			
Technical Severity: High	Probability: Medium		
Product: Brocade NetIron OS	Technology Group: IP Multicast		
Reported In Release: NI 06.0.00	Technology: IPv4 Multicast Routing		
Symptom: Management Module may unexpectedly rel	oad (and switch over to the standby Management Module		
if available). The following stack trace will	be seen: -		
Possible Stack Trace (function call return a	Possible Stack Trace (function call return address list)		
211ea688: pim_process_candidate_rp_adv_	211ea688: pim_process_candidate_rp_adv_msg(pc)		
211ea500: pim_process_candidate_rp_adv_	211ea500: pim_process_candidate_rp_adv_msg(lr)		
211bb44c: receive_pimv2_packet			
211ba630: receive_pimv2_packet_callback			
20b8fe8c: itc_process_msgs_internal			
20b90338: itc_process_msgs	20b90338: itc_process_msgs		
21170a60: mcast_task	· · ·		
00005e18: sys_end_task			
Condition: Device should be configured as BSR Candi	date.		
RP Candidate change notification is repeate	dly triggered on the network and this device receives the		

Defect ID: DEFECT000627663	
Technical Severity: Medium	Probability: Low
Product: Brocade NetIron OS	Technology Group: Management
Reported In Release: NI 05.8.00	Technology: CLI - Command Line Interface
Symptom: Below additional message may be observed on execution of 'wr mem' command:-	
'free_config_buffer: bad buffer address '	
Condition: (1) 'write mem' is issued on a telnet session.	
(2) kill the above telnet session from another telnet session.	

Defect ID: DEFECT000628203		
Technical Severity: High	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Security	
Reported In Release: NI 06.0.00	Technology: ACLs - Access Control Lists	
Symptom: BGP sessions are incorrectly allowed or denied.		
Condition: VLAN rules configured at the end of ACL access-list and applied on interface.		
Workaround: Configure additional rules after the VLAN rules in ACL access-list.		

updates.

Defect ID: DEFECT000628768		
Technical Severity: 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 VE interface on which DHCP server resides.		

Defect ID: DEFECT000628924		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching	
Reported In Release: NI 05.8.00	Technology: VLAN - Virtual LAN	
Symptom: "show arp ethernet <slot port="">" output incorrectly shows some ARPs from the VPLS domain as learnt on "<slot port="">".</slot></slot>		
Condition: If VEoVPLS interfaces are configured, ARPs learnt on VEoVPLS interfaces could be incorrectly shown as learnt on a physical <slot port=""> when the command "show arp Ethernet <slot port="">" is run.</slot></slot>		

Defect ID: DEFECT000629416	
Technical Severity: Medium	Probability: High
Product: Brocade NetIron OS	Technology Group: Security
Reported In Release: NI 05.4.00	Technology: AAA - Authentication, Authorization,
	and Accounting
Symptom: Incorrect timezone in AAA accounting of TACACS+ Server.	
Condition: TACACS+ server is configured for AAA accounting.	

Defect ID: DEFECT000629472		
Technical Severity: Medium	Probability: Low	
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer	
Reported In Release: NI 05.8.00	Technology: Static Routing (IPv4)	
Symptom: Intermittent packet loss for the directly connected host.		
Condition: 1. VRRP/VRRP-E should be enabled.		
2. Host is directly connected to VRRP/VRRP-E device.		
3. Static route to be configured for the directly connected host.		

Defect ID: DEFECT000632296		
Technical Severity: High	Probability: High	
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: Following are observed on the router after Ma	nagement Module switchover.	
1. Links disappear from MPLS TED database.		
2. OSPF TE Link type LSAs get flushed from OSPF database, and are not re-originated.		
Condition: The issue is seen when the following criteria are met:		
1. NSR is enabled.		
2. OSPF traffic engineering is enabled in MPLS.		
3. Switchover is performed.		
Recovery: The router may be recovered by issuing "clear	ip ospf all".	

Defect ID: DEFECT000635094	
Technical Severity: High	Probability: Medium
Product: Brocade NetIron OS	Technology Group: IP Multicast
Reported In Release: NI 06.0.00	Technology: PIM6 - IPv6 Protocol-Independent
	Multicast

Symptom: CES/CER may unexpectedly reload with the following stack trace :-

Possible Stack Trace (function call return address list)

00000000: .zero(pc)

2025c888: m_avll_insert_or_find(lr)

205fd7a0: time_tree_insert_new_node_with_loc_index_no_delete

205fdf08: trace_util_add_entry_avl

205b3224: IPTRACE_AVL

205b30b8: IPTRACE_AVL_USING_RT_ENTRY 204dd9b4: lp_cam_del_ip_all_cam_by_type

204fb9b4: lp_cam_del_ip_all_cam 20678cf0: fpip_delete_entry_from_cam

20674a54: fpip_free_cache 20674cec: fpip_delete_route

205a9664: ip_delete_interface_addresses_from_cache

205aeb64: ip_process_port_state_change

205b5c38: fpip_ipc_port_data

203b92b0: ipc_multi_module_handler 200b1c24: lp_assist_ipc_request_send 203bbabc: ipc_process_messages 203bc2c8: ipc_receive_packet 203b68e8: ge_process_ipc_data_msg

203b6cac: ge_process_ipc_msg 200bc284: metro_sys_loop

200b18e4: main 00040158: sys_end_task

Condition: Clearing the PIMv6 cache and MLD cache with more than 6k MLD groups and 8k mcache entries.

Defect ID: DEFECT000623082		
Technical Severity: High	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: IP Multicast	
Reported In Release: NI 05.8.00	Technology: IPv4 Multicast Routing	
Symptom: Multicast groups stop forwarding traffic when upgraded to NI 05.7.00 or above		
Condition: Happens when ingress multicast port and output port (OIF) are under 2 different untagged VLANs.		
Only ports with no VE configured are impacted.		
Workaround: Configure all multicast-enabled ports as part of the default VLAN or configure all multicast-		
enabled ports under a common untagged VLAN.		

Defect ID: DEFECT000623120	
Technical Severity: High	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NI 05.6.00	Technology: IP Addressing
Symptom: Management module reloads when "clear ip pim mcache" is executed.	
Condition: when "clear ip pim mcache" is executed.	

Defect ID: DEFECT000635645	
Technical Severity: High	Probability: High
Product: Brocade NetIron OS	Technology Group: Security
Reported In Release: NI 06.0.00	Technology: ACLs - Access Control Lists
Symptom: Ports behave unexpectedly. For example, IPv4 ACL configured on the port does not get applied to its	
traffic, VPLS local switched traffic egresses out of the port with a MPLS header, etc.	
Condition: Same IPv4 ACL is bound on more than one port on the same Packet Processor (PPCR).	
Workaround: Since binding one ACL on more than one port per packet processor (PPCR) triggers the issue,	
create one unique ACL for each port instead (even with the same rules) and apply them to	
individual ports.	

Closed with code changes R06.0.00b

This section lists software defects with Critical, High, and Medium Technical Severity closed with a code change as of 12/21/2016 in NI 6.0.00b.

NOTE: Revised December 21, 2016 with defects not listed in the version 1 of these release notes.

Defect ID: DEFECT000546299	
Technical Severity: High	Probability: High
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching
Reported In Release: NI 05.7.00	Technology: LAG - Link Aggregation Group
Symptom: Several LACP LAG ports flapped when a BR-MLX-100Gx2-CFP2 module was inserted and booted	
up.	
Condition: Insertion/power cycle of BR-MLX-100Gx2-CFP2 LP module in a system	
Workaround: Configure long timeout for LACP	

Defect ID: DEFECT000586053	
Technical Severity: High	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Security
Reported In Release: NI 06.0.00	Technology: ACLs - Access Control Lists
Symptom: ACL Rules fail to sync from management module to some of the line cards within a scaled	
configuration of MAC/IPv4/IPv6 ACLs.	
Condition: With a scaled number of MAC/IPv4/IPv6 ACLs, management module takes significant amount of	
time to complete synchronization of the configuration to all the Linecards. In rare conditions, the	
synchronization of configurations can fail, resulting in the ACL configuration not being present in the	
Linecard.	

Defect ID: DEFECT000590226	
Technical Severity: High	Probability: High
Product: Brocade NetIron OS	Technology Group: Traffic Management
Reported In Release: NI 05.7.00	Technology: Rate Limiting and Shaping
Symptom: All packets ingressing on one tower on an LP are dropped. "show np statistics" shows the "NP Rx	
Priority 0/1 Drop" counter incrementing.	
Condition: Seen on 20x10G, 2x100G-CFP2 and 4x40G r	nodules, when ACL rate limiting has been configured
and ACL rebinding is happening frequently.	
The issue was seen after 15 days when ACL rebinding was happening every 2 hours. If rebinding	
happens more frequently, the issue is likely to	happen within a shorter duration.

Defect ID: DEFECT000590434		
Technical Severity: High	Probability: Low	
Product: Brocade NetIron OS	Technology Group: Monitoring	
Reported In Release: NI 05.9.00	Technology: sFlow	
Symptom: Management Module may reload unexpectedly when an sFlow sample is being processed.		
Condition: "sflow forwarding" should be enabled on the interface and "vrf forwarding <vrf-name>" should be</vrf-name>		
enabled on the corresponding VE in which the interface is a member.		

Defect ID: DEFECT000592732	
Technical Severity: High	Probability: Medium
Product: Brocade NetIron OS	Technology Group: MPLS
Reported In Release: NI 05.6.00	Technology: MPLS Traffic Engineering
Symptom: When a second IP address is configured for an interface, it is possible RSVP chooses the second IP	
address while sending back a RESV. When upstream router processes the RESV message, it drops the	
message because it does not match the RRO it was expecting. Thus the LSP will not come up.	
Condition: This is a rare occurrence.	
Workaround: Unconfiguring the second interface IP address will bring up the LSP.	

Defect ID: DEFECT000595261		
Technical Severity: Medium	Probability: High	
Product: Brocade NetIron OS	Technology Group: IP Multicast	
Reported In Release: NI 06.0.00	Technology: PIM - Protocol-Independent Multicast	
Symptom: Multicast source lookup fails due to unavailability of unicast routes in the system.		
Condition: This issue introduced when unicast traffic does not have the routes in routing table that are required		
for multicast source and RP lookup.		
Workaround: Make sure unicast routing table is populated before running multicast traffic.		

Defect ID: DEFECT000596106	
Technical Severity: High	Probability: High
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NI 05.7.00	Technology: OSPF - IPv4 Open Shortest Path First
Symptom: When MPLS is running with OSPF as IGP, changing OSPF network type causes Dynamic Bypass	
LSPs to get created. These get deleted after a few seconds since they don't get used by Backup paths.	
This process of creation/deletion repeats.	
Condition: 1) MPLS is running with OSPF as IGP	
2) Dynamic bypass is configured	
3) OSPF network type is changed from broadcast to p2p without bringing down the interface state	

Defect ID: DEFECT000599092	
Technical Severity: Low	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Management
Reported In Release: NI 05.9.00	Technology: Configuration Fundamentals
Symptom: New half-height line card module comes up on a slot blocked for a full height card 2x100G	
Condition: 2x100G line card is configured manually.	
New half-height line card module when inserted on the slot which is blocked for full height card	
2x100G	

Defect ID: DEFECT000599156	
Technical Severity: Medium	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Security
Reported In Release: NI 05.7.00	Technology: AAA - Authentication, Authorization,
	and Accounting
Symptom: The CLI prompt is displayed when providing the wrong credential during the telnet authentication.	
Condition: During the telnet authentication, continuous "?\n" is entered on the login prompt.	

Defect ID: DEFECT000600814	
Technical Severity: Medium	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Monitoring
Reported In Release: NI 05.7.00	Technology: OAM - Operations, Admin &
	Maintenance
Symptom: In the output of "show media", the dual rate 10G/1G optic transceiver module type is shown as	
unknown	
Condition: The speed has to be configured as 1000-full and linecard module has to be reloaded.	
This issue is specific to 20x10G linecard module.	
Recovery: Remove the speed configuration - 1000-full.	

Defect ID: DEFECT000601596	
Technical Severity: Low	Probability: Low
Product: Brocade NetIron OS	Technology Group: Management
Reported In Release: NI 06.0.00	Technology: Software Installation & Upgrade
Symptom: When issuing the format command for CF slot1 or slot2, via SSH, the system might not format the CF	
module at all.	
Condition: Conditions were unclear, the probable scenario is this,	
" if the PCMCIA card is being used for any copy operation from a different session (telnet/SCP), the	
device is in use. Hence the 'format' command does not work."	
Workaround: Do not format the card when it is in use (might be from a different session).	
Recovery: Close all the open sessions, this would terminate the unknown copy operations happening on the card,	
or reload the chassis and then format the PCMCIA card.	

Defect ID: DEFECT000601641	
Technical Severity: Medium	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Management
Reported In Release: NI 05.4.00	Technology: High Availability
Symptom: Intermittent issues in management connectivity	
Condition: If there are ARP requests being sent to target IP address 0.0.0.0, the Standby management module	
may respond to them	

Defect ID: DEFECT000601776	
Technical Severity: Low	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Management
Reported In Release: NI 05.8.00	Technology: SNMP - Simple Network Management
	Protocol
Symptom: SNMP OID 1991.1.1.2.1.44.0 displays value as "Reason: Unspecified" instead of "Reason: Fabric connectivity up"	
Condition: When fabric connectivity transitions from down to up	

Probability: High	
Technology Group: Layer 2 Switching	
Technology: LAG - Link Aggregation Group	
Symptom: Unable to "deploy" or "no deploy" a LAG. The following timeout message is seen -	

Error: Timed Out

LAG ABCD deployment failed!

Condition: When the following are all true -

- System has undergone port flaps, LAG member updates, and other timer events such that the timer identifier value has gone past value 4294967295.

- "delay-link-timer" is configured

Defect ID: DEFECT000602394	
Technical Severity: Critical	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NI 05.6.00	Technology: ICMP - Internet Control Message
	Protocol
Symptom: Brocade's NetIron OS is susceptible to CVE-2016-1409 (IPv6 Neighbor Discovery Crafted Packet	
Denial of Service Vulnerability).	
A vulnerability in the IP Version 6 (IPv6) packet processing functions could allow an unauthenticated, remote attacker to cause an affected device to experience elevated CPU usage on the management module.	
Condition: Reception of IPv6 ND6 packets with Hop Limit set as 255.	
Workaround: On GEN3 module, apply User Defined ACL (UDA) to filter out invalid ND6 packets in the	
hardware with software release 5.9 or later	r

Defect ID: DEFECT000603131	
Technical Severity: Medium	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Management
Reported In Release: NI 05.6.00	Technology: FDP - Foundry Discovery Protocol
Symptom: Even after FDP is disabled locally on the primary port of a LAG, the secondary ports of the LAG are	
listed as FDP neighbors on other devices.	
Condition: After disabling FDP on the Primary port of a LAG the Active Management Module must be reloaded	
Recovery: Enable and disable FDP on the primary port of the LAG	

Defect ID: DEFECT000603611	
Technical Severity: High	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NI 05.4.00	Technology: OSPF - IPv4 Open Shortest Path First
Symptom: A /32 stale T3-LSA will remain in the area-0 DB even though all the contributing routes are removed	
from the other area.	
Condition: (1) Configure the 3 IP addresses in some order on interfaces of 3 different routers in some area (e.g.,	
2000) with the subnets labeled in a manner similar to this: x.y.z.221/32, x.y.z.221/31, x.y.z.222/30.	
(2) Delete the above configured interfaces in some order to hit this issue.	

Defect ID: DEFECT000603644	
Technical Severity: Medium	Probability: High
Product: Brocade NetIron OS	Technology Group: Traffic Management
Reported In Release: NI 05.8.00	Technology: QoS - Quality of Service
Symptom: QoS statistics on egress ports always shows against Queue 0	
Condition: CLI Command "extended-qos-mode" should be configured on the device.	

Defect ID:	Defect ID: DEFECT000603982	
Technical S	Severity: Low	Probability: High
Product: E	Brocade NetIron OS	Technology Group: SDN
Reported I	n Release: NI 06.0.00	Technology: OpenFlow
Symptom:	Symptom: When a passive Openflow connection is configured, ip-address can be optionally specified. This ip-	
	address is intended to specify which local (in switch) ip-address to listen to. The issue is that even if	
	ip-address is specified, it still accepts connection on any local ip-address. So, any controller can still	
	connect to the switch on non-specified IP address, as the passive connection listens to any ip-address.	
Condition:	Condition: When local ip-address is specified in passive OpenFlow connection, it is supposed to only listen to	
	that ip-address. Instead, it simply ignores the local IP address configuration and accepts Openflow	
	connections on any local IP address.	

Defect ID: DEFECT000604087		
Technical Severity: High	Probability: High	
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer	
Reported In Release: NI 05.9.00	Technology: OSPFv3 - IPv6 Open Shortest Path First	
Symptom: The OSPFv3 ABR did not install a more specific route learned from another area when the more		
specific route that it learns falls within the sar	ne area range configured on this router.	
Condition: (1) area range on an OSPFv3 ABR is configured and it originates T3-LSA into backbone for area-		
range summary and installs this route into RTM.		
(2) Another ABR originates a more specific route that falls within the configured area-range on the		
first ABR.		

Defect ID: DEFECT000604330	
Technical Severity: Medium	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Management
Reported In Release: NI 05.7.00	Technology: SNMP - Simple Network Management
	Protocol
Symptom: SNMP OID "snSwIfInfoGigType" returns the value as unknown(255)	
Condition: When polling OID "snSwIfInfoGigType", for Finisar 10G SR SFP+ optic configured with "speed-	
duplex 1000-full" it returns the value as unknown(255)	

Defect ID: DEFECT000605338	
Technical Severity: Medium	Probability: Medium
Product: Brocade NetIron OS	Technology Group: SDN
Reported In Release: NI 05.9.00	Technology: OpenFlow
Symptom: Port speed seen at controller was incorrect in the following scenario	
1. Upon reload	
2. Openflow is enabled when port admin state is 'Disabled'	
Condition: 1. Reload	
2. Openflow enabled when port admin state is disabled	
Workaround: Remove and re-add openflow configuration	

Defect ID: DEFECT000605720	
Technical Severity: High	Probability: Low
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching
Reported In Release: NI 05.8.00	Technology: MCT - Multi-Chassis Trunking
Symptom: Software forwarded packets (like fragmented packets, TCP SYN packets in the presence of TCP MSS	
adjust configuration) go to the wrong port leading to traffic loss.	
Condition: In a MCT topology, after ARP/MAC movement happens from ICL to another physical port.	
Recovery: "clear ip route" for the affected traffic.	

Defect ID: DEFECT000605728	
Technical Severity: High	Probability: Low
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NI 05.7.00	Technology: BGP4+ - IPv6 Border Gateway Protocol
Symptom: Available system memory depletes steadily and conditions may be seen such as the inability to	
establish new SSH sessions.	
Condition: BGP has to be configured and it receives erroneous/badly constructed update messages from its peer.	
Recovery: If available memory continues to deplete and hits a very low level (<10%), switch over to standby	
Management module (when available) OR reloading the Management module can help temporarily.	

Defect ID: DEFECT000607574		
Technical Severity: Medium	Probability: High	
Product: Brocade NetIron OS	Technology Group: Management	
Reported In Release: NI 05.9.00	Technology: CLI - Command Line Interface	
Symptom: MBRIDGE upgrade progress message as shown below might get delayed		
Copy to MBRIDGE PROMSave the new MBRIDGE to		
flashDone		
Copy MBRIDGE IMAGE to standby MP, please wait.		
Condition: During MBRIDGE upgrade copying from Compact Flash.		

Defect ID: DEFECT000607624	
Technical Severity: High	Probability: High
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NI 05.7.00	Technology: ARP - Address Resolution Protocol
Symptom: Traffic is not forwarded to directly connected host when traffic is received for the host from 2	
different VRFs.	
Condition: Connected routes leaked from one VRF to another VRF	

Defect ID: DEFECT000607934		
Technical Severity: High	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: MPLS	
Reported In Release: NI 06.0.00	Technology: MPLS VPLS - Virtual Private LAN	
	Services	
Symptom: OSPF protocol stays down as BUM traffic are not forwarded when received from VPLS peer		
Condition: MCT VPLS cluster configured		
traffic ingress through ICL/cluster-peer link from VPLS peer		
with "no vpls-cpu-protection" configured		
Workaround: configure "vpls-cpu-protection" to forward all BUM traffic.		

Defect ID: DEFECT000608460	
Technical Severity: Medium	Probability: Medium
Product: Brocade NetIron OS	Technology Group: IP Multicast
Reported In Release: NI 05.6.00	Technology: PIM - Protocol-Independent Multicast
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Symptom: (S,G) entry is not created in "show ip pim mcache" with RACL configured on CES/CER

Condition: On CES/CER when RACL is configured with explicit IGMP permit ACL like below:

access-list X sequence Y permit igmp a.b.c.d 0.0.0.255 any

Note: This is specific to CES/CER only.

Workaround: Explicitly permit all IP traffic from the source subnet to the multicast group address for the (S,G)

to be created.

For example:

access-list x sequence y permit ip a.b.c.d 0.0.0.31 host e.f.g.h

Defect ID: DEFECT000608991		
Technical Severity: High	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: IP Multicast	
Reported In Release: NI 05.6.00	Technology: IPv4 Multicast Routing	
Symptom: Some of the multicast streams stopped working.		
Condition: Primary LAG port in OIF is down and traffic is reaching the node after the (*,G) entry is created.		
Workaround: Bring primary LAG port up.		
Recovery: clear ip pim mcache where LP receives traffic but does not create (S,G) entry		

Defect ID: DEFECT000609090		
Technical Severity: Medium	Probability: High	
Product: Brocade NetIron OS	Technology Group: Security	
Reported In Release: NI 05.8.00	Technology: MAC Port-based Authentication	
Symptom: Static secured MAC addresses are flushed on a PMS enabled port while disabling the same port.		
Condition: PMS configuration should be enabled on port.		
Static MAC address should be configured.		
Disable the PMS enabled port.		

Defect ID: DEFECT000609387		
Technical Severity: High	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer	
Reported In Release: NI 05.4.00	Technology: ARP - Address Resolution Protocol	
Symptom: Unable to add static ARP entries with an error message, "ARP: Errno(6) Number of Static ARP		
entries has exceeded the max limit".		
Condition: The router acts as a DHCP relay agent and it receives DHCP packets with options.		
DAI table is full	-	

Defect ID: DEFECT000609876		
Technical Severity: Medium	Probability: High	
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer	
Reported In Release: NI 05.6.00	Technology: BFD - BiDirectional Forwarding	
	Detection	
Symptom: When BFD is used over VE interface across a layer 2 port, PCP value is incorrect.		
This value should be 7, but it is marked with 0.		
This issue will occur if PBIF (Hardware TX assist) is enabled and could be seen after BFD session		

Condition: PCP value will be 0 in the BFD packet after the BFD session state is UP.

state is UP.

Defect ID: DEFECT000610054		
Technical Severity: High	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Security	
Reported In Release: NI 05.9.00	Technology: IPsec - IP Security	
Symptom: Some traffic over IPSEC tunnel may be dropped		
Condition: When the router needs to further fragment already fragmented IP packets to send over IPSEC tunnel.		
The fragmentation ID and offset in the new IP fragments are not set correctly, rendering the end		
device unable to reassemble the packets.		
Workaround: Configure the IP MTU of the upstream device to match the IP MTU of the IPSEC tunnel, or use		
Path MTU Discovery to ensure that fragmented packets coming into the router are not further		
fragmented.		

Defect ID: DEFECT000610277	
Technical Severity: Medium	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Security
Reported In Release: NI 05.9.00	Technology: HTTP/HTTPS
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Symptom: Management Module may unexpectedly reload (and switches over to the standby Management Module if available). The following stack trace will be seen: -

Possible Stack Trace (function call return address list)

2243d048: memcpy(pc) 209ae9e4: A1RecordCrypt(lr) 209adf34: A1RecordProcess 209a928c: A1ConnectionDispatch 209af994: SsiReceiveStatus

2097ab68: AsCheckTcpReceiveStatus 2097a598: HandleWaitingForReceive 20979c14: HandleConnectionTask 209799b4: AllegroMainTask 20990084: http_web_agent 20990b70: http_timer_callback 20b556f4: itc_process_msgs_internal 20b55ba0: itc_process_msgs

209911f4: web_task 00005e18: sys_end_task

Condition: Continuous data transfer through HTTPS connection.

Defect ID: DEFECT000610776		
Technical Severity: Medium	Probability: High	
Product: Brocade NetIron OS	Technology Group: MPLS	
Reported In Release: NI 05.8.00	Technology: MPLS Traffic Engineering	
Symptom: In a network with MPLS RSVP LSP with FRR configured, detour won't come up at PLR		
Condition: Merge point router's outgoing interface has admin group configured which is excluded in FRR		
configurations under LSP		

Defect ID: DEFECT000611054		
Technical Severity: High	Probability: Low	
Product: Brocade NetIron OS	Technology Group: Monitoring	
Reported In Release: NI 05.4.00	Technology: Syslog	
Symptom: On occasion, optic on 24x1G Linecard module type may cause i2c bus lockup on the Linecard resulting in very frequent error messages similar to the SYSLOG entries seen below:		
E:System: Can't read LP6 PCB temperature!		
E:System: Can't read LP6 XPP temperature	E:System: Can't read LP6 XPP temperature!	
Condition: Usage of third party optic or any bad optic on 24x1G Linecard module.		
Recovery: "show media" command could help recover from the condition for a short interval. The recovery		
could last for days, depending on the load on i2c bus.		

Defect ID: DEFECT000611080		
Technical Severity: High	Probability: High	
Product: Brocade NetIron OS	Technology Group: Monitoring	
Reported In Release: NI 06.0.00	Technology: Hardware Monitoring	
Symptom: Port with QSFP28 optic module is not coming up after a series of plug-out/plug-in.		
Condition: Applicable to QSFP28 optic module in CFP2 to QSFP28 port.		

Defect ID: DEFECT000611357		
Technical S	Severity: Low	Probability: Medium
Product: E	Brocade NetIron OS	Technology Group: MPLS
Reported I	n Release: NI 05.7.00	Technology: IP over MPLS
Symptom:	Symptom: In a scaled network with several parallel TE links between pairs of RSVP routers and a large number of TE nodes and links, some LSPs might not come up due to a "loop detected" error. Warning message "Warning: Infinite Loop in mpls_cspf.c:3769: mpls_constrained_dijkstra 4" will be seen on the router. LSP's CSPF computation will fail and some LSPs may stay in down state due to "loop detected" CSPF error. Up LSPs will not be impacted; only the newly coming up LSPs might stay in a down state.	
Condition: This issue will been seen only in a large MPLS/RSVP network with tens of TE nodes and hundreds of links + parallel links between pairs of TE nodes.		
Workaround: There is no "non-intrusive" workaround. Removing parallel links from the topology will help.		
Recovery: No easy recovery other than reducing the number of parallel links.		

Symptom: Error message related to sFlow configuration is displayed with incorrect Primary port number in the CLI when a new member port is added in an already deployed LAG.

Condition: This happens in the following cases: -

- When the Primary port in a deployed LAG is already configured with sFlow and the member port to be added newly in the LAG does not have sFlow configured.
- When the LAG ports in the deployed LAG do not have an sFlow configuration but the member ports to be added in the LAG have an sFlow configuration.

Workaround: Ensure that the configuration on the new port is the same as the configuration on the LAG.

Defect ID: DEFECT000612475	
Technical Severity: Medium	Probability: High
Product: Brocade NetIron OS	Technology Group: Management
Reported In Release: NI 06.1.00	Technology: SNMP - Simple Network Management
	Protocol
Symptom: SNMP polling for QSFP28 optics data returns Unsupported data.	
Condition: SNMP Polling for QSFP28 optics data on 2x100G-CFP2 line card module.	

Defect ID: DEFECT000612750	
Technical Severity: Low	Probability: Low
Product: Brocade NetIron OS	Technology Group: Security
Reported In Release: NI 05.9.00	Technology: ACLs - Access Control Lists

Symptom: Error message (error - H4) is getting displayed during reload.

Sample output is given below: -

Router#reload

Checking for coherence...

Done.

Are you sure? (enter 'y' or 'n'): y

Halt and reboot

NetIron XMR/MLX Boot Code Version 5.9.0

///// OUTPUT TRUNCATED /////

system memory: 4294967295, available 3506524160

FID manager initialized ...

Start init runconfig from start config Load config data from flash memory...

error - H4

Condition: No ACL is bound to any interface on the device, "force-delete-bound-acl" is enabled and the device is reloaded.

Note: This issue is applicable across all releases. The error message displayed is an indication of the condition of no ACLs bound to any interface and does not have any impact on the system.

Workaround: Avoid using "force-delete-bound-acl" command option when no ACL is bound to any interface on the device

Defect ID: DEFECT000613063	
Technical Severity: Medium	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Security
Reported In Release: NI 05.6.00	Technology: IP Source Guard
Symptom: RPF loose mode doesn't work. Packets are routed instead of dropping when there is no valid source	
route.	
Condition: "sflow null0-sampling" is configured with RPF loose mode.	

Defect ID: DEFECT000613729		
Technical Severity: High	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Monitoring	
Reported In Release: NI 06.0.00	Technology: Hardware Monitoring	
Symptom: 100Gx2-CFP2 line card may reload une	expectedly with the following stack trace:-	
20bb3178: mod_rw2x100_g3_cfp2_res	set_steps(pc)	
20bb3170: mod_rw2x100_g3_cfp2_res	20bb3170: mod_rw2x100_g3_cfp2_reset_steps(lr)	
2002d8cc: cfp_reset	2002d8cc: cfp_reset	
209b4fe0: phy_conn_enable	209b4fe0: phy_conn_enable	
20a2fb2c: port_check_port_status		
20a339a8: port_link_status_poll		
20a334ac: port_status_poll		
200058c0: perform_callback		
200062c8: timer_timeout		
00040160: sys_end_entry		
0005e4a0: suspend		
0005cf78: dev_sleep		
00005024: xsyscall		
207f2ec8: main		
00040158: sys_end_task		
Condition: Continuous Optic Insertion and Remov	al is done for 100G LR4 CFP2 optics multiple times	

Defect ID: DEFECT000613850Technical Severity: HighProbability: MediumProduct: Brocade NetIron OSTechnology Group: Layer 2 SwitchingReported In Release: NI 05.8.00Technology: MCT - Multi-Chassis TrunkingSymptom: The VRRP-E command "short-path-forwarding-delay <delayinseconds>" is not taking effect in IPv4 VRRP-E network ("router vrrp-extended").Condition: The issue will be noticed if "short-path-forwarding" command is used to configure the backup VRRP-E device as an alternate path in IPv4 VRRP-E network.Workaround: Disable "short-path-forwarding" and configure the "garp-ra-interval" to 2 seconds (using command - "garp-ra-interval <timeInSeconds>") on the VRRP-E instances in the IPv4 VRRP-E network.

Defect ID: DEFECT000614029	
Technical Severity: High	Probability: High
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NI 06.0.00	Technology: IPv6 Addressing
Symptom: Appropriate error message is not printed on console when user configures IPv6 tunnel interface as	
MPLS interface.	
Condition: Configuring IPv6 tunnel interface as MPLS interface is not supported. Appropriate error message was	
not printed on console when user configured IPv6 tunnel interface as MPLS interface.	

Defect ID: DEFECT000614112		
Technical Severity: Medium	Probability: High	
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer	
Reported In Release: NI 05.7.00	Technology: OSPF - IPv4 Open Shortest Path First	
Symptom: OSPFv2 Type-3 summary LSA originated for area-range configuration is not flushed (withdrawn)		
even if all the component routes that fall within the area-range are removed.		
Condition: (1) area-range command on ABR is configured		
(2) component routes that fall within the range are in RTM (e.g., configure some IP interfaces with		
addresses that fall within the range)		
(3) disabling all the component routes (i.e., disable the configured interfaces with IP addresses that		
fall within the area-range).		
Workaround: If the ABR status is made to loose then it would flush (withdraw) the area-range summary.		

Defect ID: DEFECT000614508	
Technical Severity: Low	Probability: Low
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NI 05.7.00	Technology: OSPF - IPv4 Open Shortest Path First
Symptom: "show ip ospf data link-state extensive" does not display extensive output of all LSAs.	
Condition: At least 8 Loopback interfaces advertised to the peer.	
Multiple entries of router LSAs in the OSPF database.	

Defect ID: DEFECT000615179		
Technical Severity: High	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Management	
Reported In Release: NI 05.8.00	Technology: SNMP - Simple Network Management	
	Protocol	
Symptom: SNMP community configuration have duplicate entry in "show running"		
Condition: When SNMP community is configured with ACL name like below:		
snmp-server community public ro <acl-name></acl-name>		

Defect ID: DEFECT000615868		
Technical Severity: High	Probability: High	
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching	
Reported In Release: NI 05.8.00	Technology: VLAN - Virtual LAN	
Symptom: Traffic rate limited to 20Gbps for all VLANs where outbound the rate-limit is not applied.		
Condition: 1) This is specific to MLX-10Gx24.		
2) Outbound rate-limit is applied on one specific VLAN.		
Recovery: Only recovery is to reload the corresponding line card module after applying the rate-limit to the		
configuration.		

Defect ID: DEFECT000615906		
Technical Severity: Medium	Probability: High	
Product: Brocade NetIron OS	Technology Group: Management	
Reported In Release: NI 05.9.00	Technology: SNMP - Simple Network Management	
	Protocol	
Symptom: SNMP polling for IPSEC tunnel interfaces doesn't provide correct values		
Condition: When polling for IPSEC tunnel interface statistics through SNMP table IfTable.		
Workaround: Execute the CLI command "show interface tunnel <tunnel-id>" before polling SNMP table</tunnel-id>		
IfTable.		

Defect ID: DEFECT000615910	
Technical Severity: Medium	Probability: High
Product: Brocade NetIron OS	Technology Group: Monitoring
Reported In Release: NI 05.9.00 Technology: Telemetry	
Symptom: SNMP polling of ifTable statistics always displays the value as zero for MPLS LSP tunnel	
Condition: When polling MPLS LSP statistics through SNMP table if Table.	

Defect ID: DEFECT000616823	
Technical Severity: High	Probability: Low
Product: Brocade NetIron OS	Technology Group: Monitoring
Reported In Release: NI 05.8.00	Technology: Sysmon
Symptom: CES/CER may unexpectedly reload with the f	following stack trace:-
Possible Stack Trace (function call return addition 203056d0: hashFastGenericGet(pc) 209e748c: itc_registry_get_msg_def_for_msg 209e748c: itc_registry_get_msg_def_for_msg 209dfbf0: validate_params_and_get_msg_def 209dfc98: itc_send_request 20a0e608: CancelTimerCommon 20a0e788: CancelTimer2 209b9dbc: ssh_close_connection 209b1a00: cu_ssh_close_session_internal 209b3a90: ssh_cu_msg_callback 209e0954: itc_process_msgs_internal 209e0df4: itc_process_msgs 207179f0: snms_task 00040158: sys_end_task	_type(lr) _type
Condition: There is no known condition/trigger for this is	sue.

Defect ID: DEFECT000617836	
Technical Severity: Critical	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Security
Reported In Release: NI 05.9.00	Technology: IPsec - IP Security

Symptom: Linecards on an MLX unexpectedly reloading at random intervals. The stack trace seen using the

"show save" command is as follows - 212c0860: ipcom_pqueue_get_next(pc) 212ca014: ipcom_tmo2_select(lr)

Note: This is specific to CES/CER only.

21204e70: ike_wr_timer 211e874c: ike_sys_timer 00040160: sys_end_entry 0005e4c8: suspend

00062230: receive_message

00005024: xsyscall 211e8c28: ike_task 00040158: sys_end_task

Condition: Can be seen on all MLX Line Cards running NetIron 5.8.00 through 5.8.00e, 5.9.00 through 5.9.00bd,

6.0.00 and 6.0.00a images.

Can be caused by IPSec control packets.

Defeat ID. DEEECT000619044		
Defect ID: DEFECT000618044		
Technical Severity: Critical	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: LP unexpectedly reloads with the following info seen in "show save" in function		
is_routemap_in_use_by_uda_pbr()		
Condition: Can be seen		
- during LP bootup, OR		
- when an IP or UDA route-map is configured	i.	

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: Linecard module may unexpectedly re	eload with the following stack trace: -	
Possible Stack Trace (function call return address list)		
2064de14: rw2_petra_set_port_rate(po	c)	
2064ddf8: rw2_petra_set_port_rate(lr)		
2119c424: fdry_tm_set_port_rate		
20ff40c8: lp_tm_offload_handler		
207f3a2c: lp_tm_offload_task		
00040158: sys_end_task		

Defect ID: DEFECT000618134		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Management	
Reported In Release: NI 05.8.00	Technology: High Availability	
Symptom: Standby management module went down with the syslog 'reason None. Error Code 0' and no error		
log dump.		
SYSLOG: <13>Sep 20 15:15:55 System: Standby Management Module was down, reason None.		
Error Code 0.		
Condition: On terminating the Telnet/SSH session immediately after issuing 'write mem' command.		
Workaround: Wait for 2-3 sec before killing the telnet session after issuing 'write mem'.		
Note: The issue will not affect traffic as it is a Standby module and comes back in a few minutes.		

Defect ID: DEFECT000618333		
Technical Severity: Medium	Probability: High	
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer	
Reported In Release: NI 05.8.00	Technology: GRE - Generic Routing Encapsulation	
Symptom: TCP packets are received in the server without removing the GRE header.		
Condition: When trying to telnet to the Linux host from a server with a GRE tunnel between and with TCP MSS		
configured in the transit MLX device.		
Workaround: The configuration "ip tcp adjust-mss" has to be removed.		

Defect ID: DEFECT000618580		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Security	
Reported In Release: NI 06.0.00	Technology: SSH - Secure Shell	
Symptom: Unable to upload SSH client-pub-key file due to size-limit.		
Condition: When uploading the SSH client-pub-key file with the size of more than 4096 bytes.		

Defect ID: DEFECT000618928		
Technical Severity: Critical	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Security	
Reported In Release: NI 05.6.00	Technology: ACLs - Access Control Lists	
Symptom: Newly added LAG port is in LACP blocked state		
Condition: Apply a MAC ACL on a port and create LAG with this port.		
Remove the ACL and add another ACL.		
Now add a secondary port to the LAG from another LP		

Defect ID: DEFECT000619510		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching	
Reported In Release: NI 05.8.00	Technology: VLAN - Virtual LAN	
Symptom: RSTP configuration is not allowed under vlan-group and Error message is displayed as "spanning tree		
configuration is enabled".		
Condition: 1) "Spanning tree" command is globally configured		
2) configure "rstp" command under vlan-group having member vlans.		
Workaround: Remove the spanning tree configuration from each vlan under vlan-group and configure rstp.		

Defect ID: DEFECT000619934		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Management	
Reported In Release: NI 06.0.00	Technology: CLI - Command Line Interface	
Symptom: Memory leak may be observed during execution of either of the following commands:		
1) 'show rate-limit interface x/y output'		
2) 'show sysmon events brief'.		
Condition: 1) The command 'show rate-limit interface x/y output' may result in a memory leak when rate-limit is		
not configured		
2) The command "show sysmon events brief' may result in memory leak when sysmon events are not		
configured		

Defect ID: DEFECT000620066		
Technical Severity: High	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Management	
Reported In Release: NI 06.0.00	Technology: SNMP - Simple Network Management	
	Protocol	
Symptom: "snmp-server group" configuration is lost after the reload.		
Condition: "snmp-server group" name configured and reload the device.		

Defect ID: DEFECT000620069		
Technical Severity: High	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: IP Multicast	
Reported In Release: NI 05.9.00	Technology: IPv4 Multicast VLAN Traffic Reduction	
Symptom: Multicast traffic loss can be observed for VPLS.		
Condition: disabling and re-enabling of lag active primary port of VPLS end-point with Line card as BR-MLX-		
10Gx20.		

Defect ID: DEFECT000620729		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: IP Multicast	
Reported In Release: NI 06.0.00	Technology: IPv4 Multicast Routing	
Symptom: "pim-sparse" configuration getting lost on the GRE Interface after chassis Reload and could lead to a		
multicast data traffic loss issue.		
Condition: "pim-sparse" configuration on GRE interface.		
Workaround: Post reload of the device, configure pim-sp manually on gre-tunnel interface again.		

Defect ID: DEFECT000620803			
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+ - IPv6 Border Gateway Protocol		
Symptom: Enable ISIS for IPv6 with multi-topology trans	Symptom: Enable ISIS for IPv6 with multi-topology transition and then run 'show IPv6 route', shortly after this		
CER reloaded unexpectedly with the following	g stack trace:-		
20e57ec4: bgp_best_route_selection_with_sorting(pc)			
20e57dbc: bgp_best_route_selection_with_so	20e57dbc: bgp_best_route_selection_with_sorting(lr)		
20e582c8: bgp_best_route_selection_and_change			
20f05a68: bgp_check_and_update_bgp_route_in_ip_table_as_necessary			
20e77790: bgp_route_damping_timer_event	20e77790: bgp_route_damping_timer_event		
20f221f8: bgp_timer			
20f1d780: bgp_timeout_func	20f1d780: bgp_timeout_func		
20a47fe8: itc_process_msgs_internal	20a47fe8: itc_process_msgs_internal		
20a48494: itc_process_msgs			
20ec0768: bgp_task			
00040158: sys_end_task			
Condition: CER reload is observed when BGP Best path	Condition: CER reload is observed when BGP Best path flaps. BGP best path can flap in scenarios for example		
IBGP next-hop change, flapping BGP route et	ic		

Defect ID: DEFECT000621666			
Technical Severity: Medium	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: Management Module may unexpectedly reloa	d and switch over to the standby Management Module		
if available. The following stack trace will be seen: -			
Possible Stack Trace (function call return address list)			
20ef84a4: ospf_router_receive_packet_callbacket	20ef84a4: ospf_router_receive_packet_callback(pc)		
20ef849c: ospf_router_receive_packet_callbacket	20ef849c: ospf_router_receive_packet_callback(lr)		
20a1c040: itc_process_msgs_internal			
20a1c380: itc_process_msgs			
20ef775c: ospf_msg_task			
00005e18: sys_end_task	00005e18: sys_end_task		
Condition: After running for longer duration.			
Low memory available in OSPF memory poor	l.		

Defect ID: DEFECT000622131		
	Probability: High	
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: On a Customer-Edge router if external LSA's tag matches OSPF domain-tag then these external		
LSA's would not be installed in OSPF route table.		
Condition: In VRF-lite case if a Customer-Edge router is running OSPF in a VRF, and if external LSA contains		
tag same as OSPF domain-tag then these external LSAs would be missing in route table.		
Workaround: On Customer-Edge router configure OSPF domain-id different than the one present in OSPF		
external LSA tag.		

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Defect ID: DEFECT000622744 Technical Severity: High	Probability: Low		
Product: Brocade NetIron OS	Technology Group: Security		
Reported In Release: NI 06.0.00	Technology: ACLs - Access Control Lists		
•	oad and get into a continuous reload cycle with the following		
stack trace:-			
Possible Stack Trace (function call return	n address list)		
210ba9b8: sw_14_find_acl_table(pc)			
210306d0: sw_14_construct_port_list_fo	or_rule_based_acl(lr)		
21030a6c: sw_l4_construct_acl_rule_mask_and_prog_cam			
2103154c: sw_14_update_acl_cam_entri	2103154c: sw_l4_update_acl_cam_entries		
	21039d30: 14_update_rule_based_entries_in_cam		
2103199c: 14_lp_inbound_acl_update_ti	2103199c: 14_lp_inbound_acl_update_timer_callback		
200058c0: perform_callback			
200062c8: timer_timeout			
00040160: sys_end_entry			
0005e4a0: suspend			
0005cf78: dev_sleep			
00005024: xsyscall			
207f2f88: main			
00040158: sys_end_task			
Condition: 4K VEs associated one on one with 4K Y			
One physical port part of all the 4K VLA			
4K IPv4 ACL having 25 rules per ACL.			
These 4K different ACLs are bound on t	the 4K VEs		

Defect ID: DEFECT000622823	
Technical Severity: High	Probability: Low
Product: Brocade NetIron OS	Technology Group: Security
Reported In Release: NI 06.1.00	Technology: ACLs - Access Control Lists

Symptom: Line card module may unexpectedly reload and get into a continuous reload cycle with the following

stack trace:-

Possible Stack Trace (function call return address list)

210c2be4: sw_l4_find_acl_table(pc)

21038614: sw_l4_construct_port_list_for_rule_based_acl(lr) 210389b0: sw_l4_construct_acl_rule_mask_and_prog_cam

21039490: sw_14_update_acl_cam_entries

21041c74: l4_update_rule_based_entries_in_cam 210398e0: l4_lp_inbound_acl_update_timer_callback

20005a74: perform_callback 2000647c: timer_timeout 00040160: sys_end_entry 0005e4a0: suspend 0005cf78: dev_sleep 00005024: xsyscall 207f2b14: main 00040158: sys_end_task

Condition: 4K VEs associated one on one with 4K VLANs. (VE 2 to VE 4095)

One physical port part of all the 4K VLANs.

4K IPv4 ACL and 4K IPv6 ACL contains 25 rules per ACL.

Both the 4K ACLs are bound on the 4K VEs

Defect ID: DEFECT000623145		
Technical Severity: High	Probability: High	
Product: Brocade NetIron OS	Technology Group: SDN	
Reported In Release: NI 06.0.00	Technology: OpenFlow	
Symptom: When openflow rule is configured with L2VPN, the packets that come out of the MPLS network are		
deformed as invalid packets.		
Condition: Enable openflow on MPLS LSP.		
Configure openflow rule with LSP and L2VPN label in action.		
In the MPLS egress encounter, the packets are getting dropped.		

Defect ID: DEFECT000623430		
Technical Severity: High	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Monitoring	
Reported In Release: NI 05.8.00	Technology: Hardware Monitoring	
Symptom: High cpu utilization on 8x10G linecard module.		
Condition: Rarely a port on 8x10G module can get into PHY lockup. If this lockup state is continuous, CPU		
utilization can go higher.		
Recovery: Disable the affected port from configuration to bring the CPU usage down.		

Defect ID: DEFECT000623841	
Technical Severity: Critical	Probability: High
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NI 06.0.00	Technology: BGP4 - IPv4 Border Gateway Protocol
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Symptom: Management Module may unexpectedly reload (and switches over to the standby Management

Module if available). The following stack trace will be seen: -

Possible Stack Trace (function call return address list)

20fd7150: bgp_prepare_nlri_holder(pc)

20fd5e5c: bgp_best_route_selection_with_sorting(lr) 20fd5e5c: bgp_best_route_selection_with_sorting 20fd6574: bgp_best_route_selection_and_change

20fa6c94: bgp_check_and_update_bgp_route_in_ip_table_as_necessary 20fa63a8: bgp_add_bgp_routes_to_routing_table_if_necessary_callback

210336ec: bgp_tree_partial_traverse_with_possible_change 20fa67cc: bgp_add_bgp_routes_to_routing_table_if_necessary

20fb4764: bgp_check_updates

20fc1420: bgp_timer

20fc1050: bgp_timeout_func

20b92d10: itc_process_msgs_internal

 $20b931bc: itc_process_msgs$

21015b80: bgp_task 00005e18: sys_end_task

Condition: Management Module may unexpectedly reload when BGP Best path flaps.

BGP best path can flap in scenarios like lBGP next-hop change, flapping BGP route etc..

Defect ID: DEFECT000624061	
Technical Severity: Medium	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NI 05.8.00	Technology: ICMP - Internet Control Message
	Protocol
Symptom: VE Interface MAC is not used as source MAC for packets routed by VPLS-VE interface.	
Condition: Save running configuration with VPLS VE and then reload.	
Or	
Copy Startup-Config with VPLS-VE configurations and then reload.	

Defect ID: DEFECT000624544		
Technical Severity: Medium	Probability: Low	
Product: Brocade NetIron OS	Technology Group: Monitoring	
Reported In Release: NI 05.6.00	Technology: Hardware Monitoring	
Symptom: CES/CER may unexpectedly reload with the following stack trace:-		
Possible Stack Trace (function call re	eturn address list)	
21ff3114: memset(pc)		
2037c4ac: os_malloc_zero(lr)		
2097b280: mplp_send_itc_response		
2097bf40: mplp_process_lp_data_res	sponse_continue	

2095579c: itc_continue_deferred_response 2097c61c: mplp_process_lp_data_response 20954920: itc_process_msgs_internal 20954c58: itc_process_msgs

2097e408: lp_agent_task 00040158: sys_end_task

Condition: There is no known condition for this issue to occur.

Defect ID: DEFECT000624554	
Technical Severity: Medium	Probability: High
Product: Brocade NetIron OS	Technology Group: Traffic Management
Reported In Release: NI 05.8.00	Technology: Traffic Queueing and Scheduling
Symptom: VLL packets received from MPLS uplink are	queued in Queue 0 on egress ports regardless of the
EXP bit	
Condition: Seen on CER/CES platforms only.	

Defect ID: DEFECT000626658		
Technical Severity: High	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: IP Multicast	
Reported In Release: NI 05.8.00	Technology: IPv4 Multicast Routing	
Symptom: Router may experience intermittent ICL link	instability and reloadunexpectedly with the following	
stack trace:-		
2034e390: pim_remove_oif_from_entry		
21db84e8: pim_assert_update_oif_state		
	21db9544: pim_assert_cleanup_state	
	21db9304: pim_assert_cancel_assert	
	21db8798: pimsm_assert_run_fsm	
2034d280: pim_add_oif_to_entry		
21d266ac: mcast_mct_process_ingress_char	nge	
20352b7c: mcast_set_parent_phy_port		
21da0794: pimsm_l2reg_update_phy_port_	from_arp	
21da0d1c: pim_process_register_msg		
21daff90: mcast_receive_slave_message_in	ternal	
21daeb90: mcast_receive_slave_message		
209f040c: itc_process_msgs_internal		
209f08ac: itc_process_msgs		
21d23378: mcast_task		
00040158: sys_end_task		
Condition: When PIM ASSERT Winner OIF moves to	blocked state.	

Defect ID: DEFECT000627306		
Technical Severity: High	Probability: High	
Product: Brocade NetIron OS	Technology Group: Management	
Reported In Release: NI 05.9.00	Technology: Configuration Fundamentals	
Symptom: Remote port connected to a loopback configured port goes down		
Condition: Reloading line card that has a loopback configured port		
Recovery: Disable and enable the loopback configured port		

Defect ID: DEFECT000627973		
Technical Severity: High	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer	
Reported In Release: NI 05.8.00	Technology: IPv6 Addressing	
Symptom: CAM violation syslog message is generated along with invalid entry error message on line card		
console.		
Condition: Only on line cards with algorithmic mode, while an already existing IPv6 route entry is getting added		
repeatedly (duplicate entry). This results in a CAM violation syslog message.		

Closed with code changes R06.0.00a

This section lists software defects with Critical, High, and Medium Technical Severity closed with a code change as of 8/11/2016 in NI 6.0.00a.

Defect ID: DEFECT000577783		
Technical Severity: High	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Monitoring	
Reported In Release: NI 05.7.00	Technology: RAS - Reliability, Availability, and	
	Serviceability	
Symptom: Port on 100Gx2-CFP2 line card module may not come up.		
Condition: Remote end CFP2 optic is removed and re-inserted.		
Recovery: Disable and enable the port on remote end.		

Defect ID: DEFECT000577992	
Technical Severity: Medium	Probability: High
Product: Brocade NetIron OS	Technology Group: Network Automation and
	Orchestration
Reported In Release: NI 05.8.00	Technology: OpenStack Integration
Symptom: The "flow-control/flow-control rx-pause ignore" status displayed in "show flow-cntrl" and "show	
interface" is not in sync with the "flow-control/flow-control rx-pause ignore" configuration.	
Condition: On executing below commands to see flow-control status:	
1. show interface	
2. show flow-cntrl	

Defect ID: DEFECT000578252		
Technical Severity: High	Probability: High	
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching	
Reported In Release: NI 05.8.00	Technology: VLAN - Virtual LAN	
Symptom: Flapping of VLL		
Condition: When VRF is moved from one interface to another interface belonging to different PPCR.		
Workaround: While moving VRF from one interface to another belonging to different ppcr, disable both the		
interface and then move the VRF.		

Defect ID: DEFECT000578821	
Technical Severity: Medium	Probability: Low
Product: Brocade NetIron OS	Technology Group: Monitoring
Reported In Release: NI 05.7.00	Technology: Hardware Monitoring
Symptom: 100G CFP2 port goes down and LED may still glow green	
Condition: 100G CFP2 port status is down on both sides	

Defect ID: DEFECT000579744	
Technical Severity: High	Probability: Low
Product: Brocade NetIron OS	Technology Group: Management
Reported In Release: NI 05.6.00	Technology: CLI - Command Line Interface
Symptom: Management Module may reload unexpectedly while executing concurrent show commands from multiple sessions like TELNET, SSH.	
Condition: Multiple show commands should be executed from different sessions while a "write memory" command is executed.	
Example: "show lag", "show ip ospf interface", "show ipv6 bgp summary"	

Defect ID: DEFECT000581204		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Monitoring	
Reported In Release: NI 05.8.00	Technology: OAM - Operations, Admin &	
	Maintenance	
Symptom: Link of 100Gx2-CFP2 LR4 interface may go down		
Condition: 1. When the RX side of the cable connected to remote end was removed.		
2. When the remote end device is Infinera WDM/DTN-X device		
Recovery: Remove and Re-insert of the TX cable from the remote end.		

Defect ID: DEFECT000587069	
Technical Severity: Medium	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching
Reported In Release: NI 05.4.00	Technology: VLAN - Virtual LAN
Symptom: When configuring a new VLAN on the CES, the "Error: insufficient fids available for vlan creation"	
message appears	
Condition: On CER/CES platform, with continuous churns due to multicast traffic sources and receivers	

Defect ID: DEFECT000587126		
Technical Severity: Medium	Probability: High	
Product: Brocade NetIron OS	Technology Group: VPN	
Reported In Release: NI 05.6.00	Technology: EVPN - Ethernet VPN	
Symptom: When "default-local-preference" parameter is globally set, the VPNV4 advertised aggregate routes will not update the local-pref with the new parameter set, even after clearing the BGP neighborship using "clear ip bgp neighbor all"		
Condition: Aggregate routes are advertised through BGP VPN. "default-local-preference" should be globally set/reset		
Workaround: Run "clear ip bgp vrf <vrf-name> neighbor all" for the VRF's associated.</vrf-name>		
(or)		
Remove & add "local-as" under "router bgp" which stops the BGP operation and starts again		

Defect ID: DEFECT000589935		
Technical Severity: High	Probability: High	
Product: Brocade NetIron OS	Technology Group: Security	
Reported In Release: NI 05.9.00	Technology: IPsec - IP Security	
Symptom: Sometime IPsec Module may reset when the	following commands are issued using script:	
no interface tunnel <tunnel-number></tunnel-number>	no interface tunnel <tunnel-number></tunnel-number>	
no ipsec profile <ipsec-profile-name></ipsec-profile-name>	no ipsec profile <ipsec-profile-name></ipsec-profile-name>	
no ikev2 profile <ikev2-profile-name></ikev2-profile-name>	no ikev2 profile <ikev2-profile-name></ikev2-profile-name>	
no ikev2 policy <ikev2-policy-name></ikev2-policy-name>	no ikev2 policy <ikev2-policy-name></ikev2-policy-name>	
	no ikev2 auth-proposal <auth-proposal-name></auth-proposal-name>	
no ikev2 proposal <ikev2-proposal-name></ikev2-proposal-name>		
Condition: Issue the following commands using script with no delay between each command:		
no interface tunnel <tunnel-number></tunnel-number>		
no ipsec profile <ipsec-profile-name></ipsec-profile-name>		
no ikev2 profile <ikev2-profile-name></ikev2-profile-name>		
no ikev2 policy <ikev2-policy-name></ikev2-policy-name>		
no ikev2 auth-proposal <auth-proposal-name< th=""><th>2></th></auth-proposal-name<>	2>	
no ikev2 proposal <ikev2-proposal-name></ikev2-proposal-name>		

Defect ID: DEFECT000590355		
Technical Severity: Medium	Probability: High	
Product: Brocade NetIron OS	Technology Group: MPLS	
Reported In Release: NI 06.0.00	Technology: MPLS Traffic Engineering	
Symptom: Happens on a scaled scenario on a slow server with a response time more than 10 seconds.		
No path is available for the LSPs, so the LSPs keep retrying.		
Condition: This occurs with a scaled scenario on a slow server with a response time longer than 10 seconds.		
No path is available for the LSPs, so the LSPs keep retrying.		
The server response time should be within milliseconds. This is one of the main reasons to use PCE.		
The issue was seen only when using a third party test emulator.		

Defect ID: DEFECT000591098		
Technical Severity: High	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: IP Multicast	
Reported In Release: NI 05.6.00	Technology: IPv4 Multicast Routing	
Symptom: Video freezes every 3 minutes		
Condition: In ring topology where the RPT and SPT path is different and when ASSERT winner becomes		
blocked OIF on (S,G) entry		

Defect ID: DEFECT000591211		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Monitoring	
Reported In Release: NI 05.8.00	Technology: Hardware Monitoring	
Symptom: The below i2c access syslog/trap messages for PSUs will be observed.		
SYSLOG: <174>Jan 30 03:22:39 mlxe3 System: i2c access notice (GIEI = set)Minor, Mux index 0,		
Mux tap 5, ID 0x1, Addr 0x5, (PS2)		
SYSLOG: <174>Jan 30 03:22:39 mlxe3 System: i2c access notice (GIEI = clear)Minor, Mux index 0,		
Mux tap 5, ID 0x1, Addr 0x5, (PS2)		
Condition: On running "show chassis" command continuously with all PSUs present in the chassis.		

Defect ID: DEFECT000591955	
Technical Severity: Medium	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NI 05.7.00	Technology: BGP4 - IPv4 Border Gateway Protocol
Symptom: Incorrect metric value might be advertised for a BGP route to a EBGP neighbor, with the neighbor	
configured without route-map.	
Condition: The neighbor should have an out route-map,	
The route-map should have "set metric-type internal" which will advertise the BGP route with IGP	
metric for MED.	
Workaround: "clear ip bgp neighbor <neighbor address=""> soft out"</neighbor>	

Defect ID: DEFECT000592929		
Technical Severity: High	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer	
Reported In Release: NI 05.9.00	Technology: IP Addressing	
Symptom: Unexpected reload of line card module.		
Condition: Loopback interface in non-default VRF has the same IP address as that of the loopback interface in		
default VRF.		
Workaround: The IP addresses of loopback interfaces in default and non-default VRF need to be different.		

Defect ID: DEFECT000593035		
Technical Severity: Medium	Probability: High	
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching	
Reported In Release: NI 05.7.00	Technology: LAG - Link Aggregation Group	
Symptom: In a VPLS network, multicast destined packets may go on wrong VPLS instance on the remote PE.		
Condition: In a VPLS network with "vpls-cpu-protection", multicast destined packets may go on wrong VPLS		
instance on the remote PE when a user disables and re-enables one of the forwarding paths.		
Recovery: Problem can be recovered by reloading the device.		

Defect ID: DEFECT000594318	
Technical Severity: High	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Security
Reported In Release: NI 05.9.00	Technology: SSH - Secure Shell
Symptom: The SSH session terminates unexpectedly wh	en running "show tech- support" command.
Condition: From an SSH session, execute "show tech-sup	pport" command on a scaled setup with large
configuration (32 slot chassis with ACL confi	gurations close to the supported maximum limit).
Workaround: Redirect the output of "show tech-support"	to a file instead of streaming to the SSH terminal.
Example:	
$abc@xyz{295}$: $ssh lab@w.x.y.z > show_$	_tech_12.txt
Password:	<>< Provide password here, and monitor the
output in a separate window (see below)	
	<>< Now we are at user privilege level
prompt. So enter "enable"	
	<>< Now we are at privilege exec mode.
So enter "show tech"	
	<>< wait for output to complete. Then
exit twice (for exit out of privilege mode,	and then exit out of user mode)
Connection to w.x.y.z closed by remote ho	ost.

In a separate window the output can be monitored as follows: -

abc

Connection to w.x.y.z closed.

abc@xyz{296}:

Defect ID: DEFECT000594398	
Technical Severity: Medium	Probability: Medium
	v
Product: Brocade NetIron OS	Technology Group: Monitoring
Reported In Release: NI 05.7.00 Technology: Hardware Monitoring	
Symptom: Parity error similar to below mentioned is seen in syslog:	
Mar 24 09:15:42:E:CAM2PRAM Word 2 Double Bit Parity Error on port range 1/1 - 1/10	
Condition: Single bit ECC error occurs on the Linecard module NP memory	

Defect ID: DEFECT000595113	
Technical Severity: High	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NI 05.8.00	Technology: DHCP - Dynamic Host Configuration
	Protocol
Symptom: When the router is acting as DHCPv6 relay agent, it is not choosing DHCPv6 client facing interface's	
link-local address as the source address in the IPv6 packet when it forwards reply message to the	
client.	
Condition: The device should act as a DHCPv6 relay agent.	

Defect ID: DEFECT000595638	
Technical Severity: High	Probability: Low
Product: Brocade NetIron OS	Technology Group: SDN
Reported In Release: NI 06.0.00	Technology: OpenFlow
Symptom: DUT might experience a unplanned restart when more than 32K OpenFlow flows are being	
configured over SSL.	
Condition: More than 32K flows are sent from OpenFlow controller.	

Defect ID: DEFECT000595704		
Technical Severity: High	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer	
Reported In Release: NI 05.8.00	Technology: GRE - Generic Routing Encapsulation	
Symptom: Unable to establish TCP connection over GRE Tunnel.		
Condition: The command "ip tcp redirect-gre-tcp-syn" should be present in the global configuration, while the		
tunnel source port should have the command "ip tcp adjust-mss <value>" enabled.</value>		
Workaround: Remove the command "ip tcp adjust-mss <value>" from the interface configuration.</value>		

Defect ID: DEFECT000595942	
Technical Severity: High	Probability: Medium
Product: Brocade NetIron OS	Technology Group: MPLS
Reported In Release: NI 06.0.00	Technology: MPLS Traffic Engineering
Symptom: System reset is seen sometimes when select-path is retrying a new instance due to an IGP neighbor	
down event and no path is available.	
Condition: The system has IGP sync enabled and an LSP has selected a path as the Active path. In addition there	
is no alternative path for the selected secondary to come UP. Under these conditions, if an interface	
flap in the network triggers a neighbor down event, this issue may be seen.	

Defect ID: DEFECT000595982		
Technical Severity: High	Probability: High	
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer	
Reported In Release: NI 05.6.00	Technology: BFD - BiDirectional Forwarding	
	Detection	
Symptom: BFD session state is staying UP even after un-tagging the port from VLAN.		
Condition: Sometimes after untagging a port from VLAN.		
Recovery: Execute the below command after untagging ports from VLAN if a BFD session state does not		
transition to DOWN state		
"clear bfd neighbors A.B.C.D/X:X::X:X"		

Defect ID: DEFECT000596110	
Technical Severity: Medium	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching
Reported In Release: NI 05.9.00	Technology: LAG - Link Aggregation Group
Symptom: A LAG can be deployed with inconsistent sFlow configuration on primary port and secondary port.	
Condition: "sflow forwarding" is enabled on an interface and is added to a deployed LAG whose primary port	
does not have it enabled.	
Note: This does not affect the LAG configuration	

Defect ID: DEFECT000596196		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Monitoring	
Reported In Release: NI 05.6.00	Technology: Syslog	
Symptom: Alarm messages similar to the ones given below will be seen in Syslog/LP console along with trap message when 10GE Tunable SFP+ optics are connected.		
	Apr 20 14:17:38:A: Latched low RX Power alarm, port 1/3	
Apr 20 14:17:38:A: Latched low RX Pov	Apr 20 14:17:38:A: Latched low RX Power alarm, port 1/1	
Condition: Tunable Optic SFPs connected		
Recovery: "dm optic <port> eeprom" command can be executed on the associated Linecard Module to suppress</port>		
the alarm messages in the Syslog.		

Defect ID: DEFECT000596208	
Technical Severity: Medium	Probability: High
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NI 06.0.00	Technology: BFD - BiDirectional Forwarding
	Detection
Symptom: The router inexplicably restarted.	
Condition: When BFD sessions are established over LAG ports.	

Defect ID: DEFECT000596312		
Technical Severity: Medium	Probability: Low	
Product: Brocade NetIron OS	Technology Group: Monitoring	
Reported In Release: NI 05.8.00	Technology: Hardware Monitoring	
Symptom: Link SFM 1/FE 1/Link 1 will be put to DOWN state with following message due to side effect of		
auto tuning.		
Warning: Fabric Link shutdown due to Autotuning failure for SFM 1/FE 1/Link 1 -> LP 1/FE 1/Link		
76		
Condition: Link SFM 1/FE 1/Link 1 will be put to DOWN state when auto-tuning fails.		
Recovery: Power on link SFM 1/FE 1/Link 1 manually.		

Defect ID: DEFECT000596446	
Technical Severity: Medium	Probability: High
Product: Brocade NetIron OS	Technology Group: MPLS
Reported In Release: NI 06.0.00	Technology: MPLS Traffic Engineering
Symptom: After a request has been made, if the user disables the LSP, removes 'pce compute' from the LSP	
config and enables it, and the response comes or timeout occurs, the error code of the LSP will be	
incorrect. This happens in scenarios where the server response is very slow, in the order of 10s of	
seconds, or when the request is timed out due to unresponsive server.	
Condition: Seen only with PCE servers with extremely slow response time, or when the request is timed out as	
per the request timer, and the user changes the config on the LSP during this time to make the LSP	
locally computed.	

Defect ID: DEFECT000596574		
Technical Severity: Critical	Probability: High	
Product: Brocade NetIron OS	Technology Group: Traffic Management	
Reported In Release: NI 05.9.00	Technology: Traffic Queueing and Scheduling	
Symptom: TM errors on a 32-slot chassis with 24x10G modules resulting in traffic drop.		
Condition: Seen on a 32-slot chassis with 24x10G modul	es present. Triggered by either	
- a chassis reload or		
- an LP insertion while traffic is present, or		
- an LP reboot while traffic is present.		
Workaround: For the chassis reload - Add the command "wait-for-all-cards" in the configuration before reload.		
This will ensure that the issue does not happen during chassis reload.		
For LP insertion - If LP is inserted without any config present for the LP, the issue will not		
happen. If LP is inserted with a config present for the LP, the issue can happen and recovery will		
need to be performed.		
Recovery: Reload the chassis after configuring the "wait-	-for-all-cards" command.	

Defect ID: DEFECT000597413		
Technical Severity: Medium	Probability: High	
Product: Brocade NetIron OS	Technology Group: Management	
Reported In Release: NI 05.6.00	Technology: Configuration Fundamentals	
Symptom: Link fault signaling settings are not applied after reloading the chassis.		
Condition: With link fault signaling enabled globally either of the following conditions can cause this issue: -		
- A new Linecard Module is inserted		
- Existing Linecard Module is power cycled		
- Chassis is reloaded		
Recovery: Disable and enable link-fault-signaling global	ly	

Defect ID: DEFECT000597682		
Technical Severity: Critical	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: OSPFv3 task could cause router to unexpectedly reload		
Condition: If the OSPFv3 task receives multiple external LSAs with Forwarding Address field and if the longest		
prefix match for the Forwarding Address in OSPFv3 is in an area not same as ASBR (external LSA		
originator)		

Defect ID: DEFECT000597791		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: MPLS	
Reported In Release: NI 05.6.00	Technology: IP over MPLS	
Symptom: MPLS Traffic forwarding failing on MPLS transit node after reloading or inserting ingress Linecard		
module.		
Condition: Reload or insertion of Linecard module which has MPLS configuration.		
Recovery: Disable and enable the outgoing interface so that it would clear the existing ARP entries and relearn it.		

Defect ID: DEFECT000597936	
Technical Severity: High	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Management
Reported In Release: NI 05.4.00	Technology: SNMP - Simple Network Management
	Protocol
Symptom: Customer not able to fetch the VRRP related information (vrrpAssoIpAddrTable,	
vrrpRouterStatsTable) through SNMP.	
Condition: When VRRP is configured and during polling the VRRP related information (vrrpAssoIpAddrTable,	
vrrpRouterStatsTable) through SNMP.	

Defect ID: DEFECT000599114	
Technical Severity: High	Probability: Low
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching
Reported In Release: NI 05.9.00	Technology: MCT - Multi-Chassis Trunking
Symptom: When MCT VPLS cluster node status changes from Active to Standby, VPLS session between MCT	
and remote peer does not go down, and MAC address(es) learned against the VPLS session on the	
Remote peer are not flushed. This will result in traffic loss from the remote peer to the client devices.	
Condition: "client-interface shutdown" is enabled on MCT VPLS cluster.	
Recovery: Flap the remote peer OR execute "clear mac" on remote peer.	

Defect ID: DEFECT000599540		
Technical Severity: High	Probability: High	
Product: Brocade NetIron OS	Technology Group: Security	
Reported In Release: NI 05.7.00	Technology: ACLs - Access Control Lists	
Symptom: Erroneous counting of IPv6 traffic results in incorrect rate limiting of the received traffic and hence		
packet drops		
Condition: IPv6 ACLs with rate limiters should be configured along with IPv4/Port level rate limiters		
Modification (Delete/Add) of IPv4/Port level rate limiters		
Recovery: Reload of the affected Linecard Module is the only option		

Defect ID: DEFECT000600151		
Technical Severity: High	Probability: High	
Product: Brocade NetIron OS	Technology Group: Security	
Reported In Release: NI 06.0.00	Technology: IPsec - IP Security	
Symptom: Observe unexpected reload of standby Management module		
Condition: This issue may be observed when a large number of IPsec tunnels are configured and IPSEC re-		
keying mechanism is in progress.		

Defect ID: DEFECT000600532		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Security	
Reported In Release: NI 06.0.00	Technology: MAC Port-based Authentication	
Symptom: When "delete-dynamic-learn" is enabled under "global-port-security", MAC addresses learned on a		
PMS enabled LAG do not get deleted when the LAG goes down.		
Condition: Under "global-port-security", "delete-dynamic-learn" is enabled.		
PMS is enabled on a LAG port.		
MAC addresses are learned on LAG's member ports.		
LAG is either disabled or goes down		
Recovery: Delete the Secure MAC address learned on the LAG manually.		

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Defect ID: DEFECT000600734			
Technical Severity: High	Probability: High		
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching		
Reported In Release: NI 05.6.00	Technology: LAG - Link Aggregation Group		
Symptom: Secondary port in a LAG remains in LACP-B	Symptom: Secondary port in a LAG remains in LACP-BLOCKED state after removing it and re-adding it in a		
LAG that has "force-primary-port-mac" enable	LAG that has "force-primary-port-mac" enabled.		
Condition: LAG configuration should have "force-primary-port-mac" enabled.			
L2ACL used on the primary port should have a permit rule only for primary port of the peer LAG.			
Ex: If primary port MAC of the peer is aaaa.bbbb.cccc the L2 ACL should be:			
mac access-list acl_sample			
permit aaaa.bbbb.cccc ffff.ffff.ffff any any etype any			
deny any any any etype any			
Workaround: Add the interface MAC of all the member ports of the LAG to the L2ACL			
Recovery: Add the interface MAC of the current primary port of the LAG to the L2ACL if there is a change in			
the primary port status	-		

Defect ID: DEFECT000600930		
Technical Severity: High	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer	
Reported In Release: NI 05.4.00	Technology: DHCP - Dynamic Host Configuration	
	Protocol	
Symptom: In some cases, the DHCP clients will not get the address from the server when the MLX is acting as a		
relay agent.		
Condition: The VE interface is configured with an IP unnumbered loopback. MLX receives a DHCP discovery		
packet with option-82 and option-43 already inserted.		
Workaround: Move the IP address from the loopback interface to the VE interface. Disable option 82.		

Defect ID: DEFECT000601634		
Technical Severity: Medium	Probability: Low	
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching	
Reported In Release: NI 05.8.00	Technology: MCT - Multi-Chassis Trunking	
Symptom: On CES/CER, IP multicast traffic received on ICL port will be forwarded to local CCEP even though remote CCEP is UP.		
Condition: Add a member-VLAN to the MCT cluster.		
Recovery: Save the new configuration & Reload.		

Defect ID: DEFECT000602818		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Monitoring	
Reported In Release: NI 05.9.00	Technology: Telemetry	
Symptom: ACLs do not work and no traffic is forwarded. No CAM entries found in line cards.		
Condition: A memory leak in the line-card can cause memory allocation to fail and the line card becomes unable		
to store the ACL entries received from management module. Since the ACL rules are not		
downloaded, they are not programmed in the hardware.		
The memory leak is caused by updates in the next hop VLAN of the route map where the ACL entries		
are present.		
This can be triggered by events such as port flap on the line card in question, reloads of other line		
cards in the system and updates in the VLAN configuration.		

Defect ID: DEFECT000602865		
Technical Severity: High	Probability: High	
Product: Brocade NetIron OS	Technology Group: SDN	
Reported In Release: NI 05.8.00	Technology: OpenFlow	
Symptom: When OpenFlow rules are configured in reverse order of priority, complete traffic loss may be		
observed.		
Condition: 1. Configure OpenFlow rule with priority 100		
2. Configure OpenFlow rule with priority 90 on the same port.		
3. Observe complete traffic loss.		
Workaround: Apply OpenFlow rules in ascending priority order, i.e., first apply rule with priority 90 and then		
priority 100.		

Defect ID: DEFECT000604313		
Technical Severity: High	Probability: High	
Product: Brocade NetIron OS	Technology Group: Security	
Reported In Release: NI 05.9.00	Technology: PBR - Policy-Based Routing	
Symptom: L2PBR binding not propagated to Linecard.		
Memory leak on line card when L2PBR is bound on the interface. IPv4 PBR entries are not		
programmed to TCAM.		
Condition: L2PBR binding isn't propagated to Linecard when binding is performed before defining the route-		
map.		
Memory leak on the Linecard when L2PBR is applied on the interface.		
IPv4 PBR entries aren't programmed to hardware when the same route-map is bound on the same		
interface for L2PBR.		
Workaround: Define route-map before binding on interface for L2PBR entries to be programmed.		

Defect ID: DEFECT000604894	
Technical Severity: Critical	Probability: Medium
Product: Brocade NetIron OS	Technology Group: MPLS
Reported In Release: NI 05.7.00	Technology: MPLS Traffic Engineering

Symptom: Below symptoms are seen on router with MPLS Traffic Engineering configured with OSPF-TE as IGP.

- 1. Memory Allocation Failures console prints will be seen on Router.
- Router Active Management Module goes to low available memory, less than 20%. Brocade#show memory

... Available Memory (%):

20 percent

...

3. Large number (greater than 15,000) of allocations seen for TE-LSA-Id elements in MPLS; Alloc field of TE-LSA-Id in below command output

Brocade#show mpls memory

•••

Mem-Type Alloc BytesAlloc TotalAlloc TotalFree AllocPeak AllocFail FreeFail

...

TE-LSA-Id 10145010 578265570 10426232 281222 10145010 0 0

•••

Large number of TE-LSA-Id allocations implies that many of its allocations were not freed when they were supposed to be freed.

Memory Allocation failure in MPLS will lead to unspecified behaviors like CSPF fail, LSP not coming up, Fast reroute not happening,

Condition: Above mentioned Symptoms will be seen on router only with below conditions

- 1. MPLS Traffic Engineering configured using OSPF TE.

 Brocade(config-mpls-policy)#traffic-engineering ospf area [area-id]
- 2. A network with high frequency of OSPF link flaps, OSPF LSA purges.

Recovery: Restart/switchover of the Management Module is the only recovery mechanism. This may result in temporary disruption of traffic.

However, if the operator observes a low memory situation then the operator can check for the third condition mentioned in customer symptoms. If it is confirmed that it is a TE-LSA-Id high memory utilization and memory allocation fails are not seen yet then,

At maintenance window,

- 1. Note down the current configuration of traffic engineering under mpls policy
- 2. un-configure MPLS policy mode OSPF traffic engineering completely as per below command.

BROCADE(config-mpls-policy)#no traffic-engineering ospf

Condition: MIB Compile errors seen due to parsing issues in certain SNMP Managers.

Make sure that the TE data base is cleared using 'show mpls te database'

3. Configure OSPF Traffic engineering again using step 1 noted configuration.

Above steps shall release all non freed memory held by TE-LSA-Id entry in MPLS.

Defect ID: DEFECT000605297	
Technical Severity: Low	Probability: Low
Product: Brocade NetIron OS	Technology Group: Management
Reported In Release: NI 05.8.00	Technology: SNMP - Simple Network Management
	Protocol
Symptom: Parse error due to missing double quotes in two lines in MIB file.	
 #TYPE "Brocade Trap: Lockup and recovery threshold exceeded Destination %s SPI %s Message Type %u. 	

Defect ID: DEFECT000606368	
Technical Severity: Medium	Probability: High
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NI 05.9.00	Technology: IP Addressing

Symptom: Ports configured under GTP profile is lost from running configuration upon reload.

Condition: When a LAG port is added to the GTP profile and if the corresponding LAG has individual ports (non-consecutive) only or has a combination of individual (non-consecutive) as well as range of ports configured.

Following is the example configuration with non-consecutive ports that gets lost on reload,

gtp brc_gtp_profile_strip_lag 1 ports eth 14/1 eth 14/3 eth 32/4

ingress-inner-filter

Following is the example configuration with non-consecutive ports as well as range of ports, that gets lost on reload,

gtp brc_gtp_profile_strip_lag 1 ports eth 14/1 to 14/5 eth 32/4 ingress-inner-filter

Defect ID: DEFECT000606395		
Technical Severity: High	Probability: High	
Product: Brocade NetIron OS	Technology Group: MPLS	
Reported In Release: NI 05.9.00	Technology: MPLS Traffic Engineering	
Symptom: Management module will unexpectedly reset		
Condition: This will happen only when "mpls adjust-bandwidth lsp <name>" is entered with a name other than</name>		
one of the configured non-bypass RSVP LSPs on that system.		
Workaround: It can be avoided by ensuring that the entered name is correct and of an already configured non-		
bypass RSVP LSP on the system.		

Defect ID: DEFECT000608572		
Technical Severity: High	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Management	
Reported In Release: NI 05.9.00	Technology: SNMP - Simple Network Management	
	Protocol	
Symptom: When SNMP polling of 100Gx2-CFP2 optics OR CFP2 to QSFP28 adapter, the Management module		
may unexpectedly reload and switchover to the	ne standby Management module if available.	
Condition: SNMP polling on tables: "snIfOpticalMonitoringInfoTable" OR "snIfOpticalLaneMonitoringTable"		
with 100Gx2-CFP2 optics OR CFP2 to QSFF	228 adapter.	
Workaround: Disable SNMP polling for the tables: "snIfOpticalMonitoringInfoTable" and		
"snIfOpticalLaneMonitoringTable".		

Defect ID: DEFECT000610730	
Technical Severity: High	Probability: High
Product: Brocade NetIron OS	Technology Group: Management
Reported In Release: NI 06.0.00	Technology: Configuration Fundamentals
Symptom: Port flaps will be observed 3-4 times when 100G CFP2 SR10 or QSFP28 port is enabled.	
Condition: Always	

Defect ID: DEFECT000610820	
Technical Severity: Critical	Probability: High
Product: Brocade NetIron OS	Technology Group: Monitoring
Reported In Release: NI 06.0.00	Technology: Hardware Monitoring
Symptom: Link flaps 3 or 4 times before the link stays UP when disable and enable interface having CFP2 SR10	
or QSFP28 transceiver modules.	
Condition: This issue is specific to QSFP28 and CFP2 S	R10.

Closed with code changes R06.0.00

This section lists software defects with Critical, High, and Medium Technical Severity closed with a code change as of 4/25/2016 in NI 6.0.00. This list was updated 5/26/16.

Defect ID: DEFECT000534315		
Technical Severity: High	Probability: High	
Product: Brocade NetIron OS	Technology Group: Management	
Reported In Release: NI 05.8.00	Technology: Configuration Fundamentals	
Symptom: MLX8x10 line cards may fail initialization in reason code seen in "show module" output. CARD STATE DOWN(22)		
Card State Down Reason Code: 22 CARD_DOWN_REASON_TM_LBG_TEST_FAIL		
Condition: Certain scaled scenarios and multiple line ca	rds powering up at the same time may cause the issue.	
Recovery: Power cycle the line card.		

Defect ID: DEFECT000544399	
Technical Severity: Medium	Probability: High
Product: Brocade NetIron OS	Technology Group: Network Automation and Orchestration
Reported In Release: NI 05.8.00	Technology: OpenStack Integration
Symptom: Error message "free_config_buffer: bad buffer address: 28310000 20335b90 20335fb0 209f1c2c 20ae38fc 20ae3c34 209e98e8 00005e18 00000000" may be seen after successful config file transfer with tftp via ssh.	
Condition: Executing transfer of config file via tftp over SSH	

Defect ID: DEFECT000551250		
Technical Severity: High	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer	
Reported In Release: NI 05.6.00	Technology: IP Addressing	
Symptom: CER configured as DHCP relay agent does not forward the DHCP offer.		
Condition: 1) From CER the reachability to another DHCP server/relay agent should be set up via static route		
under VRF with VE interface.		
2) Unconfigure and reconfigure the VE interface.		
Recovery: Unconfigure and reconfigure the static route that points to the DHCP server/ relay agent.		

Defect ID: DEFECT000552823		
Technical Severity: High	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Monitoring	
Reported In Release: NI 05.8.00	Technology: OAM - Operations, Admin &	
	Maintenance	
Symptom: Remote-fault will not work for the ports of 20x10GE and 4x10GE-IPSEC line card modules.		
Condition: Applicable for ports of 20x10GE and 4x10GE-IPSEC line card modules.		

Defect ID: DEFECT000555532		
Technical Severity: High	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Security	
Reported In Release: NI 05.9.00	Technology: IPsec - IP Security	
Symptom: IPSec tunnel flaps may be observed and related SysLogs are generated.		
Condition: May happen in a scaled scenario with both IPSec and sFlow configuration on an IPSec interface.		

Defect ID: DEFECT000557149	
Technical Severity: Medium	Probability: High
Product: Brocade NetIron OS	Technology Group: SDN
Reported In Release: NI 05.9.00	Technology: OpenFlow
Symptom: Warning message	
"ITC_MSG_TYPE_HAL_RESPONSE (00130094) received for app 0000003f" may be seen.	
Condition: When using an OpenFlow 1.3 controller to administrate OpenFlow port up/down state.	

Defect ID: DEFECT000558739		
Technical Severity: Medium	Probability: High	
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer	
Reported In Release: NI 05.9.00	Technology: GRE - Generic Routing Encapsulation	
Symptom: IPv4 MTU gets cleared despite throwing an error message while executing the command "no ip mtu		
<value>"</value>		
Condition: 1. Support for Jumbo frames should be enabled		
2. Configure IPv4 MTU to be greater than 1500 bytes		
3. Configure GRE Tunnel MTU to be greater than default Maximum value (1476)		
Workaround: The GRE Tunnel MTU can be re-configured after removing the IPv4 MTU (OR)		
Remove the GRE Tunnel MTU configuration before modifying IPv4 MTU		

Defect ID: DEFECT000558932		
Technical Severity: Low	Probability: Low	
Product: Brocade NetIron OS	Technology Group: Network Automation and	
	Orchestration	
Reported In Release: NI 05.8.00	Technology: OpenStack Integration	
Symptom: Continuous reload of line card module		
Condition: Source path having invalid FPGA image		
Recovery: Place the correct image in the source path and retry the line card module auto upgrade procedure		

Defect ID: DEFECT000559099		
Technical Severity: Medium	Probability: High	
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer	
Reported In Release: NI 05.7.00	Technology: BGP4+ - IPv6 Border Gateway Protocol	
Symptom: 6PE and 6VPE may not work for a certain range of BGP nexthop addresses. If any of the higher two		
octets of the nexthop address is 255, then these nexthops will not be reachable.		
Condition: In 6PE and 6VPE deployment if the BGP nexthop address used is of range where any of the higher		
two octets is 255 in the IPv4 address part of the IPv4 mapped IPv6 address, this nexthop address and		
the BGP routes with that nexthop address will not be reachable.		
For example, if the BGP nexthop for 6PE or 6VPE is :FFFF:X.X.Y.Y (IPv4 mapped IPv6 address),		
and if X is set to 255, then those nexthop addresses might not be reachable in BGP.		
Workaround: Use address in a different range as BGP nexthop address.		
Recovery: Issue clear ip bgp neighbor <x.x.x.x> or clear ip bgp vpnv6 neighbor <x.x.x.x>, where <x.x.x.x></x.x.x.x></x.x.x.x></x.x.x.x>		
represents 6PE or 6VPE neighbor.		

Defect ID: DEFECT000559396		
Technical Severity: Low	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: 1) Same destination learnt from multiple ASBRs is shown as OSPF ECMP route in routing table. 2) Same destination learnt from multiple ASBRs (at least one of them in a NSSA area), only the non-NSSA route is shown in the routing table.		
Condition: Routes learnt by ABRs in the following cases: - 1) Same destination advertised by ASBRs present in multiple areas with at least one of them in the backbone area. 2) Same destination advertised by ASBRs present in multiple areas with at least one of them configured as NSSA		

Defect ID: DEFECT000559995		
Technical Severity: Medium	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: Unexpected reload of Management module in BGP task		
Condition: When BGP receives route updates with duplicate community from peer and either of the following		
conditions occur: -		
1) Route map processing is done for the received duplicate community		
2) The following command is executed		
show ip bgp routes detail x.x.x.x		

Defect ID: DEFECT000560809	
Technical Severity: High	Probability: Medium
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: Unexpected reload of Management Module.	
Condition: 1. "static-network" should be configured under BGP	
2. BGP peer announcing the route, which is same as the configured static network.	
Workaround: Have a route-map configured that will deny routes from peers that are matching with the static-	
network configured.	

Defect ID: DEFECT000560832		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Traffic Management	
Reported In Release: NI 05.8.00	Technology: QoS - Quality of Service	
Symptom: Throughput issues and packet loss when chassis is reloaded multiple times.		
Condition: Packets getting dropped in traffic manager. It happens for all line card types.		

Defect ID: DEFECT000561519	
Technical Severity: High	Probability: Medium
Product: Brocade NetIron OS	Technology Group: SDN
Reported In Release: NI 05.9.00	Technology: OpenFlow
Symptom: Disable/Enable of OpenFlow port from controller fails for certain conditions when the controller is	
connected through the management port.	
Condition: When the controller is connected via the management port and	
- is trying to enable/disable OpenFlow port 1/1	
- is trying to enable/disable OpenFlow hybrid port and this port is part of a VE.	
Workaround: For VE port, assign the global VE MAC to the MAC address of a physical port other than port 1/1.	

Defect ID: DEFECT000561715	
Technical Severity: Medium	Probability: High
Product: Brocade NetIron OS	Technology Group: Security
Reported In Release: NI 05.9.00	Technology: ACLs - Access Control Lists
Symptom: Accounting of Layer 2 Policy based routing will not work after hitless upgrade.	
Condition: It happens when hitless upgrade is done.	
Recovery: Need to reset the line card module to recover from this issue.	

Defect ID: DEFECT000561919	
Technical Severity: High	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Management
Reported In Release: NI 05.7.00	Technology: Configuration Fundamentals
Symptom: Traffic loss was seen and all the traffic was showing as dropped on NP on a 4x10G module.	
Port 6/1 RX	
NP Rx Raw Good Packet = (84418766	
NP Rx Forward Packet $= (0)$	
NP Rx Discard Packet = (84418766)	
Condition: The issue appeared after line card went into rolling reboot.	

Defect ID: DEFECT000562196	
Technical Severity: Medium	Probability: High
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NI 05.8.00	Technology: ARP - Address Resolution Protocol
Symptom: On CER/CES, packets forwarded by HW using a static route to a /32 destination may be lost	
Condition: This issue is applicable only for CER/CES platforms	
(1) Static route configured to reach a /32 destination with nexthop set to one of the VE interfaces	
(2) Traffic to the destination should have been forwarded for some time, stopped and then resumed	
after a gap of at least one minute	
Recovery: "clear ip route x.x.x.x/x" for the affected route	

Defect ID: DEFECT000562309	
Technical Severity: High	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NI 05.2.00	Technology: BGP4 - IPv4 Border Gateway Protocol
Symptom: BGP (peer) flap on CER devices.	
Condition: When system up time is more than 1242 days	

Defect ID: DEFECT000562467	
Technical Severity: High	Probability: Medium
Product: Brocade NetIron OS	Technology Group: IP Multicast
Reported In Release: NI 05.8.00	Technology: IPv4 Multicast Routing
Symptom: Downstream devices connected on CEP port may not receive multicast traffic from an MCT peer	
when the uplink connecting to the Multicast Source goes down.	
Condition: - MCT peers are CER/CES devices, and	
- uplink connecting to the Multicast Source and the MCT ICL on which the joins are received are on	
the same VLAN/VE	
Workaround: Use separate VLANs for ICL and uplink CCEP port	
Recovery: "clear ip pim mcache" on the MCT peer which is currently receiving traffic from CCEP uplink port.	

Defect ID: DEFECT000562937		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: IP Multicast	
Reported In Release: NI 05.6.00	Technology: IPv4 Multicast Routing	
Symptom: "TM EGQ Discards" counters are being incremented in the egress Traffic Manager.		
Condition: Reception of multicast traffic from a directly connected source for which no listeners are present.		

Defect ID: DEFECT000562974		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Security	
Reported In Release: NI 05.8.00	Technology: 802.1x Port-based Authentication	
Symptom: If a MAC gets blocked on a PMS enabled port, packets coming from the same MAC on a non-PMS		
enabled port will not result in source MAC being learned.		
Condition: - Topology that has possibility of loop formation		
- Mixture of PMS and non PMS enabled ports		

Defect ID: DEFECT000563075		
Technical Severity: High	Probability: High	
Product: Brocade NetIron OS	Technology Group: Network Automation and	
	Orchestration	
Reported In Release: NI 05.6.00	Technology: OpenStack Integration	
Symptom: MBridge copy failure with error message "Failed to write to destination file" may be seen.		
Condition: This happens when the MBridge FPGA image is copied more than once without a reload between the		
copy operations, if there is not enough space if	in flash to accommodate multiple MBridge files.	
Workaround: Leave enough space in flash before copying the image/FPGA		
Recovery: Delete the 'mbridge.old' file as shown below and then copy the MBridge file -		
Router#delmbridge.old		

Defect ID: DEFECT000563167	
Technical Severity: Low	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NI 05.6.00	Technology: IP Addressing
Symptom: The command "show vlan ethernet <slot port="">" does not show the secondary port of a LAG</slot>	
configured under a VLL VLAN.	
Condition: LAG port should be configured to be a part of a VLL VLAN.	

Defect ID: DEFECT000563199		
Probability: Medium		
Technology Group: Layer 2 Switching		
Technology: LAG - Link Aggregation Group		
Symptom: Port on a 8x10G Line card module may sometime not recover after it goes down with a local fault		
Condition: When Lockup condition on PHY occurs for a port on an 8x10G Line card module.		
Recovery: Only power cycle of the affected Line card module can recover the condition		
]		

Defect ID: DEFECT000563429	
Technical Severity: Medium	Probability: Low
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: Reachability issues if client interface is shutdown on both MCT peers and then enabled back on one	
of the MCT peers.	
Condition: This issue will happen only when the client-interface shutdown is done on both MCT peers and	
enabled back on one of them.	
Workaround: Avoid shutting down clients on both MCT peers.	
Recovery: Enable client interfaces on both MCT peers and then the peers would be reachable.	

Defect ID: DEFECT000563461	
Technical Severity: High	Probability: Low
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NI 05.9.00	Technology: VRRPv3 - Virtual Router Redundancy
	Protocol Version 3
Symptom: Error messages "ITC_ERR_DEST_QUEUE_FULL" may be seen on the management module	
console, and some Line card modules reload automatically and do not come up again.	
Condition: This may happen if the system has a highly scaled configuration with a lot of VPLS VPorts, VRRP-e	
instances, ARP entries, and VPLS MAC address in the MCT environment.	
Recovery: Reload the Line card modules one at a time.	

Defect ID: DEFECT000563527		
Technical Severity: High	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching	
Reported In Release: NI 05.4.00	Technology: MCT - Multi-Chassis Trunking	
Symptom: With disable/enable of CCEP in MCT, BUM Traffic may get dropped intermittently (or loop) for		
LACP transition duration.		
Condition: MCT client flap.		
Workaround: Issue recovers automatically in a few seconds, and this issue may be seen only during transition		
time.		

Defect ID: DEFECT000563742	
Technical Severity: High	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Security
Reported In Release: NI 05.8.00	Technology: SSH - Secure Shell
Symptom: "Bad client version string" error is reported when backing up MLX configuration via SCP through	
BNA.	
Condition: This error is seen only when SSH Client uses a version string that has more than 65 Characters.	

Defect ID: DEFECT000563854	
Technical Severity: Medium	Probability: Low
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NI 05.4.00	Technology: OSPF - IPv4 Open Shortest Path First
Symptom: Some OSPF routes missing from the IP routing table	
Condition: 1) CES/CER router running OSPF	
2) The router 'uptime' has to be more than 1242 days	

Defect ID: DEFECT000563862	
Technical Severity: Medium	Probability: Low
Product: Brocade NetIron OS	Technology Group: MPLS
Reported In Release: NI 05.7.00	Technology: MPLS VPLS - Virtual Private LAN
	Services
Symptom: Same VLAN is reported as Source and Destination in sFlow records when "vll-local" or "vpls-local"	
is configured.	
Condition: This behavior is seen in BR-MLX-10Gx24-DM module.	

Defect ID: DEFECT000564056	
Technical Severity: Medium	Probability: High
Product: Brocade NetIron OS	Technology Group: Management
Reported In Release: NI 05.9.00	Technology: SNMP - Simple Network Management
	Protocol
Symptom: SNMP GET query returns for unsupported objects "no such instance currently exists".	
Condition: When 'snmpget' is performed on unsupported objects, it returns "no such instance" instead of	
returning "deprecated".	
Workaround: These objects are not supported.	

Defect ID: DEFECT000564065	
Technical Severity: Low	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Network Automation and
	Orchestration
Reported In Release: NI 05.7.00	Technology: OpenStack Integration
Symptom: The port name on a LAG port may not be displayed when executing command 'show run interface'.	
The port name is displayed when executing command 'show interface'.	
Condition: Port should be a member of a LAG port.	

Defect ID: DEFECT000564079		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Security	
Reported In Release: NI 05.8.00	Technology: ACLs - Access Control Lists	
Symptom: Show resources indicates HW mac table usage is relentlessly increasing. MAC table size increases		
about 1 to 2% a day.		
Condition: The issue happens with VPLS over MCT on CER platform, when there are VPLS instance flaps in the		
network, causing MAC CAM leaks.		

Defect ID: DEFECT000564081	
Technical Severity: Low	Probability: High
Product: Brocade NetIron OS	Technology Group: Network Automation and
	Orchestration
Reported In Release: NI 05.7.00	Technology: OpenStack Integration
Symptom: When executing command 'show tech', in the following line the output contains a misspelling	
"statatistics" instead of statistics:	
BEGIN: ipc show statatistics[second time]	
Condition: Appears when executing 'show tech' command.	

Defect ID: DEFECT000564264	
Technical Severity: Medium	Probability: High
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NI 05.8.00	Technology: Static Routing (IPv4)
Symptom: After upgrade from 5600f to 5800b image, config of all vrfs with max-route configured to any value	
above 'system-max ip-vrf-route" gets deleted.	
Condition: Upgrading to 5800b.	

Defect ID: DEFECT000564299	
Technical Severity: Low	Probability: Low
Product: Brocade NetIron OS	Technology Group: Network Automation and
	Orchestration
Reported In Release: NI 05.7.00	Technology: OpenStack Integration
Symptom: Complete traffic drop in egress TM on 20x10	module can be observed. This problem was seen in
R5.7	
Condition: Complete traffic drop in egress TM on 20x10 module can be observed in case of flow control from	
egress XPP	

Defect ID: DEFECT000564387		
Technical Severity: Medium Probability: Medium		
Product: Brocade NetIron OS	Technology Group: MPLS	
Reported In Release: NI 05.6.00	Technology: MPLS VLL - Virtual Leased Line	
Symptom: In CER/CES devices, CVLAN tag disappears over a VLL that is operating in Raw-mode for IPv4		
packets.		
Condition: This behavior is observed when VLL raw mode with untagged endpoints and CVLAN tag		
type(ex:0x8100) is different from port tag type (ex: 0x9100)		
Workaround: Use VPLS or VLL tagged mode with tagged endpoints.		

Defect ID: DEFECT000564534		
Technical Severity: High	Probability: High	
Product: Brocade NetIron OS	Technology Group: IP Multicast	
Reported In Release: NI 05.9.00	Technology: IPv4 Multicast Routing	
Symptom: Extra multicast traffic may be forwarded on the port that is not the part of outgoing interface.		
Condition: Hitless reload of the device without enabling nonstop routing.		
Workaround: Perform switchover command when nonstop routing is not enabled.		
Recovery: Execute "clear ip pim mc" to clear the entries.		

Defect ID: DEFECT000564675		
Technical Severity: High	Probability: High	
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer	
Reported In Release: NI 05.9.00	Technology: IP Addressing	
Symptom: 'show tech l4 pbr' output may not display the entire UDA PBR configuration.		
Condition: UDA PBR route map must be configured. This does not have any functional impact on the UDA PBR		
feature.		
Workaround: Use command "show pbr inter ethernet <port>"</port>		

Defect ID: DEFECT000565193		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer	
Reported In Release: NI 05.6.00	Technology: ARP - Address Resolution Protocol	
Symptom: Traffic loss and Line card Module reset with Traffic Manager errors.		
Condition: Following logs will be observed in sys log.		
Jun 12 06:43:43:N:System: Module down in slot 4, reason		
CARD_DOWN_REASON_POWERED_OFF_SYS_MONITOR. Error Code 0		
Jun 12 06:43:43:D:System: TM errors detected in slot 4 ppcr 0 Reg Offset 00002980 Value 00000004		

Defect ID: DEFECT000565259	
Technical Severity: Medium	Probability: High
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NI 05.9.00	Technology: BFD - BiDirectional Forwarding
	Detection
Symptom: BFD session at both ends may remain in DC	OWN state, when an LSP is configured with a detour path
and low BFD timer values less than the defa	ult values, and when the LSP egress interface is disabled.
Condition: This may occur due to certain timing scenarios where the BFD packets order causes the LSP ingress	
to not process the packets correctly.	

Defect ID: DEFECT000565346	
Technical Severity: High	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Security
Reported In Release: NI 05.9.00	Technology: IPsec - IP Security
Symptom: Clear IPSec SA of an IPSec tunnel may bring down the IKE SA also in a scaled set up.	
Condition: Execute 'clear ipsec sa' command	
Recovery: Systems recovers on its own.	

Defect ID: DEFECT000565392		
Technical Severity: High	Probability: Low	
Product: Brocade NetIron OS	Technology Group: Management	
Reported In Release: NI 05.9.00	Technology: Configuration Fundamentals	
Symptom: CPU usage on a Line card module may go high after a Hitless software upgrade.		
Condition: Hitless upgrade.		
Recovery: System recovers after some time.		

Defect ID: DEFECT000565398		
Technical Severity: High	Probability: High	
Product: Brocade NetIron OS	Technology Group: SDN	
Reported In Release: NI 05.9.00	Technology: OpenFlow	
Symptom: "show openflow flow" output may display as generic flow hardware entry consumed even after all the		
flows are deleted thus unable to create more flows.		
Condition: After adding MPLS label match generic flow, when any of the ports is enabled for OpenFlow		
hardware entries are consumed incorrectly as per "show openflow flows" counter.		
Workaround: Avoid enabling OpenFlow on ports after installing MPLS label match flows.		

Defect ID: DEFECT000565403		
Technical Severity: High	Probability: High	
Product: Brocade NetIron OS	Technology Group: MPLS	
Reported In Release: NI 05.9.00	Technology: MPLS VPLS - Virtual Private LAN	
	Services	
Symptom: Management module may unexpectedly reload when "no router mpls" command is executed.		
Condition: Router has MPLS configurations in the node with standby MP up.		
There must be at least one LSP in the process to be synced to the standby MP.		

Defect ID: DEFECT000565713		
Technical Severity: High	Probability: Low	
Product: Brocade NetIron OS	Technology Group: Security	
Reported In Release: NI 05.9.00	Technology: IPsec - IP Security	
Symptom: Some of the IPSec Tunnels using manual certification authentication may take longer than expected		
to come up.		
Condition: Hitless upgrade		
Workaround: 1. Use other authentication method.		
2. Clear/reset the affected tunnels.		
Recovery: Reset/clear the affected tunnel		

Defect ID: DEFECT000565828		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Monitoring	
Reported In Release: NI 05.7.00	Technology: Telemetry	
Symptom: Unable to mirror PBR next-hop invalid packets		
Condition: 1) Mirroring enabled on the port		
2) PBR next hop rule should be invalid for the affected stream		

Defect ID: DEFECT000565966		
Technical Severity: High	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Security	
Reported In Release: NI 05.9.00	Technology: IPsec - IP Security	
Symptom: IPSec Line card module reload may be seen.		
Condition: If same tunnel source and destination addresses are configured for multiple IPSec tunnels.		
Workaround: Avoid using the same source and destination addresses for multiple tunnels. This configuration is		
not supported.		

Defect ID: DEFECT000566294			
Technical Severity: Medium	Probability: High		
Product: Brocade NetIron OS	Technology Group: Network Automation and		
	Orchestration		
Reported In Release: NI 05.9.00	Technology: OpenStack Integration		
Symptom: When tm-voq collection feature is disabled, 'show tm-voq-stat' command should not show voq			
statistics. But, only for option 'show tm-vo	statistics. But, only for option 'show tm-voq-stat src-port' the statistics is shown even though the		
feature is disabled. This has been fixed.	feature is disabled. This has been fixed.		
After fix, when tm-voq stats collection fear	After fix, when tm-voq stats collection feature is disabled, it will throw error for all 'show tm-voq-		
stats' commands.			
Condition: This bug was introduced in coding for all s	ndition: This bug was introduced in coding for all sub options of 'show tm-voq-stat' command (queue-drops,		
dst-port, max-queue-depth, dst-lag), error message will be thrown when the feature is disabled. But			
for 'src-port' sub option alone, this validation was not added.			
This has been fixed.			

Defect ID: DEFECT000566312		
	Probability: High	
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer	
Reported In Release: NI 05.6.00	Technology: GRE - Generic Routing Encapsulation	
Symptom: Line card Module having GRE tunnel end point may unexpectedly reset.		
Condition: 1. GRE tunnel should be configured.		
2.GRE recursive routing should happen		
3. Incoming traffic MTU should be more than MTU size of GRE tunnel and hence result in		
fragmentation.		
Workaround: Add a static route towards the GRE tunnel end point to prevent the recursive routing.		

Defect ID: DEFECT000566498	
Technical Severity: High	Probability: High
Product: Brocade NetIron OS	Technology Group: Management
Reported In Release: NI 05.9.00	Technology: Configuration Fundamentals
Symptom: IPSec log observed is success irrespective of EC key pair generation failed/passed.	
Condition: EC key generation should fail.	

Defect ID: DEFECT000566879	
Technical Severity: High	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Security
Reported In Release: NI 05.7.00 Technology: ACLs - Access Control Lists	
Symptom: Intermittent high latency is observed for traffic such as Ping/TFTP/SSH	
Condition: This is seen when acl-accounting is enabled for more than 10,000 ACL rules.	

Defect ID: DEFECT000566985		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Management	
Reported In Release: NI 05.4.00	Technology: Software Installation & Upgrade	
Symptom: After an upgrade or downgrade, some Switch Fabric Modules (SFMs) fail to boot up and go to a		
powered off state on an MLX-32 with MR1 cards.		
Condition: During code upgrade or downgrade with SBRIDGE image copied through "manifest copy" command. Sometimes, SBRIDGE image is not copied properly to some of the Switch Fabric Modules (SFMs) even though the manifest copy command is successful.		

Defect ID: DEFECT000567391		
Technical Severity: High	Probability: High	
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer	
Reported In Release: NI 05.9.00	Technology: IP Addressing	
Symptom: Salt value associated with the IPSec encryption key may be displayed as zero.		
Condition: May be seen when AES-GCM-128 algorithm is used for encryption/decryption of packets over IPSec		
tunnel.		

Defect ID: DEFECT000567447	
Technical Severity: Medium	Probability: High
Product: Brocade NetIron OS	Technology Group: SDN
Reported In Release: NI 05.8.00	Technology: OpenFlow
Symptom: Traffic loss for High priority Open Flow rule may be seen while applying Low priority Open flow	
rule with the same matching criteria.	
Condition: When installing a lower priority flow with higher priority flows present, when no gaps are available	
in the HW CAM.	

Defect ID: DEFECT000567625		
Technical Severity: Medium	Probability: High	
Product: Brocade NetIron OS	Technology Group: Management	
Reported In Release: NI 06.0.00	Technology: Configuration Fundamentals	
Symptom: Link remains UP and traffic passes through even though Auto Negotiation settings on 20x10G Line card Module port does not match with the remote end.		
Condition: 1) Auto Negotiation should be enabled on 20x10G Line card Module port as well as its remote end 2) Port should be UP on both ends 3) Disable Auto Negotiation on 20x10G Line card Module port		

Defect ID: DEFECT000568041		
Technical Severity: High	Probability: Low	
Product: Brocade NetIron OS	Technology Group: Management	
Reported In Release: NI 05.6.00	Technology: SNMP - Simple Network Management	
	Protocol	
Symptom: Warning message similar to the one mentioned below is reported in optical monitoring when doing		
SNMP walk: -		
OPTICAL MONITORING: port 5/3 (4x40), failed to read latched flags when snmp polling occur		
Condition: When doing continuous SNMP polling on the following optic related OID's.		
snIfOpticalMonitoringInfoTable (brcdIp.1.1.3.3.6)		
snIfOpticalLaneMonitoringTable (brcdIp.1.1.3.3.10)		
Workaround: Increase the SNMP polling intervals.		

Defect ID: DEFECT000568140		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Management	
Reported In Release: NI 05.6.00	Technology: Licensing	
Symptom: Unexpected reload of Management module when copying license file.		
Condition: Copying of license file with file size 0 (empty file) through Tftp://ftp./		

Defect ID: DEFECT000568638		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Monitoring	
Reported In Release: NI 05.8.00	Technology: Hardware Monitoring	
Symptom: Link goes down without any fault notification on 2x100G-CFP2, 20x10G and 4x10G-IPSEC line		
cards		
Condition: For a 2x100G-CFP2/20x10G/4x10G-IPSEC line card port, local fault is not detected but remote end		
connected to these ports detects remote fault		

Defect ID: DEFECT000569107	
Technical Severity: Medium	Probability: High
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching
Reported In Release: NI 05.9.00	Technology: VLAN - Virtual LAN
Symptom: By default, VLAN state of port is untagged in VLAN1. When OpenFlow hybrid feature is enabled on	
port, it is allowed to remove the untagged component of the port from VLAN1. When OpenFlow is	
disabled the ports did not revert to untagged state and would not allow user to configure it as	
untagged port on any VLAN.	
Condition: OpenFlow configuration.	

Defect ID: DEFECT000569387	
Technical Severity: Medium	Probability: High
Product: Brocade NetIron OS	Technology Group: Security
Reported In Release: NI 05.8.00	Technology: ACLs - Access Control Lists
Symptom: Unexpected traffic loss when a Layer 2 ACL is bound to an interface with the intention of filtering	
based on ethertype value and priority-mapping.	
Condition: Layer 2 ACL with rule to match based on ethertype value configured as hexadecimal number and also	
priority-mapping value.	

Defect ID: DEFECT000569396	
Technical Severity: Medium	Probability: High
Product: Brocade NetIron OS	Technology Group: Security
Reported In Release: NI 05.8.00	Technology: ACLs - Access Control Lists
Symptom: User isn't allowed to add a L2 ACL rule which contains ethertype hexadecimal value 00008902 with	
priority or priority-force options.	
Condition: When user tries to configure a L2ACL rule with ethertype hexadecimal value 00008902 with priority	
or priority-force option, an error message is displayed and the rule doesn't get added to the L2 ACL	
table.	

Defect ID: DEFECT000569416	
Technical Severity: Medium	Probability: High
Product: Brocade NetIron OS	Technology Group: Security
Reported In Release: NI 05.9.00	Technology: ACLs - Access Control Lists
Symptom: System will not be able to add rule with protocol number as 58 if rule with protocol as ICMP is	
already configured in ipv6 filter and when duplicate-check is enabled.	
Condition: Configure ipv6 filter with protocol as ICMP and enable duplicate-check. Then try to configure new	
rule with protocol number as 58.	

Defect ID: DEFECT000569740	
Technical Severity: High	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Management
Reported In Release: NI 05.6.00	Technology: Configuration Fundamentals
Symptom: TIME-STAMP shows negative value in show tech-support output.	
Condition: The system up time is 248 days or above.	

Defect ID: DEFECT000569791	
Technical Severity: High	Probability: High
Product: Brocade NetIron OS	Technology Group: Security
Reported In Release: NI 05.9.00	Technology: IPsec - IP Security
Symptom: Crypto key generation config will be lost after reload of the router.	
Condition: If duplicate crypto key label names are allowed.	

Defect ID: DEFECT000570174	
Technical Severity: High	Probability: High
Product: Brocade NetIron OS	Technology Group: Security
Reported In Release: NI 05.9.00	Technology: IPsec - IP Security
Symptom: IPsec tunnel comes up when the ESP algorithm is AES-GCM-256 and IKEv2 algorithm is AES-CBC-	
128.	
Condition: Configure IKEv2 algorithm as AES-CBC-128 and ESP algorithm as AES-GCM-256. IPsec tunnel	
should not be allowed to come up.	

Defect ID: DEFECT000570194		
Technical Severity: High	Probability: High	
Product: Brocade NetIron OS	Technology Group: Monitoring	
Reported In Release: NI 05.6.00	Technology: sFlow	
Symptom: In CES/CER boxes, sFlow packet sampling may stop working		
Condition: When IP receive ACL is configured sFlow packet sampling may stop working.		

Defect ID: DEFECT000570596		
Technical Severity: Medium	Probability: Low	
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching	
Reported In Release: NI 05.7.00	Technology: VLAN - Virtual LAN	
Symptom: CER/CES devices may not properly flood broadcast/unknown unicast/multicast frames		
Condition: Conflict between global and interface route-only/no route-only configuration on a dual mode / tagged		
interface.		
Workaround: For VLAN tagged ports ensure route-only/no route-only configuration on interface level is the		
same as global level configuration.		
Recovery: Change the interface level route-only/no route-only configuration for VLAN tagged ports to match the		
global level configuration.		

Defect ID: DEFECT000570706		
Technical Severity: High	Probability: High	
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer	
Reported In Release: NI 05.9.00	Technology: OSPFv3 - IPv6 Open Shortest Path First	
Symptom: Router shows incorrect OSPFv3 Area Border Router status and can unexpectedly reload after the last		
virtual link is removed from OSPFv3		
Condition: When the last virtual link is removed from OSPFv3 and if no backbone area exists.		
Workaround: Configure a backbone area.		

Defect ID: DEFECT000570755		
Technical Severity: Critical	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Management	
Reported In Release: NI 06.0.00	Technology: Software Installation & Upgrade	
Symptom: TFTP copy of NI 6.0 Management Module image fails with below error message:		
"Download to primary flash failed - TFTP: downgrade below v5.2 not allowed"		
Condition: (1) TFTP copy of Management Module image for upgrade from NI 5.3 and above to NI 6.0		
(2) Presence of MR2 Module		
Workaround: (1) Enter OS/monitor mode on MP by pressing Ctrl+y, m		
(2) Copy the individual application image of NI 6.0 in monitor mode		
e.g., "copy tftp flash <ip_address> xmr06000b016.bin primary"</ip_address>		
(3) Reload the router		
(4) Then upgrade the other images, or run manifest upgrade.		

Defect ID: DEFECT000570849	
Technical Severity: Medium	Probability: High
Product: Brocade NetIron OS	Technology Group: Security
Reported In Release: NI 05.9.00	Technology: ACLs - Access Control Lists
Symptom: IPv6 Syslog message always displays the primary port even though the denied packet has arrived on	
the secondary port.	
Condition: This behavior is seen when "enable-deny-logging" is enabled on the LAG or VE associated with the	
LAG and "deny" filter with "log" option is enabled in the ACL. In the presence of such a	
configuration, packets that get denied should arrive on the secondary port of LAG.	

Defect ID: DEFECT000570890	
Technical Severity: High	Probability: High
Product: Brocade NetIron OS	Technology Group: Security
Reported In Release: NI 06.0.00	Technology: 802.1x Port-based Authentication
Symptom: Management module may unexpectedly reload when processing access accept message from	
RADIUS server.	
Condition: Reception of access accept message from RADIUS server.	

Defect ID: DEFECT000571002		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Traffic Management	
Reported In Release: NI 05.8.00	Technology: Rate Limiting and Shaping	
Symptom: Line card module may unexpectedly reload when "clear rate-limit counters bum" is executed on the		
Line card module.		
Condition: Issuing command "clear rate-limit counters bum" on the Line card module.		
Workaround: Specifically mentioning port number and corresponding VLAN ID.		
"clear rate-limit counters bum-drop port-id x/y vlan-id z".		

Defect ID: DEFECT000571038		
Technical Severity: High	Probability: High	
Product: Brocade NetIron OS	Technology Group: Monitoring	
Reported In Release: NI 05.8.00	Technology: Hardware Monitoring	
Symptom: Changes in the auto-negotiation options done when the port is in 10G mode is not getting applied		
when the port speed is changed to 1G later on.		
Condition: This happens in the following scenario:		
- Applicable for 20x10GE and 4x10GE-IPSEC line cards.		
- Port is in 10G speed and auto-negotiation configurations are not relevant.		
- Change the auto-negotiation options.		
- Change the port speed to 1G by changing the transceiver.		
Workaround: Change the auto-negotiation options only when port speed is 1G.		

Defect ID: DEFECT000571042		
Technical Severity: High	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching	
Reported In Release: NI 05.8.00	Technology: RFN - Remote Fault Notification	
Symptom: For 20x10G ports, link-fault-signaling is not working after reload.		
Condition: 1) link-fault-signaling configured on 20x10G ports.		
2) Reload OR Power OFF, Power ON of the 20x10G Line card Module.		
Recovery: Removing and re-configuring link-fault-signaling on 20x10G ports.		

Defect ID: DEFECT000571357	
Technical Severity: Medium	Probability: High
Product: Brocade NetIron OS	Technology Group: Traffic Management
Reported In Release: NI 05.6.00	Technology: Rate Limiting and Shaping
Symptom: After rate-limit is applied on an interface, if	CIR value is changed to a value higher than the line rate
for that interface, the configuration change will be accepted and the CIR value will be adjusted	
internally to the maximum line rate. But this causes 2 issues.	
1. "no rate-limit" command will be rejected with the error message - "Error: Maximum burst is more	
than maximum port rate".	
2. After reload, the configuration application will fail.	
Condition: Apply rate-limit on an interface and then modify the CIR value higher than the line rate for that	
interface	
Workaround: Ensure that the CIR value being configure	ed in the "rate-limit" command is lower than the line rate

y: To recover after reload, re-apply the rate-limit configuration on the interface.	
Probability: Low	
Technology Group: IP Multicast	
Technology: IPv4 Multicast Routing	

Symptom: On CER-RT, traffic may not be forwarded to 10G ports/OIFs for a multicast group. **Condition:** Seen only on CER-RT, when the OIFs included ports from both PPCRs of 10G ports. **Workaround:** Issue will not be seen if all OIFs for a given group are on the same PPCR.

Technical Severity: High Probability: High
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: Invalid routes may be seen in route table when inter VRF route leaking is configured.
Condition: When inter vrf route leak is configured and route table changes in quick succession then routes which should be deleted may be left un-deleted in VRF route table.

Recovery: Issue 'clear ip route vrf vrf-name prefix' to remove invalid routes.

Defect ID: DEFECT000571735		
Technical Severity: High	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Security	
Reported In Release: NI 05.7.00	Technology: ACLs - Access Control Lists	
Symptom: Command "show access-list accounting ethernet <> in rate-limit" does not show counters		
incrementing		
Condition: When MAC ACLs are configured and rate limiting based on MAC ACLs is applied on the interface		

Defect ID: DEFECT000571931		
Technical Severity: High	Probability: High	
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: The Management module may unexpectedly reload in OSPF task during boot.		
Condition: (1) Device should be configured as NSSA ASBR/ABR.		
(2) Should have at least 3 NSSA areas configured.		
(3) Should redistribute an external destination into various NSSA areas.		

for that interface

Defect ID: DEFECT000571998	
Technical Severity: High	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NI 05.9.00	Technology: IPv6 Addressing
Symptom: High CPU utilization resulting in packet loss.	
Condition: Configuration of "ipv6 nd local-proxy" on an MCT peer.	

Defect ID: DEFECT000572323		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Monitoring	
Reported In Release: NI 05.4.00	Technology: Hardware Monitoring	
Symptom: The remote end of a link shows as UP even though the local port is disabled.		
Condition: An incompatible transceiver is inserted in a port of any Line card module.		

Defect ID: DEFECT000572378		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Management	
Reported In Release: NI 05.8.00	Technology: Configuration Fundamentals	
Symptom: In CES/CER, memory usage may reach up to 99% after configuring the system-max values.		
Condition: When large system-max values are configured in CES/CER.		

Defect ID: DEFECT000572411	
Technical Severity: Medium	Probability: High
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NI 05.7.00	Technology: VRRPv2 - Virtual Router Redundancy
	Protocol Version 2
Symptom: Running configuration output may incorrectly display the command "privilege vrrp-router level 5	
enable" as "privilege level 5 enable".	
Condition: Configure the command, "privilege vrrp-router level x".	

Defect ID: DEFECT000572552		
Technical Severity: Medium	Probability: Low	
Product: Brocade NetIron OS	Technology Group: MPLS	
Reported In Release: NI 05.5.00	Technology: BGP/MPLS VPN	
Symptom: Traffic destined to one of the VRF's is dropped in L3VPN.		
Condition: L3VPN needs to be configured on CER/CES which act as a PE.		

Defect ID: DEFECT000572675	
Technical Severity: Medium	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Security
Reported In Release: NI 05.8.00	Technology: MAC Port-based Authentication

Symptom: On an interface that has PMS enabled and "violation restrict" configured, Violation Syslog message stops printing after 5 violations for the same MAC.

Condition: PMS should be enabled on an interface and "violation restrict" configured. Interface should receive traffic from more MAC addresses than specified in the "maximum <value>" configuration.

Example Configuration is as below:

interface ethernet 3/1

enable port security enable

violation restrict maximum 1

In the above sample configuration, a log will be generated when traffic from at least two MAC addresses is received.

Defect ID: DEFECT000572720		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer	
Reported In Release: NI 05.4.00	Technology: BGP4 - IPv4 Border Gateway Protocol	
Symptom: On Provider Edge device, BGP VRF routes learnt over IBGP neighbor are not advertised to BGP		
VPN address-family neighbors.		
Condition: When the CE BGP VRF neighbor is configured as IBGP session.		
Workaround: Change BGP VRF neighbors from IBGP session to EBGP session.		

Defect ID: DEFECT000572729	
Technical Severity: Medium	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Security
Reported In Release: NI 05.8.00	Technology: ACLs - Access Control Lists
Symptom: CLI allows application of an ACL to a physical interface, even when the number of rules contained in	
the ACL is larger than the L4 CAM space.	
The operation is not rejected and there is no warning logged in the Syslog.	
Condition: Number of rules in ACL clause is larger than the available L4 CAM space.	

Defect ID: DEFECT000572893	
Technical Severity: Medium	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Security
Reported In Release: NI 05.8.00	Technology: MAC Port-based Authentication
	1 1 0

Symptom: Unicast packets get flooded when aging interval expires for a secured port.

Condition: This issue is applicable only on CES/CER platform and happens when an aging interval is configured

(as shown below) for a secured port.

Aging configured globally for all secured ports -

device(config)# global-port-security device(config-global-port-security)# age 10

Aging configured for a specific port - device(config)# interface ethernet 7/11 device(config-if-e100-7/11)# port security device(config-port-security-e100-7/11)# age 10

Defect ID: DEFECT000573138		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching	
Reported In Release: NI 05.8.00	Technology: VLAN - Virtual LAN	
Symptom: Broadcast packets are not flooded out of Uplink ports on CER/CES.		
Condition: Seen when CER/CES is rebooted with Uplink-switch configuration enabled.		
Recovery: Un-configure and Re-Configure Uplink Switch configuration.		

Defect ID: DEFECT000573303	
Technical Severity: Critical	Probability: Low
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NI 05.4.00	Technology: IP Addressing
Symptom: Line cards may reset unexpectedly or duplicate ARP entries may be seen in Line cards.	
Condition: When LAG primary port is frequently changed.	

Defect ID: DEFECT000573507	
Technical Severity: High	Probability: High
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NI 05.8.00	Technology: Multi-VRF
Symptom: Routes in a VRF lite instance not participating in L3VPN are still programmed in the L3VPN	
hardware table consuming VPN hardware resource.	
Condition: VRF lite configuration in the presence of L3VPN.	

Defect ID: DEFECT000573533	
Technical Severity: Critical	Probability: High
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NI 05.8.00	Technology: Multi-VRF
Symptom: Line card reset may be seen when adding a new port to a VRF when the system has more than 500K	
VRF routes.	
Condition: When more than 500K VRF routes are learned and the first port is added into a VRF on a Line card.	

Defect ID: DEFECT000573707	
Technical Severity: Medium	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Monitoring
Reported In Release: NI 05.8.00	Technology: Sysmon
Symptom: In "show sysmon config" command output, SLOTS column is blank for some of the monitoring	
features.	
Condition: Issuing "show sysmon config" command.	

Defect ID: DEFECT000573788	
Defect ID: DEFECT0003/3/88	
Technical Severity: Medium	Probability: Low
Product: Brocade NetIron OS	Technology Group: Monitoring
Reported In Release: NI 05.2.00	Technology: Syslog
Symptom: On CES/CER platform, timestamps in syslog output may become incorrect after system uptime passes 1242 days. The syslog time stamp in one instance jumped to March from August	
Condition: When the system uptime reaches 1242 days.	
Recovery: System can only be recovered by reloading the system	

Defect ID: DEFECT000574183			
	- 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
Technical Severity: High	Probability: High		
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching		
Reported In Release: NI 05.6.00	Technology: MCT - Multi-Chassis Trunking		
	Symptom: L2 VPN MACs are out of sync between 2 MCT peers.		
Error messages similar to the ones listed below scroll on the console -			
Oct 16 01:20:37.205 Call Stack [Task 12vpn]: 0x202a9ffc 0x21529a5c 0x21529b0c 0x2147b898			
0x2147bb5c 0x21486e00 0x21486ee0 0x21548888 0x21565348 0x215655f0			
Oct 16 01:20:37.205 VPLS: ITC error while sending log, error code 8			
Condition: Seen when an MCT peer reloaded on a setup with over 2000 VPLS instances, 100,000 VPLS MACs			
and corresponding scale.			
Recovery: Force a re-sync by clearing the MACs of VPLS instances on the Active MCT peer, using the "clear			
mac vpls" command.			

Defect ID: DEFECT000574490	
Technical Severity: High	Probability: High
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching
Reported In Release: NI 05.6.00	Technology: MCT - Multi-Chassis Trunking
Symptom: CCEP port can go to forwarding state 1 second ahead of the configured delay.	
Condition: Bring down CCEP port	
Bring CCEP port back UP.	

Defect ID: DEFECT000574935	
Technical Severity: High	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Management
Reported In Release: NI 05.4.00	Technology: Configuration Fundamentals
Symptom: Copying of configuration from PCMCIA to running configuration fails with "invalid input" message	
for ACLs.	
Condition: Presence of ACL in the configuration stored in PCMCIA.	

Defect ID: DEFECT000575002		
Technical Severity: High	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer	
Reported In Release: NI 05.2.00	Technology: OSPF - IPv4 Open Shortest Path First	
Symptom: OSPF will see neighbors flap with md5 authentication failure.		
Condition: OSPF interface(s) should have md5 authentication enabled and the local router's 'uptime' has crossed		
1242 days.		

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Defect ID: DEFECT000575072		
Technical Severity: Medium	Probability: High	
Product: Brocade NetIron OS	Technology Group: Monitoring	
Reported In Release: NI 05.7.00	Technology: Hardware Monitoring	
Symptom: Remote and local fault message in syslog could be associated with a number as below.		
Oct 20 19:44:47:I:SYSTEM: port 4/2 is down(remote fault 1)		
Oct 20 19:36:18:I:SYSTEM: port 6/16 is down(remote fault 3)		
Condition: When local or remote fault is logged in syslog.		
Note: These numbers are used by the device for internal purposes and are not a cause for concern		

Defect ID: DEFECT000575097	
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Technical Severity: Critical	Probability: High
Product: Brocade NetIron OS	Technology Group: Security
Reported In Release: NI 05.9.00	Technology: IPsec - IP Security
Symptom: IPsec tunnel between strongswan IPsec server and MLXe will not come up using certificate based	
signature.	
Condition: If certificate based auth method is used between MLX and another vendor, the IPSEC tunnel will not	
come up because AUTH Payload was sent in DER format.	
Recovery: Use PSK as auth method between MLX and another vendor.	

Defect ID: DEFECT000575273		
Technical Severity: High	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Management	
Reported In Release: NI 05.6.00	Technology: CLI - Command Line Interface	
Symptom: - "dir" command from the management card fails with the following error "error: File not found".		
- "wr mem" command from the management card fails with the error - "Write startup-config failed".		
Condition: This issue may occur if "show tech-support" command is repeatedly executed through script.		
Recovery: Reload of the router is the only recovery option		

Defect ID: DEFECT000575349		
Technical Severity: Medium	Probability: Low	
Product: Brocade NetIron OS	Technology Group: Management	
Reported In Release: NI 05.7.00	Technology: Software Installation & Upgrade	
Symptom: Line card module goes to interactive state and "show module" command output displays any other		
reason code than "None" such as, "FPGA mismatch/monitor mismatch.".		
Condition: 1) When any slot in the chassis has already reported a card interactive state with a reason code other		
than "None"		
2) When any Line card module is put in the same slot and booted to interactive mode manually by the		
command "lp boot sys interactive <slot-no>", the card will be moved to interactive with the old</slot-no>		
interactive reason, as "FPGA mismatch/monitor mismatch."		

Note: This is a display issue only.

Defect ID: DEFECT000575361		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Traffic Management	
Reported In Release: NI 05.8.00	Technology: QoS - Quality of Service	
Symptom: LAG deployment will fail with following message: "QoS configuration mismatch between primary and secondary ports!"		
Condition: One of the LAG member ports belongs to a Line card Module which is configured, but not physically inserted.		
Workaround: Use command "qos multicast shaper best-effort/guaranteed rate" to apply primary port shaper values on the ports of the Line card Module that is not physically present.		
"Note: Shaper values of the primary port can be obtained from "show qos multicast e x/y"		

Defect ID: DEFECT000575599		
Technical Severity: High	Probability: High	
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching	
Reported In Release: NI 06.0.00	Technology: LAG - Link Aggregation Group	
Symptom: LAG flaps after Active to Standby MP switchover		
Condition: When Active to Standby MP switchover happens.		

Defect ID: DEFECT000575718		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Monitoring	
Reported In Release: NI 05.9.00	Technology: Syslog	
SYSLOG: <14>Oct 28 13:17:12 Router 1 SYSLOG: <14>Oct 28 13:17:12 Router 3 SYSLOG: <14>Oct 28 13:17:13 Router 3 SYSLOG: <14>Oct 28 13:17:13 Router 3 SYSLOG: <14>Oct 28 13:17:13 Router 3	s similar to the following would be SYSLOGGED. PORT: 3/1 enabled by operator from console session. System: Interface ethernet 3/1, state up SYSTEM: port 3/1 is down(local fault 1) System: Interface ethernet 3/1, state down - local fault System: Interface ethernet 3/1, state up	
condition: When an admin disabled port is enabled a optics.	and the port has LR and ER range of QSFP28 and CFP2	

Defect ID: DEFECT000575726	
Technical Severity: Medium	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Monitoring
Reported In Release: NI 05.9.00 Technology: Syslog	
Symptom: Port will flap once and if Link Fault Signaling is enabled it will report an incorrect remote fault	
notification before it comes up. Messages similar to the following would be SYSLOGGED.	

SYSLOG: <14>Oct 28 18:39:42 Router System: Interface ethernet 3/2, state up

SYSLOG: <14>Oct 28 18:39:55 Router SYSTEM: port 3/2 is down(remote fault 1)

SYSLOG: <14>Oct 28 18:39:55 Router System: Interface ethernet 3/2, state down - remote fault

SYSLOG: <14>Oct 28 18:39:55 Router System: Interface ethernet 3/2, state up

Condition: When a remote port that is admin disabled gets enabled and the port has LR and ER range of QSFP28 and CFP2 optics.

Defect ID: DEFECT000575856	
Technical Severity: High	Probability: Medium
Product: Brocade NetIron OS	Technology Group: SDN
Reported In Release: NI 05.8.00	Technology: OpenFlow
Symptom: Unexpected system reload during OpenFlow 1.0 flow-stats request message processing.	
Condition: OpenFlow 1.0 flow-stats request received with match condition that matches more than 10 flows.	

Defect ID: DEFECT000575924	
Technical Severity: Medium	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Management
Reported In Release: NI 05.6.00	Technology: Software Installation & Upgrade
Symptom: Simplified image upgrade summary reports Line card Module monitor image installed on all Line	
card Modules successfully even though monitor image did not download to a few Line card Modules.	
Condition: Simplified image upgrade when LP CPU utilization is 10% or more	
Recovery: Perform the simplified image upgrade again after reducing the LP CPU utilization.	

Defect ID: DEFECT000575991		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer	
Reported In Release: NI 05.8.00	Technology: GRE - Generic Routing Encapsulation	
Symptom: Traffic loss may be observed when GRE is used with PBR		
Condition: Packets which are processed by route-map/policy-map and have their next-hop set to GRE tunnel.		
The incoming packet's ingress MTU should be greater than the egress tunnel MTU.		

Defect ID: DEFECT000576041		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching	
Reported In Release: NI 05.6.00	Technology: MCT - Multi-Chassis Trunking	
Symptom: In CES/CER, MCT CCP state starts to flap indefinitely when "no client-interface shutdown"		
command option is enabled		
Condition: MCT L2VPN configured with default L2VPN keep-alive/hold-time		
Recovery: On both ends of the MCT cluster, configure L2VPN keep-alive/hold-time to a minimum value of		
600/1800 and then re-deploy the cluster.		
Example:		
"12vpn-peer <ip> timers keep-alive 600 hold-t</ip>	ime 1800"	

Defect ID: DEFECT000576079		
Technical Severity: Medium	Probability: High	
Product: Brocade NetIron OS	Technology Group: Security	
Reported In Release: NI 05.9.00	Technology: IPsec - IP Security	
Symptom: IKE session does not come up when using a certificate for authentication.		
Condition: When using IKE AUTH method as ECDSA, sometimes the IKE session does not come up.		
Workaround: Use Preshared key as IKE AUTH method to avoid this issue.		
Recovery: Clear ike sa		

Defect ID: DEFECT000576121		
Technical Severity: High	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Management	
Reported In Release: NI 05.7.00	Technology: SNMP - Simple Network Management	
	Protocol	
Symptom: SNMP Object "ifAlias" does not display any LSP information		
Condition: 1) MPLS is enabled		
2) LSP configuration should be present		

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Defect ID: DEFECT000576189	
Technical Severity: Medium	Probability: High
Product: Brocade NetIron OS	Technology Group: Network Automation and
	Orchestration
Reported In Release: NI 05.6.00	Technology: OpenStack Integration
Symptom: After doing switch over, observed "fe_update_sync_err_handler:FE200: status = 7" and	
"Warn:rw_program_multicast_table_entry: Sync to standby MP failed for FE entry 26 (001a) (err =	
Timeout)" messages seen on different runs.	
Condition: During switchover on a fully loaded MLXe-32 chassis with all hSFMs and standby MP present.	

Defect ID: DEFECT000576198		
Technical Severity: Medium	Probability: High	
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching	
Reported In Release: NI 05.6.00	Technology: VLAN - Virtual LAN	
Symptom: ITC error messages seen on the console (with no functional impact) -		
Error:hal_send_itc_request: itc_send_request() failed (ret = 8) app id 00000013		
Oct 30 00:56:03.169 SAT Error: itc_rw2_fe600_serdes_config - itc_send_request() failed slot:25		
itc_ret:8		
Oct 30 00:56:03.169 The caller task: scp had an ITC_ERROR:8Oct 30 00:56:03.169 SAT Error:		
Condition: These messages are seen after LP hot upgrade during Hitless Upgrade of an MLX/MLXe.		

Defect ID: DEFECT000576238	
Technical Severity: Medium	Probability: Low
Product: Brocade NetIron OS	Technology Group: Security
Reported In Release: NI 05.8.00	Technology: MAC Port-based Authentication
Symptom: Following two symptoms are seen in CER/CES.	
1) With Port security configuration on a port, when there is MAC movement from Secure port to	
Non-secure port, packets are flooded.	
2) When the same MAC address returns to the original Secure Port, packets get dropped.	
Condition: 1) Port security is configured on a port on CER/CES.	
2) MAC movement happens between a secure port and a non secure port.	
Recovery: Delete and add port security configuration again	
(OR)	
Delete the port security MAC address from running configuration.	

Defect ID: DEFECT000576302		
Technical Severity: High	Probability: High	
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching	
Reported In Release: NI 05.6.00	Technology: MCT - Multi-Chassis Trunking	
Symptom: MCT VPLS instances are down with the reason "wait for local functional ports", but the associated		
VPLS configured ports are up. There is no functional impact.		
Condition: Seen after executing "client-interface shut" followed by "no client-interface shut", "no deploy" and		
"deploy" of the client.		

Defect ID: DEFECT000576487	
Technical Severity: Medium	Probability: High
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching
Reported In Release: NI 05.6.00	Technology: MCT - Multi-Chassis Trunking
Symptom: After doing MCT Cluster "no deploy", the peer CCP is down with inappropriate reason "Invalid	
Application packet received message came from peer.	
Condition: MCT Cluster "no deploy"	

Defect ID. DEFECTIONS TOTAL		
Defect ID: DEFECT000576744		
Technical Severity: High	Probability: High	
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer	
Reported In Release: NI 05.8.00	Technology: MBGP - Multiprotocol Border Gateway	
	Protocol	
mptom: Upon modification of any VRF attributes like route-target or route-map VRF routes that were earlier		
not advertised to VPN neighbors would never be advertised even if the route-target or route-map		
allows for such advertisement.		
Condition: When BGP VPN neighbor is established and local VRF routes are added before configuring export		
route target, and later export route target is added then VRF routes would not be advertised to BGP		
VPN neighbors.		
Workaround: Always configure export route-target in VRF before learning adding/learning routes in VRF.		
Recovery: Add VRF export route-target and clear BGP VPNv4 session.		

Defect ID: DEFECT000576778	
Technical Severity: Medium	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Management
Reported In Release: NI 05.8.00	Technology: Configuration Fundamentals
Symptom: Management module may reload unexpectedly or may switchover if standby management module is	
available. The stacktrace will show "EXCEPTION 0300, Data Storage Interrupt" at "Task: scp", but	
the "Possible Stack Trace" will be blank.	
Condition: This issue is seen when disabling all the interfaces of a 20x10G Line card module.	

Defect ID: DEFECT000576811	
Technical Severity: Medium	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Network Automation and
	Orchestration
Reported In Release: NI 05.8.00 Technology: OpenStack Integration	
Symptom: "flow-control rx-pause-ignore" command is not honored for 20x10G line card. Even with the	
command configured, unicast traffic will not be forwarded on 20x10G LP's ports when PAUSE	
frames are received.	
Condition: 1. The command "flow-control rx-pause-ignore" should be enabled on the interface.	
2. 20x10G interface receives simple unicast traffic and pause frames	

Defect ID: DEFECT000576858		
Technical Severity: Medium	Probability: High	
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching	
Reported In Release: NI 05.6.00	Technology: MCT - Multi-Chassis Trunking	
Symptom: CCR MACs on MCT L2VPN peer not learning as CCL MACs		
Condition: When Spoke PW goes down between MCT L2VPN peers, the standby MCT L2VPN peer which		
becomes active does not learn MACs as CCL		
Recovery: clear mac vpls <>		

Defect ID: DEFECT000577024		
Technical Severity: High	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Monitoring	
Reported In Release: NI 05.8.00	Technology: Syslog	
Symptom: A port on the 20x10G module does not come up after the remote side flaps multiple times continuously.		
Condition: Seen only on the 20x10G module and with continuous flapping of remote side.		
Recovery: Remove and reconnect fiber locally or disable and enable the port again manually at remote or local		
end.		

Defect ID: DEFECT000577049		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching	
Reported In Release: NI 05.4.00	Technology: MCT - Multi-Chassis Trunking	
Symptom: Applying the "uplink-switch" command on a VLAN can cause high CPU on LPs when traffic flows		
on that VLAN		
Condition: Happens when the VLAN for which "uplink-switch" is applied has been configured as a "member-		
vlan" for MCT.		
Workaround: Step 1. Remove the VLAN from "member-vlan" configuration under MCT,		
Step 2. Apply "uplink-switch" on the VLAN,		
Step 3. Add the VLAN to the "member-vlan" configuration under MCT.		
Recovery: A "write mem" followed by a router reload is required to recover from the high CPU on LPs.		
If "uplink-switch" and "member-vlan" configurations are both present during reload, high CPU will		
not be seen after bootup.		

Defect ID: DEFECT000577299		
Technical S	Severity: Low	Probability: High
Product: E	Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported I	n Release: NI 05.6.00	Technology: BGP4 - IPv4 Border Gateway Protocol
Symptom:	m: The "no export-vrf-leaked-routes" command is accepted at BGP configuration level even though it	
	should only be executed under a specific address family.	
	Router(config)#router bgp	
	Router(config-bgp)#local-as 100	
	Router(config-bhp)#no export-vrf-leaked-routes	
	No error message is printed and the configuration is accepted even though it will not take effect	
Condition:	Condition: Configuring "no export-vrf-leaked-routes" command under "router bgp"	

Defect ID: DEFECT000577647		
Technical Severity: High	Probability: High	
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching	
Reported In Release: NI 05.6.00	Technology: MCT - Multi-Chassis Trunking	
Symptom: Traffic loss and VPLS MACs out of sync between MCT L2VPN cluster peer.		
Condition: On CER platform, while executing "client-interface shutdown" and "no client-interface shutdown",		
the VPLS MACs are not synced to the MCT peer.		

Defect ID: DEFECT000577665		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer	
Reported In Release: NI 05.8.00	Technology: BGP4+ - IPv6 Border Gateway Protocol	
Symptom: BGP4+ session does not establish with the desired source IPv6 address and always uses the first IPv6		
address as the source IPv6 address when establishing the session.		
Condition: Two IPv6 addresses are configured on the same subnet and interface, and BGP peering is configured		
on second IPv6 address.		
Workaround: Under BGP configuration, use the "update source" command option to specify the desired source		
IPv6 address.		

Defect ID: DEFECT000577739	
Technical Severity: High	Probability: High
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching
Reported In Release: NI 05.6.00	Technology: MCT - Multi-Chassis Trunking
Symptom: MCT CCP is kept in up state after doing "client-interface shut"	
Condition: Applying "client-interface shut" on CER-RT.	

Defect ID: DEFECT000577946		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Monitoring	
Reported In Release: NI 05.6.00	Technology: Hardware Monitoring	
Symptom: 8x10G Line card module reports error similar to the following: -		
AGERAM Word 1 Parity Error on port range 1/1 - 1/4.		
Condition: There are no specific triggers for these errors. The errors will be noticed from release NI 05.6.00		
onwards when the NP memory error monitoring (Line Module memory error monitoring) feature is		
introduced.		
Workaround: If these errors are not accompanied by traffic loss or issues in traffic forwarding, the frequency at		
which these errors are logged can be reduced by increasing the polling period of sysmon NP		
memory errors using the CLI command (from the CONFIG level),		
"sysmon np memory-errors polling-period <polling-period in="" seconds"<="" td=""></polling-period>		

"sysmon np memory-errors polling-period <polling-period in seconds>"

The default polling period is 60 seconds. It can be increased from the current default to a higher value, say 43200 seconds (every 12 hours).

Defect ID: DEFECT000578003	
Technical Severity: Medium	Probability: High
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NI 05.9.00	Technology: OSPF - IPv4 Open Shortest Path First
Symptom: OSPF Summary routes and external routes will not be calculated and populated in the OSPF routing	
table.	
Condition: This happens when OSPF ABR and ASBR routes are filtered using a distribute-list.	

Defect ID: DEFECT000578059		
Technical Severity: Critical	Probability: High	
Product: Brocade NetIron OS	Technology Group: IP Multicast	
Reported In Release: NI 05.9.00	Technology: PIM - Protocol-Independent Multicast	
Symptom: Multicast traffic loss maybe seen when multicast traffic is received on MCT CCEP port.		
Condition: When multicast traffic is incoming on a MCT CCEP port and the CCEP port flaps or goes down and		
traffic is moved on to other CCEP port on MCT peer.		
Recovery: clear ip pim mcache on MCT nodes.		

Defect ID: DEFECT000578298		
Technical Severity: High	Probability: High	
Product: Brocade NetIron OS	Technology Group: Security	
Reported In Release: NI 05.9.00	Technology: IPsec - IP Security	
Symptom: System reboot may be observed with IPsec configuration.		
Condition: Issue may be observed when longer local identifier is specified under IKEv2 profile.		

Defect ID: DEFECT000578595	
Technical Severity: Medium	Probability: High
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching
Reported In Release: NI 05.6.00	Technology: MCT - Multi-Chassis Trunking
Symptom: Local VPLS MACs not aging out	
Condition: Disable multiple CCEP ports of MCT L2VPN at same time.	

Defect ID: DEFECT000578904	
Technical Severity: High	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NI 06.0.00	Technology: BFD - BiDirectional Forwarding
	Detection
Symptom: Neighboring nodes of CES/CER may report protocol flaps for time sensitive protocols like LACP,	
BFD and may not stabilize.	
Condition: The issue can occur when there are CES/CER nodes on the network that have many instances of	
protocols with short timeout values configured (BFD – 15+ sessions/500 msec timeout, LACP – 5 or	
more with short timeout).	

Defect ID: DEFECT000579013			
Technical Severity: Medium	Probability: Medium		
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching		
Reported In Release: NI 05.1.00	Technology: MCT - Multi-Chassis Trunking		
Symptom: Rolling-reboot is seen on CES/CER with clu	ster configuration.		
Condition: 1) 2x10G card should be present and have cl	Condition: 1) 2x10G card should be present and have cluster configuration (client-interface ethernet <slot port="">)</slot>		
on its interface(s)	on its interface(s)		
2) 2x10G card should be removed from the node			
3) Node should be reloaded			
Note: Issue is specific to CES/CER platform			
Workaround: Before removing the 2x10G card, delete the associated cluster configuration (client-interface			
ethernet <slot port="">").</slot>			
Recovery: On boot up, press "b" to enter Monitor mode. Upload the startup config using TFTP.			
Edit the configuration to remove the command "client-interface ethernet <slot port="">".</slot>			
Download the startup configuration using Tftp://ftp./			
Reboot the box again.			

Defect ID: DEFECT000579084		
Technical Severity: Critical	Probability: High	
Product: Brocade NetIron OS	Technology Group: IP Multicast	
Reported In Release: NI 05.9.00	Technology: PIM - Protocol-Independent Multicast	
Symptom: Multicast traffic not received when L2 upstream is MCT peer.		
Condition: When CCEP flaps and incoming changes to ICL and back to CCEP.		
Recovery: Clear ip pim mcache		

Defect ID: DEFECT000579096		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Security	
Reported In Release: NI 05.9.00	Technology: PBR - Policy-Based Routing	
Symptom: After removal of allow-all-vlan pbr from an interface, the VLAN traffic received on the interface		
would still get processed.		
Condition: Removal of "allow-all-vlan pbr" option from an interface.		
Recovery: Power cycle of the module after the command has been removed is the only recovery option.		

Defect ID: DEFECT000579123		
Technical Severity: High	Probability: High	
Product: Brocade NetIron OS	Technology Group: Security	
Reported In Release: NI 05.8.00	Technology: ACLs - Access Control Lists	
Symptom: IPv6 ACL rate-limiting accounting doesn't increment as per traffic hitting the ACL rules. But rate-		
limiting of traffic works fine. The problem has been fixed in R6.0.		
Condition: With IPv6 ACL based rate-limiting configured on an interface, when user executes the command		
"show ipv6 access-list accounting ethernet <slot port=""> in rate-limit", the accounting counters don't</slot>		
reflect the traffic hitting the IPv6 ACL based rate-limiting rules.		

Defect ID: DEFECT000579525	
Technical Severity: Medium	Probability: High
Product: Brocade NetIron OS	Technology Group: Network Automation and
	Orchestration
Reported In Release: NI 05.6.00	Technology: OpenStack Integration
Symptom: "Warn: active primary sync to standby MP failed!" seen on console.	
Condition: Seen when MCT CCEP/CEP ports flapped multiple times within a few seconds.	

Defect ID: DEFECT000579759	
Technical Severity: High	Probability: Low
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching
Reported In Release: NI 05.6.00	Technology: MCT - Multi-Chassis Trunking
Symptom: Traffic loss and high LP CPU conditions in MCT L2VPN configuration.	
Condition: MCT L2VPN configuration.	

Defect ID: DEFECT000579937	
Technical Severity: Medium	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Management
Reported In Release: NI 05.6.00	Technology: Software Installation & Upgrade
Symptom: BRAM size could sometimes be displayed as zero in "show version" command output.	
Condition: On Software version NI05200 and above for 4x10G Line card module.	
Note: This does not cause any issue and hence can be ignored	

Defect ID: DEFECT000579942		
Technical Severity: Critical	Probability: High	
Product: Brocade NetIron OS	Technology Group: Security	
Reported In Release: NI 05.9.00	Technology: PBR - Policy-Based Routing	
Symptom: When user removes IPv4 PBR, L2 PBR cam is also removed.		
Condition: L2 Policy is applied on interface.		
Workaround: Disable cam sharing or apply dummy Ipv4 PBR on that interface.		
Recovery: Disable cam sharing.		

Defect ID: DEFECT000580193	
Technical Severity: High	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NI 05.7.00	Technology: DHCP - Dynamic Host Configuration
	Protocol
Symptom: DHCPv6 clients do not get assigned IPv6 addresses. When a client sends a DHCPv6 request, the	
MLX responds with an incorrect IPv6 source address. This causes devices that have strict checking	
enabled (like ASUS routers) to reject the DHCPv6 response.	
Condition: MLX acting as DHCPv6 agent.	

Defect ID: DEFECT000580360		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Management	
Reported In Release: NI 05.9.00	Technology: SNMP - Simple Network Management	
	Protocol	
Symptom: SNMPv3 groups using IPv4 standard numbered ACLs may be rejected and removed from the		
configuration upon reload.		
Condition: Standard numbered ACL for SNMPv3 groups are applied.		
Recovery: Reconfigure the missing SNMPv3 groups after the device has fully loaded its configuration.		

Defect ID: DEFECT000580510	
Technical Severity: Medium	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Security
Reported In Release: NI 05.6.00	Technology: ACLs - Access Control Lists
Symptom: CES/CER node does not respond to a trace route request	
Condition: Issue can be seen when Receive ACL is configured on the CES/CER node and "traceroute" command	
is executed to a destination via the CES/CER node.	
Note: This issue is applicable only for CES/CER platforms	

Defect ID: DEFECT000580563	
Technical Severity: Low	Probability: High
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NI 05.6.00	Technology: BGP4+ - IPv6 Border Gateway Protocol
Symptom: IPV4 or IPV6 prefix which gets filtered due to an inbound route-map will be flagged with "F"	
meaning "Filtered". For such a filtered route; the next-hop will be shown as "Not Reachable" though	
the next-hop can be reachable. This can mislead to troubleshoot next-hop reachability.	
Condition: For a BGP neighbor inbound route-map should be configured.	
The prefix filtered in the route-map can be an IPV4 prefix or IPV6 prefix.	

Defect ID: DEFECT000580685	
Technical Severity: High	Probability: High
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching
Reported In Release: NI 05.6.00	Technology: MCT - Multi-Chassis Trunking
Symptom: Router reload while continuous CCEP and CEP flaps.	
Condition: On MCT L2VPN peer, when CCEP and CEP flaps continuously.	

Defect ID: DEFECT000580810	
Technical Severity: High	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching
Reported In Release: NI 05.7.00	Technology: VLAN - Virtual LAN
Symptom: Traffic also sent to the older ports which was part of the TVF LAG LB VLAN before.	
Condition: When the TVF LAG LB VLAN was deleted and added with new set of ports, traffic also passing	
through older ports.	
Recovery: Add old port of the removed TVF LAG LB VLAN again to the same TVF LAG LB VLAN and	
remove it.	
or Re-load the Line Card.	

Defect ID: DEFECT000580877	
Technical Severity: Low	Probability: Low
Product: Brocade NetIron OS	Technology Group: Monitoring
Reported In Release: NI 06.0.00	Technology: Sysmon
Symptom: The display does not show information on slot when the command "show sysmon config" is run.	
Condition: This issue is seen when the slot information is not edited.	

Defect ID: DEFECT000580978		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Security	
Reported In Release: NI 05.8.00	Technology: SSH - Secure Shell	
Symptom: Device may unexpectedly reload during SSH	access.	
Condition: When unknown SSH client is trying for the SSH access repeatedly with bad login and password.		
Workaround: You can permit or deny SSH server access to the device using ACLs. To configure an ACL that		
restricts SSH server access to the device, enter commands such as the following.		
device(config)# access-list 12 deny host 10.157.22.98		
device(config)# access-list 12 deny 10.157.23.0 10.0.0.255		
device(config)# access-list 12 deny 10.157.24.0/24		
device(config)# access-list 12 permit any		
device(config)# ssh access-group 12		

Defect ID: DEFECT000581192	
Technical Severity: Medium	Probability: High
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching
Reported In Release: NI 05.8.00	Technology: MCT - Multi-Chassis Trunking
Symptom: In CER/CES, when uplink-switch settings are applied to a MCT VLAN, known unicast traffic is	
flooded out the ICL LAG Primary port as if they are unknown unicast.	
Condition: Uplink-switch configuration should be present on a MCT VLAN.	
Recovery: Step 1. Disable the cluster ports	
Step 2. Do "no deploy" for associated cluster	
Step 3. Do "deploy" for associated cluster	

Defect ID: DEFECT000581327	
Technical Severity: Medium	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Monitoring
Reported In Release: NI 05.8.00	Technology: Hardware Monitoring

Symptom: Errors like those shown below are reported on the console and syslog.

"CAM1 Dbase Parity Error on port range 1/1 – 1/4" "CAM3 Dbase Parity Error on port range 3/1"

"CAM2PRAM Word 3 Parity Error on port range 6/5 - 6/8"

These errors may or may not be accompanied by traffic loss or issues in traffic forwarding.

Condition: There are no specific trigger for these errors. The errors will be noticed from release NI 05.6.00 onwards from when the NP memory error monitoring (Line Module memory error monitoring) feature was introduced.

Workaround: If these errors are not accompanied by traffic loss or issues in traffic forwarding, the frequency at which these errors are logged can be reduced by increasing the polling period of sysmon NP memory errors using the CLI command (from the CONFIG level),

"sysmon np memory-errors polling-period <polling-period in seconds>"

The default polling period is 60 seconds, it can be increased from the current default to a higher value, say 43200 seconds (every 12 hours).

Defect ID: DEFECT000581474		
Technical Severity: Low	Probability: Low	
Product: Brocade NetIron OS	Technology Group: Security	
Reported In Release: NI 05.7.00	Technology: ACLs - Access Control Lists	
Symptom: Port membership of IPv4 ACL gets affected when IPv6-ACL is bound on VE interface For example, if 'ip access-group 100 in ethe 1/3' and 'ipv6 traffic-filter ipv6acl in' are configured on a VE in the same sequence, the "show run" command displays "'ip access-group 100 in ethe 1/1 to 1/20". But, after removing 'ipv6 traffic-filter ipv6acl in', the IPv4 ACL configuration will be seen in 'show run' as 'ip access-group 100 in'.		
Condition: This happens when an IPv6 ACL is applied and removed while an IPv4 ACL also exists on the VE.		
Workaround: Issue is not seen when IPv6 ACLs are configured before IPv4 ACLs.		
Recovery: Remove and reconfigure the IPv4 ACL after adding IPv6 ACL		

Defect ID: DEFECT000581636	
Technical Severity: Low	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Security
Reported In Release: NI 05.6.00	Technology: ACLs - Access Control Lists

Symptom: Syslog may display wrong Ether type information for packets that are denied due to a MAC ACL

enabled on an interface.

Example: LLDP (Ethertype: 000088cc) traffic could be logged as APPLETALK

Condition: MAC ACL is enabled on an interface. Command "mac access-group enable-deny-logging" is enabled.

Deny rule is configured as part of ACL with "log" option enabled.

Example:

interface ethe 4/2

mac access-group mac_log in

mac access-group enable-deny-logging

mac access-list mac_log

deny any any any etype 000080f3 log deny any any any etype 000088cc log

Defect ID: DEFECT000581903	
Technical Severity: High	Probability: High
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: When multiple BGP neighbors are configured, configuring "filter-change-update-delay" with "0"	
might put some BGP neighbors stuck in "ESTABp" state.	
"p" meaning Filter Group change "Pending"	
Condition: Multiple BGP neighbors should be configured.	
"filter-change-update-delay 0" should be con	ifigured.

Defect ID: DEFECT000582212	
Technical Severity: Medium	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching
Reported In Release: NI 05.8.00	Technology: LAG - Link Aggregation Group
Symptom: If LAG member ports flap for short time, then the traffic passing through the ports may be dropped	
after the port(s) come up.	
Condition: LAG configuration	

Defect ID: DEFECT000582245	
Technical Severity: High	Probability: High
Product: Brocade NetIron OS	Technology Group: SDN
Reported In Release: NI 05.8.00	Technology: OpenFlow
Symptom: Unexpected Line card reload while adding OpenFlow rule.	
Condition: Adding an OpenFlow rule with action as Port Group.	

Defect ID: DEFECT000582287		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer	
Reported In Release: NI 05.9.00	Technology: DHCP - Dynamic Host Configuration	
	Protocol	
Symptom: DHCP client will not be able to obtain the IP address		
Condition: This issue will be seen when the node is acting as a DHCP relay agent under the following conditions:		
- The DHCP server and the client are in non default-VRF		
- Static routes are used on the DHCP relay agent to forward the DHCP messages to DHCP client and		
server		
Workaround: On the DHCP relay agent, to reach the DHCP server and client, inter-VRF leaking should be used		
instead of static routes.		

Defect ID: DEFECT000582844	
Technical Severity: High	Probability: High
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NI 05.8.00	Technology: Static Routing (IPv4)
Symptom: CER fails to forward the traffic for the configured static route to X.X.X.X/32 with directly connected	
interface as next-hop.	
Condition: (1) CER is configured with a static route to X.X.X.X/32 destination with directly connected interface	
as next-hop.	
(2) IP Traffic with IP-OPTIONs comes to CER, destined to X.X.X.X/32.	
(3) Stop the traffic for few minutes destined to this destination.	
Recovery: clear ip route X.X.X.X/32	

Defect ID: DEFECT000582945		
Technical Severity: High	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching	
Reported In Release: NI 05.6.00	Technology: xSTP - Spanning Tree Protocols	
Symptom: CER unexpectedly reloads		
Condition: All ports enabled at same time when same traffic can reach the LP CPU through different ports		

Defect ID: DEFECT000583095	
Technical Severity: High	Probability: High
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching
Reported In Release: NI 05.6.00	Technology: MCT - Multi-Chassis Trunking
Symptom: "Client-interface shut" on standby MCT node is not working as expected as the expectation is to	
being the CCP down with reason "local client interfaces disabled" and CCP has to come up when "no	
client-interface shut" is done. But the same is not happening.	
Condition: Using "client interface shut" and "no client interface shut" with MCT VPLS setup.	
Recovery: no deploy and deeply can recover system	

Defect ID: DEFECT000583319	
Technical Severity: High	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Management
Reported In Release: NI 05.6.00	Technology: SNMP - Simple Network Management
	Protocol
G 4 GNDAD 11' 1 4VAD TE11 (OVD 1 11 0 7 1 1 2) 1 1 1 1 1 1 DCD 4'	

Symptom: SNMP polling on bgp4V2PeerTable (OID brcdIp.3.5.1.1.2) does not display all the BGP entries

Condition: Multiple BGP sessions should be configured and the local IP of one of the peers should be higher than the next BGP peer entry's local IP address. Sample entries are given below to explain the behavior

exhibited: -

BGP peer 1 local IP address : xx.xx.xx.xx BGP peer 2 local IP address : xx.xx.xx.xx BGP peer 3 local IP address : xx.xx.xx.xx

In the above example, the second BGP entry with local IP address xx.xx.xx will be skipped

Defect ID: DEFECT000583379	
Technical Severity: Medium	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Security
Reported In Release: NI 05.8.00	Technology: MAC Port-based Authentication

Symptom: Symptom 1: When a MAC moves from a secured port to a non-secured port, packets from secure MAC address get forwarded (instead of getting dropped).

Symptom 2: The Violation mode with Port MAC Security configured will default to "None" instead of "shutdown". This means that the port will not be shutdown when violation occurs and all packets will continue to get forwarded. The number of MACs learnt as secure MACs will still be limited to the maximum value configured. However, the remaining MACs will get learnt as non-secure MACs. Symptom 3: After a reload, the configured violation "maximum" limit will be reset to the default value of '1'.

Condition: These issues are seen in 5.8.00bm and 5.8.00d on CES/CER platforms with the Port MAC Security feature configured.

Workaround: For Symptom 1: When PMS configuration is required, the system must be reloaded after applying

1t

For Symptom 2: Set Violation mode explicitly to "Shutdown" using CLI For Symptom 3: After a reload, reconfigure the "maximum" limit.

D 6 4 ID DEFECTION 503 (0.4		
Defect ID: DEFECT000583604		
Technical Severity: High	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Monitoring	
Reported In Release: NI 05.8.00	Technology: Syslog	
Symptom: A port on the 20x10G module does not come up after the remote side flaps multiple times continuously.		
Condition: Seen only on the 20x10G module accompanied by continuous flapping of the remote side.		
Recovery: Remove and reconnect fiber locally or disable and enable the port again manually at remote or local		
end.		

Defect ID: DEFECT000583906		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: IP Multicast	
Reported In Release: NI 05.8.00	Technology: PIM - Protocol-Independent Multicast	
Symptom: Multicast traffic loss after flapping CCEP port and clearing multicast cache in an MCT network.		
Condition: Presence of 200+ IGMP groups. Continuous CCEP port flaps in a MCT cluster along with clearing of		
multicast cache entries on the cluster node (on which the CCEP port is flapping)		
Recovery: Clear the multicast cache entries on both MCT peers.		

Defect ID: DEFECT000584065		
Technical Severity: High	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: IP Multicast	
Reported In Release: NI 06.0.00	Technology: IPv4 Multicast Routing	
Symptom: Layer3 multicast traffic causes high CPU usage on one of the MCT cluster devices.		
Condition: Either of the following cases occurring on the peer node of a MCT setup can trigger this condition: -		
- MCT peer reload		
- Management Module Switchover of the MCT peer		
- Disabling and enabling Cluster Client port [CCEP]		
Recovery: Clear the multicast cache entries on both MCT peers.		

Defect ID: DEFECT000584145	
Technical Severity: Low	Probability: Low
Product: Brocade NetIron OS	Technology Group: Monitoring
Reported In Release: NI 05.8.00	Technology: Hardware Monitoring
Symptom: Misspelling of text "search" as "serach" in diag burn-in log.	
Message similar to the below will be displayed:	
"PORT1 CAM0 serach error 0x0 0x20	:0x5120 :0x5120 "
Condition: diag burn-in command fails because of CAM search errors when run on a Line card Module	

Defect ID: DEFECT000584285		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Monitoring	
Reported In Release: NI 05.8.00	Technology: RAS - Reliability, Availability, and	
	Serviceability	
Symptom: On running "diag burn-in", the below error could be seen		
on diagnostic failure.		
PORT1 CAM0 serach error 0x0 0x20	:0x5120 :0x5120	
diag_ntl_entry_search error		
Failed		
Condition: With NI5800 and above image, when running diagnostics on Line card module types 20x10G and		
2x100G-CFP2.		
Recovery: Reload the system to boot up the application since these errors will be corrected by the application		
software.		

Defect ID: DEFECT000584298	
Technical Severity: High	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NI 06.0.00	Technology: IP Addressing
Symptom: Management module may unexpectedly reload	
Condition: Scaled IPSEC configuration with more than 50 tunnels and HLOS is executed.	

Defect ID: DEFECT000584661		
Technical Severity: High	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer	
Reported In Release: NI 05.6.00	Technology: DHCP - Dynamic Host Configuration	
	Protocol	
Symptom: DHCP client will not be able to obtain the IP address.		
Condition: This issue will be seen when the device is acting as a DHCP relay agent and the DHCP server/client		
are in different VRFs.		
Workaround: Configure DHCP server and client in the same VRF.		

Defect ID: DEFECT000584908		
Technical Severity: High	Probability: High	
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer	
Reported In Release: NI 05.7.00	Technology: IS-IS - IPv4 Intermediate System to	
	Intermediate System	
Symptom: IS-IS ECMP route cost calculation between shortcuts and IGP path may go wrong wherein shortcut path would be preferred incorrectly.		
Condition: This issue may be observed when "reverse-metric" command is configured under global or interface		
level.		

Defect ID: DEFECT000585112		
Technical Severity: Low	Probability: High	
Product: Brocade NetIron OS	Technology Group: Management	
Reported In Release: NI 05.9.00	Technology: SNMP - Simple Network Management	
	Protocol	
Symptom: 'ifTable' does not display the LAGs entries during the SNMP walk.		
Condition: Device should have LAG configured and SNMP walk should be performed on the table 'ifTable'		
Note: This issue is applicable from the release 5.9 onwards		

Defect ID: DEFECT000585156	
Technical Severity: High	Probability: High
Product: Brocade NetIron OS	Technology Group: MPLS
Reported In Release: NI 05.9.00	Technology: MPLS VLL - Virtual Leased Line
Symptom: Below logs keeps coming on MP console.	
ERROR:mplp_get_lp_data_request:Session29: requested slot mask ffffffff 80000000 is invalid for msg-type 12 ERROR:mplp_get_lp_data_request:msg-type is MPLP_MSGTYPE_SCP_INFO and scp-type is 44	
Condition: VLL-LOCAL configuration on the 32 slot MI	LX chassis.

Defect ID: DEFECT000585309	
Technical Severity: High	Probability: Medium
Product: Brocade NetIron OS	Technology Group: IP Multicast
Reported In Release: NI 05.7.00	Technology: IPv4 Multicast Routing
Symptom: Intermittent packet loss when PIM interface through which traffic is not received flaps.	
Condition: PIM interface flaps	

Defect ID: DEFECT000585789		
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: Router may unexpectedly reload in OSPF task when a neighboring third party router reloads.		
Condition: - Router should have OSPF adjacency with a third party router and should have learnt Opaque LSAs		
from it		
 The neighboring router is reloaded 		

Defect ID: DEFECT000586048		
Technical Severity: High	Probability: High	
Product: Brocade NetIron OS	Technology Group: IP Multicast	
Reported In Release: NI 05.9.00	Technology: PIM - Protocol-Independent Multicast	
Symptom: Layer3 multicast traffic causes high CPU usage on one of the MCT cluster devices.		
Condition: Either of the following cases occurring on the peer node of a MCT setup can trigger this condition: -		
- MCT peer reload		
- Management Module Switchover of the MCT peer		
- Disabling and enabling Cluster Client port [CCEP]		
Recovery: Clear the multicast cache entries on both MCT	peers.	

Defect ID: DEFECT000586114	
Technical Severity: Medium	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Management
Reported In Release: NI 05.6.00	Technology: CLI - Command Line Interface
Symptom: Starting 5.7.00, named ACLs are mistakenly restricted from having names that begin with a number. Because of this, when upgrading from a lower release to 5.7.00 or above, any Named ACL with a name beginning with a number will get rejected in the reload after upgrade.	
Condition: Seen in 5.7.00 and above when named ACLs are configured to have names that begin with a number.	
Workaround: Before upgrading to any release 5.7.00 or above, ensure that all named ACLs have names that do not begin with a number.	
Recovery: If any named ACLs were not applied during upgrade, reconfigure them with names that do not begin with a number and reapply them.	

Defect ID: DEFECT000586281	
Technical Severity: High	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Management
Reported In Release: NI 05.6.00	Technology: SNMP - Simple Network Management Protocol
Symptom: When querying the custom MIB 'agIpPortCounterTable' the octet on the member links of the LAG show the same value. However, the "show stats" output for that LAG could show different values. Example: If 1/3 and 2/3 are member ports of a LAG and only 1/3 receives traffic and 2/3 does not, both could still show the same values in their counters when custom MIB 'agIpPortCounterTable' is	
queried.	
Condition: The LAG being queried has more than one	member port

Defect ID: DEFECT000586897		
Fechnical Severity: High Probability: Medium		
Product: Brocade NetIron OS	Technology Group: Security	
Reported In Release: NI 06.0.00	Technology: SSH - Secure Shell	
Symptom: Unexpected reload of Management module when copying multiple L2 ACL configuration files using		
SCP/ Tftp://ftp./		
Condition: Repeated execution of any of the below mentioned commands on the Management module where the		
file has at least 1000 ACLs with each ACL having 257 filters.		
1) "copy scp running-config <scp-server-ip> <file-name>"</file-name></scp-server-ip>		
(or)		
2) "copy tftp running-config <tftp-server-ip> <file-name>"</file-name></tftp-server-ip>		

Defect ID: DEFECT000587383		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Security	
Reported In Release: NI 05.6.00	Technology: ACLs - Access Control Lists	
Symptom: Device responds to NTP query targeted for broadcast IPv4 address		
Condition: Reception of NTP query with destination IPv4 address as broadcast		

Defect ID: DEFECT000587423	
Technical Severity: Medium	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Security
Reported In Release: NI 05.8.00	Technology: MACsec - Media Access Control security
Symptom: When "delete-dynamic-learn" is enabled under "global-port-security", MAC addresses learnt on a	
PMS enabled LAG member port do not get deleted after the corresponding interface flaps.	
Condition: Under "global-port-security", "delete-dynamic-learn" is enabled.	
PMS is enabled on a LAG port.	
MAC addresses are learnt on LAG's member ports.	
Recovery: Delete the Secure MAC address learnt on the LAG port manually.	

Defect ID: DEFECT000588340	
Technical Severity: Medium	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching
Reported In Release: NI 05.6.00	Technology: ERP - Ethernet Ring Protocol
Symptom: Upon reload, CES/CER nodes will go back to	ERP version '1' even though the device was configured
as ERP version '2'	
Condition: "raps-default-mac" option is removed from ERP configuration (as shown in the example below) to enable ERP version '2' and the device is reloaded	
erp 10	
no raps-default-mac	
Recovery: The command "raps-default-mac" has to be re-	emoved again after reload

Defect ID: DEFECT000588469		
Technical Severity: Medium	Probability: High	
Product: Brocade NetIron OS	Technology Group: Monitoring	
Reported In Release: NI 06.0.00	Technology: RAS - Reliability, Availability, and	
	Serviceability	
Symptom: When the line card is booted to OS, from the monitor using "boot os flash primary", after some time remote console session ends abruptly. User may see the following errors just before the session termination on the line card: TSEC: bm_get_buf() failed(2) 1 TSEC: bm_get_buf() failed(2) 2 TSEC error: Invalid buffer pointer. Count=1		
Condition: When the line card is booted to OS, from the monitor using "boot os flash primary" command.		
Workaround: No workaround		
Recovery: Reboot the line card from the management card using "power-off lp" and "power-on lp".		

Defect ID: DEFECT000589350		
Technical Severity: High	Probability: High	
Product: Brocade NetIron OS	Technology Group: IP Multicast	
Reported In Release: NI 05.9.00	Technology: PIM - Protocol-Independent Multicast	
Symptom: Intermittent multicast traffic drops.		
Condition: Seen when a PIM enabled interface with no traffic incoming or outgoing is disabled or enabled.		

Defect ID: DEFECT000589468		
Technical Severity: High	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Monitoring	
Reported In Release: NI 05.7.00	Technology: Hardware Monitoring	
Symptom: Low memory warning syslog messages are observed after copying an individual FPGA-XPP image to		
a Line card module through SSH session		
Condition: On a device that is already utilizing high memory and is close to the low memory warning threshold		
Workaround: Perform individual FPGA XPP image copy from the console or a Telnet session		
OR		
Copy the combined LP FPGA image		

Defect ID: DEFECT000589471		
Technical Severity: High	Probability: High	
Product: Brocade NetIron OS	Technology Group: Monitoring	
Reported In Release: NI 05.9.00	Technology: Hardware Monitoring	
Symptom: When connected to LR4 CFP link won't come up.		
Condition: NA		

Defect ID: DEFECT000589895		
Technical Severity: High	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: IP Multicast	
Reported In Release: NI 05.9.00	Technology: PIM - Protocol-Independent Multicast	
Symptom: Slow loss of packet buffer will be observed on Line card module.		
Condition: Line card module frequently receives and reassembles fragmented IPv4 PIMv2 packets.		

Defect ID: DEFECT000590494		
Technical Severity: High	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Security	
Reported In Release: NI 05.9.00	Technology: ACLs - Access Control Lists	
Symptom: Unexpected traffic loss when applying ACL		
Condition: Applying numbered/named L2 ACL filter with Etype in hex and priority-mapping.		
Example: dut1(config)#access-list 404 permit 1234.5678.1234 ffff.ffff.ffff any 4019 etype 00008100 priority-mapping 7		
Workaround: Configure ACLs with etype as the keywords instead of hexa values		
dut1(config)#access-list 404 permit 1234.5678.1234 ffff.ffff.ffff any 4019 etype ipv6 priority-mapping 7		

Defect ID: DEFECT000590634	
Technical Severity: High	Probability: High
Product: Brocade NetIron OS	Technology Group: IP Multicast
Reported In Release: NI 06.0.00	Technology: IGMP - Internet Group Management
	Protocol
Symptom: Device may reload when user run script which configures and un-configures IGMPv3 version	
configuration on tunnels.	
Condition: Repeatedly configure/un-configure IGMPv3 version configuration on tunnel.	

Defect ID: DEFECT000591720		
Technical Severity: Medium	Probability: High	
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: For VRF/VPNV4 routes, BGP might not honor next-hop IGP metric for selecting Best-Path, even		
with "next-hop-mpls follow-igp" configured.		
Condition: "next-hop-mpls follow-igp" should be configured in BGP.		
For a VPN learned destination, there should be more than one path, and all paths should have		
different next-hops with same outgoing-interface/tunnel.		
Flapping this outgoing-interface/tunnel will result in a Best-Path that might not have honored the		
next-hop igp metric.		

Defect ID: DEFECT000591822		
Technical Severity: High	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Management	
Reported In Release: NI 05.9.00	Technology: CLI - Command Line Interface	
Symptom: Management module stops responding to the SSH and Telnet connection requests.		
Condition: When "show tech-support" is executed and the associated SSH/Telnet session is aborted midway.		
Recovery: A switch-over of the active Management module from another existing open session or reload of the		
router is required to recover.		

Defect ID: DEFECT000593099	
Technical Severity: Medium	Probability: High
Product: Brocade NetIron OS	Technology Group: Management
Reported In Release: NI 06.0.00	Technology: SNMP - Simple Network Management
	Protocol
Symptom: ifDescr for PW3 interface in a pwEnetTable was showing an incorrect value.	
Condition: Always seen for pwEnetTable.	

Defect ID: DEFECT000593652		
Technical Severity: Medium	Probability: High	
Product: Brocade NetIron OS	Technology Group: Management	
Reported In Release: NI 06.0.00	Technology: CLI - Command Line Interface	
Symptom: Even after removing the NTP configuration either by issuing "no ntp" or by removing all the		
configured NTP servers, the output of "show clock detail" command still shows the time source as		
NTP.		
Condition: Either by executing command "no ntp" to unconfigure NTP or by removing all the configured NTP		
servers		

Defect ID: DEFECT000594078		
Technical Severity: High	Probability: High	
Product: Brocade NetIron OS	Technology Group: Security	
Reported In Release: NI 06.0.00	Technology: PBR - Policy-Based Routing	
Symptom: The PBR counters for IPv4/IPv6 are not updating when the ACL contains mix of permit and deny		
rules.		
Condition: Create an ACL with rules with action as permit and deny. Use this ACL in PBR. Bind the PBR on an		
interface. Send the traffic with matching attributes. The counters are not updating properly.		

Defect ID: DEFECT000594082		
Technical Severity: Medium	Probability: High	
Product: Brocade NetIron OS	Technology Group: Security	
Reported In Release: NI 06.0.00	Technology: PBR - Policy-Based Routing	
Symptom: The statistics for ipv4 pbr are getting updated twice in CES/CER box.		
Condition: Apply IPv4 PBR on interface and send traffic with matching rule attributes. The counters can be seen		
updating twice.		
Recovery: This problem has been addressed in R6.0		

Closed without code changes

This section lists software defects with Critical, High, and Medium Technical Severity closed without a code change as of 4/25/2016 in NI 6.0.00.

Defect ID: DEFECT000545288	Technical Severity: Medium
Reason Code: Not Reproducible	Probability: High
Product: Brocade NetIron OS	Technology Group: SDN
Reported In Release: NI 05.8.00	Technology: OpenFlow
Symptom: Issuing the command 'power-off lp all' and 'power-on lp all' may cause 8x10G modules to remain	
down due to "LBG failure". This can cause IPC failures and the below error messages to show on the	
MP console:	
Error:sysmon_ipc_send_config: ipc_send() failed to dest_fid 0000d003 (ret = 4)	
Error:dcbIpcNetIron_sendIpcBuff(): IPC send failed	
Condition: This only affects 8x10G modules.	

Defect ID: DEFECT000545537	Technical Severity: Medium	
Reason Code: Not Reproducible	Probability: High	
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: In some scenarios, for just a few routes, re-addition of non-default routes takes more than 10ms. This		
has no functional impact and is applicable with algorithmic mode enabled LPs only.		
Condition: After clearing VPN neighbors status for multiple non-default VRFs at the same time, the re-addition		
of routes results in a few routes taking more than 10ms.		

Defect ID: DEFECT000551390	Technical Severity: Medium	
Reason Code: Not Reproducible	Probability: Low	
Product: Brocade NetIron OS	Technology Group: Monitoring	
Reported In Release: NI 05.7.00	Technology: Syslog	
Symptom: The below message could be seen frequently	Symptom: The below message could be seen frequently in syslog.	
23: Mar 23 07:15:19:W: Latched low Temperature warning, port 16/9		
24: Latched high TX Bias Current warning,	24: Latched high TX Bias Current warning, port 16/9	
25: Latched low TX Bias Current warning, p	25: Latched low TX Bias Current warning, port 16/9	
26: Latched high TX Power warning, port 16	26: Latched high TX Power warning, port 16/9	
27: Latched low TX Power warning, port 16/9		
28: Latched low RX Power warning, port 16/9		
Condition: On enabling optical monitoring on 20x10G Line card module with SFPP optic.		
Workaround: Disable optical monitoring for the port on which the errors are seen		

Defect ID: DEFECT000553175	Technical Severity: High	
Reason Code: Will Not Fix	Probability: High	
Product: Brocade NetIron OS	Technology Group: MPLS	
Reported In Release: NI 05.4.00	Technology: MPLS Traffic Engineering	
Symptom: FRR may take longer than the standard 50 ms.		
Condition: Issue can be seen if any of the following conditions are true -		
- PIM interface and MPLS uplinks are on same physical interface.		
- MPLS uplink ports are using different Network Processors on LP		
- LDP signaling		
Workaround: - Multicast and MPLS uplinks on different physical interfaces		
- MPLS uplinks on same Network Processor on a single LP		
- MR2 Management Module instead of MR		
- VI.L (RSVP signaled) instead of VPLS		

Defect ID: DEFECT000553391	Technical Severity: High	
Reason Code: Design Limitation	Probability: High	
Product: Brocade NetIron OS	Technology Group: IP Multicast	
Reported In Release: NI 05.9.00	Technology: IPv4 Multicast Routing	
Symptom: When OSPF NSR is configured and OSPF is enabled on IPsec tunnels and switchover is performed		
then some traffic loss may be observed during the switchover interval.		
Condition: OSPF is configured on IPsec and OSPF NSR is enabled and switchover is performed.		

Defect ID: DEFECT000554273	Technical Severity: High	
Reason Code: Not Reproducible	Probability: Low	
Product: Brocade NetIron OS	Technology Group: Management	
Reported In Release: NI 05.9.00	Technology: Configuration Fundamentals	
Symptom: Sometimes while powering-up a chassis or any individual 8x10G LP, it can go down with the reason		
code "CARD_DOWN_REASON_TM_LBG_TEST_FAIL".		
Condition: This issue can be encountered while full system reload or any individual 8x10G LP reboot.		
Recovery: Power-cycling the 8x10G LP, individually, resolves the issue.		

Defect ID: DEFECT000556063	Technical Severity: Medium
Reason Code: Not Reproducible	Probability: High
Product: Brocade NetIron OS	Technology Group: Monitoring
Reported In Release: NI 05.9.00	Technology: Syslog
Symptom: "A:PRAM free: slot 1 XPP 1 0x0007ff83 0x00000001" type messages logged during time of high	
ITC Queue usage .	
Condition: During a time of High ITC Queue Usage.	

Defect ID: DEFECT000556641	Technical Severity: Medium	
Reason Code: Will Not Fix	Probability: High	
Product: Brocade NetIron OS	Technology Group: Management	
Reported In Release: NI 05.9.00	Technology: Configuration Fundamentals	
Symptom: "snTrapPortConfigChange" SNMP trap may be seen for a port which doesn't change status.		
Condition: "snTrapPortConfigChange" port config change trap is seen twice after disabling a port, which is		
already disabled.		

Defect ID: DEFECT000559032	Technical Severity: High	
Reason Code: Not Reproducible	Probability: High	
Product: Brocade NetIron OS	Technology Group: Management	
Reported In Release: NI 05.9.00	Technology: Configuration Fundamentals	
Symptom: MAC table could get out of sync between the MCT chassis, cause incorrect flooding in the network in		
a L2 MCT configuration, when ICL link is fl	apped without keepalive VLAN.	
Condition: May happen when ICL flaps without keepalive VLAN in a scaled topology. Example of one such		
scale topology includes 4K MCT VLANs, 140 K MAC entries, 22 K ARP entries, with 200 MCT		
clients.		
Recovery: Clear MAC on the MCT chassis to repopulate	e the MAC table	

Defect ID: DEFECT000559413	Technical Severity: Medium	
Reason Code: Not Reproducible	Probability: Low	
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer	
Reported In Release: NI 05.8.00	Technology: IP Addressing	
Symptom: Unexpected reload while updating ACL clauses.		
Condition: Updating ACL clauses associated with multicast filter applied on VE.		

Defect ID: DEFECT000559621	Technical Severity: Medium	
Reason Code: Not Reproducible	Probability: High	
Product: Brocade NetIron OS	Technology Group: Management	
Reported In Release: NI 05.9.00	Technology: Configuration Fundamentals	
Symptom: IPSec module may undergo continuous Rolling reboot due to BIST failure.		
Condition: FPGA installation could be incorrect.		

Defect ID: DEFECT000560563	Technical Severity: High	
Reason Code: Not Reproducible	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Management	
Reported In Release: NI 05.9.00	Technology: Configuration Fundamentals	
Symptom: 0.1% frame loss may be observed at line rate due to EGQ reassembly errors in case of 2X100g line		
cards.		
Condition: This happens only with full mesh topology. Port to port line rate traffic is not affected and no packet		
loss is seen.		

Defect ID: DEFECT000561541	Technical Severity: High	
Reason Code: Not Reproducible	Probability: High	
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching	
Reported In Release: NI 05.9.00	Technology: xSTP - Spanning Tree Protocols	
Symptom: Traffic loss may be seen for longer duration during RSTP reconvergence when link between core		
node routers is flapped.		
Condition: Only when multicast snooping is enabled along with RSTP on a scaled RSTP topology.		
Trigger for the issue is port flapping or port interface down between two core nodes where one of the		
nodes is RSTP root bridge.		
Workaround: 1) Configure root port as a multi-slot lag between the core nodes where one of the node is the root		
node. This will ensure that these are no easy link flaps.		
2) Disable Multicast snooping.		

Defect ID: DEFECT000561652	Technical Severity: Medium	
Reason Code: Will Not Fix	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: MPLS	
Reported In Release: NI 05.6.00	Technology: MPLS VPLS - Virtual Private LAN	
	Services	
Symptom: MAC resource leak in software may be seen rarely. The available free MAC entries in software may		
decrease faster than in hardware.		
Condition: Rarely occurs only with MCT VPLS configuration in CES/CER.		

Defect ID: DEFECT000562162	Technical Severity: Medium
Reason Code: Not Reproducible	Probability: High
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching
Reported In Release: NI 05.6.00	Technology: LAG - Link Aggregation Group
Symptom: While changing primary and disable/enable LAG ports, observed "Error - vlandata_get_vport,	
next_free_vport_index 68166161" in console logs	
Condition: While changing primary and disable/enable LAG ports.	

Defect ID: DEFECT000562959	Technical Severity: Medium	
Reason Code: Not Reproducible	Probability: High	
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer	
Reported In Release: NI 05.9.00	Technology: IP Addressing	
Symptom: Debug messages starting with [PRAM_FREE] may be seen on line card console.		
Condition: Only in algorithmic mode (X2 scale) during hitless upgrade operation.		

Defect ID: DEFECT000563189	Technical Severity: Medium
Reason Code: Not Reproducible	Probability: High
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NI 05.9.00	Technology: BGP4 - IPv4 Border Gateway Protocol
Symptom: Displaying BGP neighbor output may sometime show the error: "Duplicate session added". There is	
no functionality loss or impact.	
Condition: Performing MP switch-over multiple times.	

Defect ID: DEFECT000563192	Technical Severity: High	
Reason Code: Not Reproducible	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer	
Reported In Release: NI 05.9.00	Technology: VRRPv2 - Virtual Router Redundancy	
	Protocol Version 2	
Symptom: A Syslog "duplicate IP address on an interface" is observed.		
Condition: Issue will be observed when either a duplicate IP address is configured or a loop is present in the		
network.		
Recovery: Remove the duplicate IP address configured or break the loop in the network.		

Defect ID: DEFECT000563516	Technical Severity: High	
Reason Code: Not Reproducible	Probability: High	
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer	
Reported In Release: NI 05.9.00	Technology: BFD - BiDirectional Forwarding	
	Detection	
Symptom: ISIS neighbor flaps leading to traffic loss may be seen rarely.		
Condition: When unconfiguring/configuring ISIS protocol, BFD session may flap shortly after ISIS is		
configured.		

Defect ID: DEFECT000563805	Technical Severity: Medium	
Reason Code: Not Reproducible	Probability: Low	
Product: Brocade NetIron OS	Technology Group: IP Multicast	
Reported In Release: NI 05.7.00	Technology: IPv4 Multicast VLAN Traffic Reduction	
Symptom: Under rare condition, if FID exhaustion occurs, some of the flows may experience traffic loss.		
Condition: UPNP (Universal Plug and Play) protocol may pump at a high rate Multicast control packets resulting		
in this problem.		
Workaround: Block the UPNP requests using Multicast filters.		

Defect ID: DEFECT000563946	Technical Severity: High	
Reason Code: Already Fixed in Release	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: IP Multicast	
Reported In Release: NI 05.6.00	Technology: IPv4 Multicast VLAN Traffic Reduction	
Symptom: Multicast traffic impacted when VPLS snooping is enabled.		
Condition: - Seen on CER		
- Continuous joins and leaves and		
- VPLS snooping		

Defect ID: DEFECT000564005	Technical Severity: Medium
Reason Code: Will Not Fix	Probability: High
Product: Brocade NetIron OS	Technology Group: Management
Reported In Release: NI 05.9.00	Technology: SNMP - Simple Network Management
	Protocol
Symptom: With scaled ACL configuration snmpwalk on policy based accounting table may take longer than	
expected.	
Condition: May occur only when a duplicate (scaled) ACL configuration is applied and SNMP walk is issued	
while the ACL configuration update is still in process.	
Workaround: Avoid issuing snmpwalk command during ACL configuration update	

Defect ID: DEFECT000564058	Technical Severity: High
Reason Code: Not Reproducible	Probability: High
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching
Reported In Release: NI 05.9.00	Technology: MCT - Multi-Chassis Trunking
Symptom: CCEP flapping with high LP CPU may be seen, when a 24x10G card is reset using CLI command,	
with multi-slot CCEP LAG configuration in Dual-MCT setup.	
Condition: In Dual MCT setup with multi-slot CCEP LAG configured on 24x10G cards	

Defect ID: DEFECT000564316	Technical Severity: High
Reason Code: Will Not Fix	Probability: High
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NI 05.9.00	Technology: IP Addressing
Symptom: Ping may fail on a 10Gx24 line card when an OpenFlow hybrid port is configured on an unprotected	
VLAN.	
Condition: Hybrid OpenFlow and VE interface configured on an unprotected VLAN. The unprotected VLAN	
PASS entries are not created on OpenFlow ACL cam.	
Workaround: Change the configuration from an unprotected VLAN to a protected VLAN on those ports	

Defect ID: DEFECT000564805	Technical Severity: Medium	
Reason Code: Not Reproducible	Probability: High	
Product: Brocade NetIron OS	Technology Group: Traffic Management	
Reported In Release: NI 05.9.00	Technology: Rate Limiting and Shaping	
Symptom: Traffic loss may occur on a 100Gx2 line card when configuring the inbound port base rate limit.		
Condition: Only if configuring inbound rate limit on a 100Gx2 line card.		
Recovery: Use another type of line card.		

Defect ID: DEFECT000564808	Technical Severity: High	
Reason Code: Not Reproducible	Probability: High	
Product: Brocade NetIron OS	Technology Group: Management	
Reported In Release: NI 05.9.00	Technology: Configuration Fundamentals	
Symptom: High LP CPU usage may be seen due to routing table download.		
Condition: When importing more routes to a VRF via inter-vrf leaking, causing the receiving VRF's route table		
to run out of space.		
Workaround: Use route-map to limit the number of routes imported to a VRF in the inter-vrf leaking		
configuration.		
Recovery: Clear ip route table for the VRF.		

Defect ID: DEFECT000564830	Technical Severity: High	
Reason Code: Not Reproducible	Probability: Low	
Product: Brocade NetIron OS	Technology Group: Security	
Reported In Release: NI 05.9.00	Technology: IPsec - IP Security	
Symptom: IPSec Tunnel status may be down on the Management Module.		
Condition: When the tunnel outgoing port changes from one Line Card to another Line Card.		
Workaround: Avoid changing of tunnel outgoing port to another Line Card.		
Recovery: Clear or reset the affected tunnel.		

Defect ID: DEFECT000564957	Technical Severity: High
Reason Code: Not Reproducible	Probability: Low
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NI 05.9.00	Technology: Static Routing (IPv6)
Symptom: MP might reload unexpectedly on issuing the command "itc show queue 11".	
Condition: In a topology with the following characteristics:	
IP Sec tunnels in default VRF and underlying interface is using non-default VRF.	
There are 121 IPSec tunnels configured between two routers	
There are 100 ipv6 IPSec tunnels between two routers.	
If syslog reports for low buffers, then issuing command "itc show queue 11" might cause MP reload.	

Defect ID: DEFECT000565223	Technical Severity: Medium
Reason Code: Feature/Function Not Supported	Probability: High
Product: Brocade NetIron OS	Technology Group: Management
Reported In Release: NI 05.9.00	Technology: Configuration Fundamentals
Symptom: "ERROR: command not supported for this type of card" may be seen when downgrading from 5.9.00	
to 5.6.00f. There is no impact to functionality.	
Condition: Downgrade system software from 5.9.00 to	5.6.00f.

Defect ID: DEFECT000565395	Technical Severity: High
Reason Code: Not Reproducible	Probability: High
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NI 05.9.00	Technology: BGP4 - IPv4 Border Gateway Protocol
Symptom: When a BGP router sends a withdraw update message for a set of routes, the peer BGP router	
receiving this withdrawn message will not clear these routes; instead peer will marks them as	
dampened routes and will clear them after 180 minutes.	
Condition: BGP routes are not getting cleared as they are getting withdrawn.	
Workaround: The dampened routes are not included in best route calculation and will not be advertised. "clear ip	
bgp dampening" can be used to clear the dampened routes.	

Defect ID: DEFECT000565409	Technical Severity: High	
Reason Code: Not Reproducible	Probability: Low	
Product: Brocade NetIron OS	Technology Group: Security	
Reported In Release: NI 05.9.00	Technology: IPsec - IP Security	
Symptom: IPSec tunnels may stay in down state after the Line card is reloaded.		
Condition: Reload the Line card module of a remote IPSec peer.		
Recovery: Clear or reset the affected IPSec tunnels.		

Defect ID: DEFECT000565437	Technical Severity: High	
Reason Code: Not Reproducible	Probability: Low	
Product: Brocade NetIron OS	Technology Group: Security	
Reported In Release: NI 05.9.00	Technology: IPsec - IP Security	
Symptom: Traffic for one of the IPv6 prefix may be sent out on the wrong IPSec tunnel if that prefix is reachable		
through a static route and is learnt via IGP as well.		
Condition: In IPv6 IPsec double encryption configuration;		
IPv6 prefix reachable through static route and learnt via IGP		

Defect ID: DEFECT000565487	Technical Severity: High	
Reason Code: Not Reproducible	Probability: High	
Product: Brocade NetIron OS	Technology Group: MPLS	
Reported In Release: NI 05.9.00	Technology: MPLS Traffic Engineering	
Symptom: Unexpected system reload may be seen when slot was removed in highly scaled MPLS network.		
Condition: Only if multiple protocols are scaled including MPLS and in a rare timing window.		

Defect ID: DEFECT000565571	Technical Severity: High	
Reason Code: Not Reproducible	Probability: Low	
Product: Brocade NetIron OS	Technology Group: IP Multicast	
Reported In Release: NI 05.9.00	Technology: IPv4 Multicast Routing	
Symptom: Loss of traffic may be seen on specific VRF post reload of the device.		
Condition: In scaled set-up when reload is performed.		
Recovery: Clear the multicast entries using "clear ip pim mc" command.		

Defect ID: DEFECT000565843	Technical Severity: High	
Reason Code: Already Fixed in Release	Probability: High	
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer	
Reported In Release: NI 05.9.00	Technology: IP Addressing	
Symptom: Salt value associated with the IPSec encryption key may be displayed as zero.		
Condition: May be seen when AES-GCM-128 algorithm is used for encryption/decryption of packets over IPSec		
tunnel.		

Defect ID: DEFECT000566036	Technical Severity: High
Reason Code: Not Reproducible	Probability: High
Product: Brocade NetIron OS	Technology Group: Management
Reported In Release: NI 05.9.00	Technology: Configuration Fundamentals
Symptom: 20x10G and 8x10G OIR (Online Insertion/Removal) may make TM CPU Queue stuck forever causing VPLS MAC learning to break.	
Condition: When MPLS L3VPN, 6VPE, VPLS traffic running on 20x10G and 8x10G modules and LP OIR is performed for either of these modules, the TM CPU Queue may get stuck.	
Recovery: To find out stuck queue: MP#show tm non-empty-queue To recover, the stuck TM CPU queue needs to be flushed once as instructed below: LP#dm tm auto-credit <device-id> 1000 <queue-id> <queue-id> After a minute:</queue-id></queue-id></device-id>	
LP#dm tm auto-credit <device-id> 0 <queue-id> <queue-id></queue-id></queue-id></device-id>	

Defect ID: DEFECT000566210	Technical Severity: High
Reason Code: Not Reproducible	Probability: High
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NI 05.9.00	Technology: IP Addressing
Symptom: The router restarts sometime.	
Condition: Simultaneous flapping of multiple interfaces manually through a script.	

Defect ID: DEFECT000566355	Technical Severity: High	
Reason Code: Not Reproducible	Probability: Low	
Product: Brocade NetIron OS	Technology Group: SDN	
Reported In Release: NI 05.9.00	Technology: OpenFlow	
Symptom: MLX device resets very rarely upon addition/removal of large number of OpenFlow flows		
Condition: Continuous Flow addition/removal for a large period of time(3-4 days)		
Workaround: Issue is not seen in 6.0 release		
Recovery: Issue is not seen in 6.0 release		

Defect ID: DEFECT000566513	Technical Severity: High
Reason Code: Already Fixed in Release	Probability: High
Product: Brocade NetIron OS	Technology Group: MPLS
Reported In Release: NI 05.6.00	Technology: MPLS VLL - Virtual Leased Line
Symptom: The System may reload while performing Switchover.	
Condition: 1. MPLS traffic should be running.	
2. Switchover is done.	

Defect ID: DEFECT000567517	Technical Severity: High	
Reason Code: Not Reproducible	Probability: Low	
Product: Brocade NetIron OS	Technology Group: Security	
Reported In Release: NI 05.8.00	Technology: SSH - Secure Shell	
Symptom: Device may unexpectedly reload when a SSH client is attempting to login to it.		
Condition: Continuous attempts (more than 200 times) to login with bad username/password using SSH.		
Workaround: User may block the source that is attempting to login with bad credentials.		

Defect ID: DEFECT000569860	Technical Severity: Medium	
Reason Code: Will Not Fix	Probability: High	
Product: Brocade NetIron OS	Technology Group: Network Automation and	
	Orchestration	
Reported In Release: NI 05.8.00	Technology: OpenStack Integration	
Symptom: Auto-negotiation not complete syslog is generated twice in a specific auto-negotiation configurations with MACsec enabled; only one syslog is expected.		
Condition: MACsec is enabled on the port. Auto-negotiation is disabled state at both local and remote devices.		
Enable auto-negotiation at local-device.		

Defect ID: DEFECT000570731	Technical Severity: High	
Reason Code: Will Not Fix	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching	
Reported In Release: NI 05.8.00	Technology: LAG - Link Aggregation Group	
Symptom: On 20x10G Line card module high CPU condition could be seen when the command "no route-only"		
is enabled.		
Condition: "no route-only" option is enabled when there is a LAG spanning across multiple ports on the same 20		
x 10G Line card module.		

Defect ID: DEFECT000571753	Technical Severity: High	
Reason Code: Will Not Fix	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Management	
Reported In Release: NI 05.9.00	Technology: CLI - Command Line Interface	
Symptom: CLI returns the error "Invalid Input" when an IP/IPv6 ACL deny filter is being configured in the		
IP/IPv6 ACL configuration mode.	IP/IPv6 ACL configuration mode.	
Condition: The issue is seen when a decimal is used that is equal in value to that of any of the valid Keywords.		
For ex: Keyword "tcp" is associated with a value of 6. If the same number is inputted in the command		
line as		
deny 6 a.b.c.d a.b.c.e eq 50120 log		
The error is seen since the optional keyword "eq" is not available in " <decimal>" node.</decimal>		
Note:		
Although an error message is displayed, the command will get stored in the configuration using the		
associated keyword matching with number. In this case it would get stored as		
deny tcp a.b.c.d a.b.c.e eq 50120 log.		
Workaround: Use appropriate keyword for the deny filters instead of its decimal equivalent.		

Defect ID: DEFECT000572448	Technical Severity: Medium
Reason Code: Already Fixed in Release	Probability: High
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NI 05.7.00	Technology: VRRPv2 - Virtual Router Redundancy
	Protocol Version 2
Symptom: customers may observe message similar to the one given below on active Management Module during switchover:	
VRRP4: eth 1/1 down event received	
Condition: (1) VRRP is configured	
(2) Switchover is initiated	

Defect ID: DEFECT000572825	Technical Severity: High	
Reason Code: Already Fixed in Release	Probability: High	
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching	
Reported In Release: NI 05.7.00	Technology: MCT - Multi-Chassis Trunking	
Symptom: In a MCT setup : -		
1) Traffic loss after switchover		
2) Missing "deploy" keyword/configuration in "show cluster configuration" on the MCT cluster node		
on which Management module switchover was done.		
Condition: Management module switchover on one of the MCT cluster nodes.		
Workaround: 1) Save startup-config by using "write memory" command		
2) Issue the command "sync-standby" before Switchover		

Defect ID: DEFECT000573260	Technical Severity: High
Reason Code: Feature/Function Not Supported	Probability: High
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NI 05.4.00	Technology: IP Addressing
Symptom: When pinging a device directly connected to the CES from a host several router hops away, the ping	
traffic gets stuck in a routing loop.	
Condition: On CER/CES platform, with non-major network subnets (subnets that are not /8, /16, /24 or /32)	
present in network with 100s of hosts directly connected to the node.	
Recovery: clear ip ospf route all	

Defect ID: DEFECT000573265	Technical Severity: High	
Reason Code: Already Fixed in Release	Probability: High	
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching	
Reported In Release: NI 05.6.00	Technology: MCT - Multi-Chassis Trunking	
Symptom: On ICL flap, VPLS does not come up on MCT L2VPN peer.		
"show mpls vpls <> " show the cluster peer state as "MCT Peering Time-out State"		
Condition: On scaled MCT L2VPN environment (around 2000 VPLS instances and 70K MACs), ICL port flap		
can cause some VPLS instances not to comeup		
Recovery: "clear cluster <>" CLI, clears the problem.		

Defect ID: DEFECT000573553	Technical Severity: Medium	
Reason Code: Already Fixed in Release	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching	
Reported In Release: NI 05.7.00	Technology: MCT - Multi-Chassis Trunking	
Symptom: Below error message will be seen when undeploying the cluster and configuring active-passive mode		
for cluster.		
"Error - Cannot change MCT mode for cluster id = 1 when cluster deployed"		
Condition: Undeploy the cluster and configure active-passive mode for cluster		

Defect ID: DEFECT000573690	Technical Severity: High	
Reason Code: Feature/Function Not Supported	Probability: High	
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching	
Reported In Release: NI 05.6.00	Technology: MCT - Multi-Chassis Trunking	
Symptom: The following messages scrolling on telnet/ssh/console session:		
"SAT Error: itc_scp_check_snm - itc_send_request() failed ret[8]"		
Condition: On MLX, continuous CCEP and ICL flaps on MCT L2VPN scaled environment (2000 VPLS		
instances with 70K MACs).		

Defect ID: DEFECT000574287	Technical Severity: Medium	
Reason Code: Already Fixed in Release	Probability: High	
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching	
Reported In Release: NI 05.6.00	Technology: MCT - Multi-Chassis Trunking	
Symptom: MACs are not relearned after the command "clear mac vpls eth <mod port="">" is issued.</mod>		
Condition: This is not applicable to NI5.9 and later releases.		
Workaround: "clear mac vpls id <>" to clear and relearn the MACs.		

Defect ID: DEFECT000575239	Technical Severity: Medium	
Reason Code: Already Fixed in Release	Probability: High	
Product: Brocade NetIron OS	Technology Group: SDN	
Reported In Release: NI 05.7.00	Technology: OpenFlow	
Symptom: Router reload while adding OpenFlow flows from an OpenFlow controller.		
Condition: OpenFlow enabled and new flow-add request has both Send to controller and VLAN		
Push/Pop/Modify action.		

Defect ID: DEFECT000575527	Technical Severity: Medium
Reason Code: Already Fixed in Release	Probability: High
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching
Reported In Release: NI 05.6.00	Technology: MCT - Multi-Chassis Trunking
Symptom: When client-interfaces are shut, "show cluster" shows	
"Peer State: CCP Down (Reason for Down: Graceful upgrade in progress)". The reason displayed is	
wrong. There is no functional impact.	
Condition: Seen in an MCT setup when client interfaces are shutdown administratively using the "client-	
interfaces shutdown" command	

Defect ID: DEFECT000575926	Technical Severity: Medium
Reason Code: Already Fixed in Release	Probability: High
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching
Reported In Release: NI 05.6.00	Technology: MCT - Multi-Chassis Trunking
Symptom: Unwanted debug print messages related to enabling MCT clients interfaces will be seen in console while the device is reloaded with MCT configurations in place. The messages will be seen right after bring up of the CCP session.	
Condition: The unwanted messages will be seen with MCT configurations in place and while rebooting the Node.	
Workaround: There is no work around available.	
Recovery: Unwanted messages will NOT cause any fu	nctional impact.

Defect ID: DEFECT000576701	Technical Severity: Medium	
Reason Code: Feature/Function Not Supported	Probability: High	
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching	
Reported In Release: NI 05.6.00	Technology: MCT - Multi-Chassis Trunking	
Symptom: "No deploy" of MCT L2VPN cluster does not work at times		
Condition: On scaled MCT L2VPN environment, with around 2000 VPLS instances.		
Workaround: Wait for around 30 seconds after no deploy on scaled environment.		

Defect ID: DEFECT000576911	Technical Severity: Medium	
Reason Code: Design Limitation	Probability: Low	
Product: Brocade NetIron OS	Technology Group: Management	
Reported In Release: NI 05.9.00	Technology: CLI - Command Line Interface	
Symptom: "show tech-support 14 acl <specific name=""> " output from console does not show all ACL entries.</specific>		
Condition: When more than 1700 ACLs are configured on the device and console session is used to execute		
""show tech-support 14 acl <specific name=""> " command</specific>		
Workaround: Use Telnet/SSH to execute "show tech-support 14 acl <specific name=""> " command</specific>		

Defect ID: DEFECT000577144	Technical Severity: Medium	
Reason Code: Will Not Fix	Probability: High	
Product: Brocade NetIron OS	Technology Group: Network Automation and	
	Orchestration	
Reported In Release: NI 05.6.00	Technology: OpenStack Integration	
Symptom: 8x10G-X card fails to come Up online.		
Shows different status messages each time after restart of module, reseat or reload of chassis		
Condition: NA		

Defect ID: DEFECT000577652	Technical Severity: Low	
Reason Code: Will Not Fix	Probability: High	
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching	
Reported In Release: NI 05.6.00	Technology: MCT - Multi-Chassis Trunking	
Symptom: Cluster FSM messages are seen in log. These messages are harmless.		
Condition: Messages such as "CLUSTER FSM: Error: Received CCP event when cluster 0x00000001 is not		
deployed" are observed during various MCT events		

Defect ID: DEFECT000578097	Technical Severity: Medium	
Reason Code: Will Not Fix	Probability: High	
Product: Brocade NetIron OS	Technology Group: Management	
Reported In Release: NI 05.6.00	Technology: CLI - Command Line Interface	
Symptom: Closing pattern/prompt ")#" is missing from the VPLS config mode.		
Condition: Configure VPLS instance name with length greater than 128 characters and press Enter to complete the command		
the command		
Note: Applicable only for releases 5.7x and lower versions		
Workaround: Avoid configuring VPLS instance name with length greater than 128 characters		

Defect ID: DEFECT000578870	Technical Severity: Medium	
Reason Code: Will Not Fix	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching	
Reported In Release: NI 05.6.00	Technology: MCT - Multi-Chassis Trunking	
Symptom: CES/CER nodes may incorrectly send back broadcast packets received from the ICL port to the		
newly added member port in CCEP LAG.		
Condition: Adding a new member port to a deployed CCEP LAG.		
Workaround: (1) Disable the primary port		
(2) Add the member port to the deployed LAG		
(3) Enable primary port		
Recovery: Deploy and undeploy the LAG.		

Defect ID: DEFECT000579896	Technical Severity: High
Reason Code: Already Fixed in Release	Probability: High
Product: Brocade NetIron OS	Technology Group: Security
Reported In Release: NI 05.8.00	Technology: ACLs - Access Control Lists
Symptom: After Management Module switch-over occurs more than once, traffic doesn't get filtered as per the	
applied L2 ACL based rate-limiting binding on interface. Also, L2 ACL based rate-limiting counters	
don't display correct values as per the train	ffic filtering.
Condition: When an active management module fails over to a standby management module or when a	
"switchover" command is entered manually, from the second failover onwards, the ACL based rate-	
limiting CAM entries aren't programmed	as per the actual ACL definition.

Defect ID: DEFECT000580586	Technical Severity: High	
Reason Code: Will Not Fix	Probability: High	
Product: Brocade NetIron OS	Technology Group: Management	
Reported In Release: NI 05.8.00	Technology: CLI - Command Line Interface	
Symptom: Observing "ITC not successful" error in CLI while disabling and enabling of loop back interface.		
Condition: Disabling and enabling of loop back interface several times with in a short span of time with highly		
scaled VPLS/VLL instances.		

Defect ID: DEFECT000581125	Technical Severity: High
Reason Code: Design Limitation	Probability: High
Product: Brocade NetIron OS	Technology Group: MPLS
Reported In Release: NI 05.8.00	Technology: LDP - Label Distribution Protocol
Symptom: In a router configured with heavy BGP routes (~100k) with aggressive BFD configuration for IGP	
protocol; LDP sessions may flap if the user ex	ecutes clear ip bgp neighbor all.
Condition: The condition includes a very high scale BGP configuration, BFD, and LDP; in combination with	
user execution of 'clear ip bgp neighbor all'	

Defect ID: DEFECT000581687	Technical Severity: High
Reason Code: Design Limitation	Probability: High
Product: Brocade NetIron OS	Technology Group: MPLS
Reported In Release: NI 05.8.00	Technology: BGP/MPLS VPN
Symptom: On clearing statistics of all MPLS tunnels, Hi	gh LP CPU utilization will be observed and timeout
message will be displayed in the console. LP	CPU utilization will return to normal after clearing all
the tunnel statistics.	
Condition: When there are more than 4K MPLS LSP tun	nels and 4K IP nexthops entries.

Defect ID: DEFECT000582617	Technical Severity: High	
Reason Code: Already Fixed in Release	Probability: High	
Product: Brocade NetIron OS	Technology Group: SDN	
Reported In Release: NI 05.8.00	Technology: OpenFlow	
Symptom: Action list gets corrupted for already installed flows with Normal action		
Condition: After a power-off followed by power-on of Line card.		
Recovery: Remove and add the flows again.		

Defect ID:	DEFECT000582982	Technical Severity: High
Reason Co	de: Already Fixed in Release	Probability: Medium
Product: 1	Brocade NetIron OS	Technology Group: Monitoring
Reported I	n Release: NI 05.6.00	Technology: RAS - Reliability, Availability, and
		Serviceability
Symptom:	Symptom: Active management module in MLX may reload unexpectedly and switch over to the standby	
	management module if available. The below mentioned stack trace could be seen in the dump: -	
Possible Stack Trace (function call return address list) 00005008: xsyscall(pc)		
	00056194: bm alloc(lr)	
	00055d14: bm_alloc	
	0005cc94: gt6446x_eth_receive_handler	
	0005d230: gt6446x_eth_isr	
	00027234: handle_interrupt	
	0001b69c: sysloop	
	000b7dfc: handler	

Condition: When huge burst of Management Module CPU bound traffic is received

Defect ID: DEFECT000584620	Technical Severity: Medium	
Reason Code: Already Fixed in Release	Probability: High	
Product: Brocade NetIron OS	Technology Group: SDN	
Reported In Release: NI 05.8.00	Technology: OpenFlow	
Symptom: Push an OpenFlow rule with action as send to controller.		
Reload Line card which holds the OpenFlow rule. After the line card is operational, the packets are		
not forwarded to controller though traffic hi	ts the flow.	
Condition: In case of reload of line card, the Line card will be programmed with the OpenFlow rule. In case of		
send to controller action OpenFlow rule, the programming went wrong which caused to packets to get		
dropped.		

Defect ID: DEFECT000585720	Technical Severity: High
Reason Code: Feature/Function Not Supported	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Monitoring
Reported In Release: NI 05.6.00	Technology: Hardware Monitoring
Symptom: Syslog message similar to the one mentioned below may be reported: "PRAM free: slot 5 XPP20SP 0 0x0007f5b3 0x00000001"	
In some cases Traffic Forwarding could be impacted.	
Condition: A message is logged when any violation is reported during the PRAM monitoring which could be indicative of double free of a PRAM index or Freeing of a PRAM index which is currently in use.	

Defect ID: DEFECT000592923	Technical Severity: High	
Reason Code: Feature/Function Not Supported	Probability: Low	
Product: Brocade NetIron OS	Technology Group: Monitoring	
Reported In Release: NI 05.9.00	Technology: sFlow	
Symptom: Port based sFlow statistics don't increment as per the monitored traffic.		
Condition: Enables sFlow monitoring on interface.		

Known Issues

This section lists open software defects with Critical, High, and Medium Technical Severity as of 4/25/2016 in NI 6.0.00. This list was updated 5/26/16.

Defect ID: DEFECT000518506	
Technical Severity: High	Probability: High
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NI 05.7.00	Technology: IP Addressing
Symptom: FRR Failover takes more than 70 secs to converge on bringing down the transit link.	
Packet drops observed when FRR 10K and 20K LSPs failover by bringing down the transit link.	
Condition: FRR failover by bringing down the transit link.	

Defect ID: DEFECT000551348		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer	
Reported In Release: NI 05.7.00	Technology: BGP4 - IPv4 Border Gateway Protocol	
Symptom: While configuring BFD or changing BFD timers, the user might see unexpected values for CFM 1-		
DM sessions specifically on CES/CER devices.		
Condition: CES/CER User deployment where BFD and CFM 1-DM are in use.		
Recovery: The only way to recover is resetting of device.		

Defect ID: DEFECT000562915		
Technical Severity: Medium	Probability: High	
Product: Brocade NetIron OS	Technology Group: IP Multicast	
Reported In Release: NI 05.9.00	Technology: IPv4 Multicast Routing	
Symptom: Transient multicast traffic loss during first time switchover.		
Condition: Traffic loss is seen only when first time failover happens.		

Defect ID: DEFECT000566837		
Technical Severity: Medium	Probability: High	
Product: Brocade NetIron OS	Technology Group: Traffic Management	
Reported In Release: NI 05.2.00	Technology: Traffic Queueing and Scheduling	
Symptom: Jitter is outside acceptable limits for voice traffic.		
Condition: Seen on Gen2 (BR-MLX-10Gx8-M or –X and BR-LMX-100Gx1-X or x2-X)		
Line cards with low throughput traffic.		

Defect ID: DEFECT000575538	
Technical Severity: Medium	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Management
Reported In Release: NI 05.6.00	Technology: SNMP - Simple Network Management
	Protocol
Symptom: When issuing SNMP walk for lldpRemTable, some of the LLDP neighbors object will not be displayed.	
Condition: When any of the objects under the table "lldpRemTable" are not configured.	

Defect ID: DEFECT000575987	
Technical Severity: High	Probability: High
Product: Brocade NetIron OS	Technology Group: SDN
Reported In Release: NI 05.9.00	Technology: OpenFlow
Symptom: OpenFlow scale numbers are not up to 64k.	
Condition: Specific to Management Module type MR2-X.	

Defect ID: DEFECT000577783		
Technical Severity: High	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Monitoring	
Reported In Release: NI 05.7.00	Technology: RAS - Reliability, Availability, and	
	Serviceability	
Symptom: Port on 100Gx2-CFP2 Line card module may not come up.		
Condition: Remote end CFP2 optic is removed and re-inserted.		
Recovery: Disable and enable the port on remote end.		

Defect ID: DEFECT000578252		
Technical Severity: High	Probability: High	
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching	
Reported In Release: NI 05.8.00	Technology: VLAN - Virtual LAN	
Symptom: Flapping of VLL		
Condition: When vrf is moved from one interface to another interface belonging to different PPCR.		
Workaround: While moving vrf from one interface to another belonging to different ppcr, disable both the		
interface and then move the vrf.		

Defect ID: DEFECT000578821	
Technical Severity: Medium	Probability: Low
Product: Brocade NetIron OS	Technology Group: Monitoring
Reported In Release: NI 05.7.00	Technology: Hardware Monitoring
Symptom: 100G CFP2 port goes down and LED may still glow green.	
Condition: 100G CFP2 port status is down on both sides.	

Defect ID: DEFECT000579366		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Network Automation and	
	Orchestration	
Reported In Release: NI 05.8.00	Technology: OpenStack Integration	
Symptom: PAUSE frames received on an interface are not honored even though "flow-control rx-pause-ignore"		
is not configured.		
Condition: When "no flow-control" is configured at interface level.		
Workaround: Apply "no flow-control rx-pause-ignore" at interface level		

Defect ID: DEFECT000579744		
Technical Severity: High	Probability: Low	
Product: Brocade NetIron OS	Technology Group: Management	
Reported In Release: NI 05.6.00	Technology: CLI - Command Line Interface	
Symptom: Management Module may reload unexpectedly while executing concurrent show commands from multiple sessions like TELNET, SSH.		
Condition: Multiple show commands should be executed from different sessions while a "write memory" command is executed.		
Example: "show lag", "show ip ospf interface", "show ipv6 bgp summary"		

Defect ID: DEFECT000580123	
Technical Severity: High	Probability: Low
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: Under rare circumstances, multiple switch over	er of Management module done back to back, could
result in some of the BGP sessions flapping o	nce or twice.
Condition: Multiple switch over of the Management Moo	lule done back to back on a router that has configuration
of the following scale: -	
- 100+ IBGP neighbors	
- 100+ EBGP neighbors	

	1	
Defect ID: DEFECT000581204		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Monitoring	
Reported In Release: NI 05.8.00	Technology: OAM - Operations, Admin &	
	Maintenance	
Symptom: Link of 100Gx2-CFP2 LR4 interface may go down		
Condition: 1. When the RX side of the cable connected to remote end was removed.		
2. When the remote end device is Infinera WDM/DTN-X device		
Recovery: Remove and Re-insert of the TX cable from the remote end.		

Defect ID: DEFECT000583134		
Technical Severity: Medium	Probability: High	
Product: Brocade NetIron OS	Technology Group: Security	
Reported In Release: NI 06.0.00	Technology: ACLs - Access Control Lists	
Symptom: When IPv6 ACL is applied on a VEoVPLS interface, deny Logging syslogs aren't generated.		
Condition: IPv6 ACL deny logging doesn't generate any syslogs when applied on a VEoVPLS interface.		

Defect ID: DEFECT000584408		
Technical Severity: High	Probability: Low	
Product: Brocade NetIron OS	Technology Group: Security	
Reported In Release: NI 06.0.00 Technology: ACLs - Access Control Lists		
Symptom: During system bootup, when MP configuration is being synchronized to all LPs, one or more of the		
LPs go for an unexpected reload with scaled number of ACLs and PBR bound to multiple interfaces.		
Condition: This problem can be seen In a system with scaled number of ACLs configured and PBR bound to		
multiple interfaces on multiple LPs.		

Defect ID: DEFECT000586053		
Technical Severity: High	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Security	
Reported In Release: NI 06.0.00	Technology: ACLs - Access Control Lists	
Symptom: ACL Rules fail to sync from management module to a few of the line cards with scaled configuration		
of MAC/IPv4/IPv6 ACLs.		
Condition: When user configures a scaled number of MAC/IPv4/IPv6 ACLs, Management module takes		
significant amount of time to complete synchronization of the configuration to all the Line cards. In		
rare conditions, the synchronization of configurations can fail resulting in the ACL configuration not		
present in the Line card.		

Defect ID: DEFECT000586070		
Technical Severity: High	Probability: High	
Product: Brocade NetIron OS	Technology Group: MPLS	
Reported In Release: NI 05.9.00	Technology: MPLS VPLS - Virtual Private LAN	
	Services	
Symptom: Mac-address seen to loop between local interface and remote interfaces towards MCT cluster.		
Condition: On CER, MCT VPLS with CoS configuration in LSP.		
Workaround: Issue will not be seen if CoS configuration is not present in LSP.		

Defect ID: DEFECT000587054		
Technical Severity: High	Probability: High	
Product: Brocade NetIron OS	Technology Group: Monitoring	
Reported In Release: NI 05.7.00	Technology: Hardware Monitoring	
Symptom: In certain configuration, a 100G interface may not come up in an operational state.		
Condition: Due to the state of the link parameters, an interface link goes down.		
Recovery: Setting interface to disable and re-enabling it fixes the issue.		

Defect ID: DEFECT000587069	
Technical Severity: Medium	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching
Reported In Release: NI 05.4.00	Technology: VLAN - Virtual LAN
Symptom: When configuring a new VLAN on the CES, the "Error: insufficient fids available for vlan creation"	
message appears.	
Condition: On CER/CES platform, with continuous churns due to multicast traffic sources and receivers.	

Defect ID: DEFECT000587126		
echnical Severity: Medium Probability: High		
Product: Brocade NetIron OS	Technology Group: VPN	
Reported In Release: NI 05.6.00	Technology: EVPN - Ethernet VPN	
Symptom: When "default-local-preference" parameter is globally set, the VPNV4 advertised aggregate routes will not update the local-pref with the new parameter set, even after clearing the BGP neighborship using "clear ip bgp neighbor all".		
Condition: Aggregate routes are advertised through BGP VPN. "default-local-preference" should be globally set/reset		
Workaround: Run "clear ip bgp vrf <vrf-name> neighbor all" for the VRF's associated.</vrf-name>		
(or)		
Remove & add "local-as" under "router bgp" which stops the BGP operation and starts again.		

Defect ID: DEFECT000587202		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Monitoring	
Reported In Release: NI 05.6.00	Technology: RAS - Reliability, Availability, and Serviceability	
Symptom: Packet drops seen on ports due to Line card module failing to process packets with error "RX Lookup unavailable".		
Condition: CAM FIFOs are stuck resulting in RX Lookup failure.		
Recovery: Reload the affected Line card module.		

Defeat ID. DEEECT0005972/2		
Defect ID: DEFECT000587263		
Technical Severity: High	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Security	
Reported In Release: NI 06.0.00	Technology: PBR - Policy-Based Routing	
Symptom: Device takes a long time to stabilize and recover the traffic after system reload with scaled ACL		
configuration.	•	
Condition: This issue is seen only in scaled scenario. If user has scaled route-map configuration the reload time		
will increase proportionally.		
Recovery: System will recover by itself.		

Defect ID: DEFECT000587847		
Technical Severity: High	Probability: Low	
Product: Brocade NetIron OS	Technology Group: Management	
Reported In Release: NI 06.0.00	Technology: Licensing	
Symptom: Under rare conditions the device goes for unplanned restart after a switchover has happened.		
Condition: Likely scenario of reproduction when a switchover has happened and the systems been idle for some time post that. The conditions for reproducing the defect have not be known yet. This has been seen twice till now.		

Defect ID: DEFECT000588168	
Technical Severity: Medium	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NI 05.7.00	Technology: ICMP - Internet Control Message
	Protocol
Symptom: While doing ping to local IP on the router, lat	ency of more than 10msec seen.
Condition: When ICMP packets are processed in the CPU, a latency introduced when there are ARP updates in	
the system/network.	

Defect ID: DEFECT000589295		
Technical Severity: High	Probability: High	
Product: Brocade NetIron OS	Technology Group: Management	
Reported In Release: NI 06.0.00	Technology: Software Installation & Upgrade	
Symptom: The error messages "Master Dload chksum Fail" and "firmware download failed" will be seen on line		
card console during initialization.		
Condition: Specifically with 2x100GE-CFP2 line card with CFP2-QSFP28 adapter plugged-in.		

Defect ID: DEFECT000589304	
Technical Severity: Medium	Probability: High
Product: Brocade NetIron OS	Technology Group: Monitoring
Reported In Release: NI 06.0.00	Technology: Hardware Monitoring
Symptom: The optical module type in the syslog message - "Optic module not factory qualified", shows as	
"******Unknown*****" at times instead of "100GE QSFP28-AOC".	
Condition: Specifically with 2x100GE-CFP2 with CFP2 adapter and 100G QSFP28 AOC plugged-in.	

Defect ID: DEFECT000589935		
Technical Severity: High	Probability: High	
Product: Brocade NetIron OS	Technology Group: Security	
Reported In Release: NI 05.9.00 Technology: IPsec - IP Security		
Symptom: Sometime IPsec Module may reset when the following commands are issued using script: no interface tunnel <tunnel-number> no ipsec profile <ipsec-profile-name> no ikev2 profile <ikev2-profile-name> no ikev2 policy <ikev2-policy-name> no ikev2 auth-proposal <auth-proposal-name> no ikev2 proposal <ikev2-proposal-name></ikev2-proposal-name></auth-proposal-name></ikev2-policy-name></ikev2-profile-name></ipsec-profile-name></tunnel-number>		
Condition: Issue the following commands using script with no delay between each command: no interface tunnel <tunnel-number> no ipsec profile <ipsec-profile-name> no ikev2 profile <ikev2-profile-name> no ikev2 policy <ikev2-policy-name> no ikev2 auth-proposal <auth-proposal-name> no ikev2 proposal <ikev2-proposal-name></ikev2-proposal-name></auth-proposal-name></ikev2-policy-name></ikev2-profile-name></ipsec-profile-name></tunnel-number>		

Defect ID: DEFECT000590355		
Technical Severity: Medium	Probability: High	
Product: Brocade NetIron OS	Technology Group: MPLS	
Reported In Release: NI 06.0.00	Technology: MPLS Traffic Engineering	
Symptom: Happens on a scaled scenario on a slow server with a response time more than 10 seconds.		
No path is available for the LSPs, so the LSPs keep retrying.		
Condition: We expect the server to have a good response time within milliseconds, as that is one of the main		
purposes of using PCE. The issue was seen only when using a Spirent emulator.		

Defect ID: DEFECT000590434		
Technical Severity: High	Probability: Low	
Product: Brocade NetIron OS	Technology Group: Monitoring	
Reported In Release: NI 05.9.00	Technology: sFlow	
Symptom: Management Module may reload unexpectedly when a sFlow sample is being processed.		
Condition: "sflow forwarding" should be enabled on the interface and "vrf forwarding <vrf-name>" should be</vrf-name>		
enabled on the corresponding VE in which the interface is a member.		

Defect ID: DEFECT000591015	
Technical Severity: High	Probability: High
Product: Brocade NetIron OS	Technology Group: MPLS
Reported In Release: NI 05.8.00	Technology: MPLS VPLS - Virtual Private LAN
	Services
Symptom: Traffic loss In MCT VPLS scenario, after Primary MCT peer reload.	
Condition: When the Primary MCT peer fails with scaled VPLS can cause the issue.	

Defect ID: DEFECT000591098	
Technical Severity: High	Probability: Medium
Product: Brocade NetIron OS	Technology Group: IP Multicast
Reported In Release: NI 05.6.00	Technology: IPv4 Multicast Routing
Symptom: Video freezes every 3 minutes.	
Condition: In ring topology where the RPT and SPT path is different and when ASSERT winner becomes	
blocked OIF on (S,G) entry.	

Defect ID: DEFECT000591161	
Technical Severity: High	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NI 06.0.00	Technology: BFD - BiDirectional Forwarding
	Detection
Symptom: Sometimes BFD session flaps when OpenFlow-flows are deleted using "clear open all" command.	
Condition: When OpenFlow-flows are deleted using the command "clear open all".	
Recovery: BFD session will recover by itself.	

Defect ID: DEFECT000591202		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Management	
Reported In Release: NI 05.8.00	Technology: CLI - Command Line Interface	
Symptom: Multiple interfaces stay down on MLX 10Gx20 with 1G SFPs and do not come up even on disable/enable.		
Condition: The issue is seen when		
- chassis is loaded with default config,		
- MLX 10x20G card is inserted without the optics, and		
- 1G SFPs are then inserted fairly fast on the interfaces		

Defect ID: DEFECT000591513	
Technical Severity: High	Probability: High
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NI 05.7.00	Technology: IS-IS - IPv4 Intermediate System to
	Intermediate System
Symptom: IS-IS peer node reachability may be shown as multihop although it is a single hop	
Condition: This issue may be observed in a scaled IS-IS topology with shortcuts enabled	

Defect ID: DEFECT000591587		
Technical Severity: Medium	Probability: High	
Product: Brocade NetIron OS	Technology Group: IP Multicast	
Reported In Release: NI 05.9.00	Technology: IPv4 Multicast Routing	
Symptom: Multicast software cache entries are not deleted after entries are aged out from hardware in an MCT		
network.		
Condition: This issue has introduced after stopping multicast source traffic.		
Recovery: System can be recovered from this state by clearing cache entries using "clear ip pim mcache"		
command.		

Defect ID: DEFECT000591955	
Technical Severity: Medium	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NI 05.7.00	Technology: BGP4 - IPv4 Border Gateway Protocol
Symptom: Incorrect metric value might be advertised for a BGP route to an EBGP neighbor, with the neighbor	
configured without route-map.	
Condition: The neighbor should have an out route-map,	
The route-map should have "set metric-type internal" which will advertise the BGP route with IGP	
metric for MED.	
Workaround: "clear ip bgp neighbor <neighbor address=""> soft out"</neighbor>	

Defect ID: DEFECT000592026		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Monitoring	
Reported In Release: NI 05.8.00	Technology: OAM - Operations, Admin &	
	Maintenance	
Symptom: MEP ages out after Standby Management Module is reloaded		
Condition: ERP is configured with sub-second CCM interval and standby Management Module is reloaded.		

Defect ID: DEFECT000592027		
Technical Severity: Medium	Probability: High	
Product: Brocade NetIron OS	Technology Group: Monitoring	
Reported In Release: NI 06.0.00	Technology: Hardware Monitoring	
Symptom: Connected to Line card, Ran the Diag bist command multiple times, after few instances LP is		
rebooting.		
Condition: debuggability		

Defect ID: DEFECT000592732		
Technical Severity: High	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: MPLS	
Reported In Release: NI 05.6.00	Technology: MPLS Traffic Engineering	
Symptom: When a second IP address is configured for an interface, it is possible RSVP chooses the second IP address while sending back a RESV. When upstream router processes the RESV message, it drops because it doesn't match the RRO it was expecting. Thus LSP won't come up.		
Condition: This issue must be one of the corner scenarios that might be existing in the RSVP code.		
Workaround: Unconfigure the second interface IP address will bring up the LSP.		

Defect ID: DEFECT000592929		
Technical Severity: High	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer	
Reported In Release: NI 05.9.00	Technology: IP Addressing	
Symptom: Unexpected reload of line card module.		
Condition: Loopback interface in non-default VRF has the same IP address as that of the loopback interface in		
default VRF.		
Workaround: The IP addresses of loopback interfaces in default and non-default VRF need to be different.		

Defect ID: DEFECT000593035		
Technical Severity: Medium	Probability: High	
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching	
Reported In Release: NI 05.7.00	Technology: LAG - Link Aggregation Group	
Symptom: In a VPLS network, multicast destined packets may go on wrong VPLS instance on the remote PE.		
Condition: In a VPLS network with "vpls-cpu-protection", multicast destined packets may go on wrong VPLS		
instance on the remote PE when a user disables and re-enables one of the forwarding paths.		
Recovery: Problem can be recovered by reloading the device.		

Defect ID: DEFECT000593492		
Technical Severity: High	Probability: High	
Product: Brocade NetIron OS	Technology Group: IP Multicast	
Reported In Release: NI 06.0.00	Technology: IPv4 Multicast Routing	
Symptom: Sometimes device may reload when user undeploy and deploy LAG interface after some specific		
configuration steps along with the Multicast t	raffic in an MCT deployment.	
Condition: This issue introduced when user un-deploy and deploy LAG interface after some specific		
configuration steps along with the Multicast traffic in an MCT deployment.		
Workaround: Stop Multicast traffic and clear cache entries before un-deploy and deploy of the LAG in an MCT		
deployment.		

Defect ID: DEFECT000594037		
Technical Severity: Medium	Probability: High	
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: There are sometimes a lot of SYSLOG messages indicating OSPFv3 LSA re-transmission.		
Condition: This happens if "log-status-change" is enabled in OSPv3 config to enable LSA-retransmit traps.		

Defect ID: DEFECT000594168		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Security	
Reported In Release: NI 05.6.00	Technology: ACLs - Access Control Lists	
Symptom: Packets matching the permit clause of IPV6 ACL are dropped		
Condition: When MAC ACL is applied on the interface and IPV6 receive ACL rate-limiting with strict-acl		
option is applied globally.		

Defect ID: DEFECT000594173		
Technical Severity: Medium	Probability: High	
Product: Brocade NetIron OS	Technology Group: Management	
Reported In Release: NI 06.0.00	Technology: High Availability	
Symptom: The customer at the time of issuing a reload on the system might see the below error/warning if the setup is loaded and scaled. Warn:alloc_and_distribute_base_fid: Sync to standby MP failed for FID 0 (0000) (err = Timeout), reboot it(g_mp_red_wait_done 0).		
In this case, setup was considerably scaled setup having 4k VLANS, 128 RTSP sessions, llldp enabled, LCP, etc		
Condition: On a scaled setup the sync may not complete in time and result in timeout thereby causing the messages to be printed. The sync is required to maintain the correct states across active and standby MP.		
At the time of reload the sync couldn't complete in time due to load on the MP's and the IPC. Since this happens at reload the warning in itself is harmless and causes no functionality impact. Workaround: No workaround		

Recovery: The system just reloads fine without any functional impact

Defect ID: DEFECT000594318		
Technical Severity: High	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Security	
Reported In Release: NI 05.9.00	Technology: SSH - Secure Shell	
Symptom: The SSH session terminates unexpectedly who	en running "show tech- support" command.	
Condition: From a SSH session, execute "show tech-support" command on a scaled setup with large		
configuration (32 slot chassis with ACL confi	gurations close to the supported maximum limit)	
Workaround: Redirect the output of "show tech-support"	to a file instead of streaming to the SSH terminal.	
Example:		
$abc@xyz{295}$: $ssh lab@w.x.y.z > show_$	tech_12.txt	
Password:	<>< Provide password here, and monitor the	
output in a separate window (see below)		
	<>< Now we are at user privilege level	
prompt. So enter "enable"		
	<><< Now we are at privilege exec mode.	
So enter "show tech"		
	<>< wait for output to complete. Then	
exit twice (for exit out of privilege mode, and then exit out of user mode)		
Connection to w.x.y.z closed by remote ho	ost.	
Connection to w.x.y.z closed.		

Defect ID: DEFECT000594398		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Monitoring	
Reported In Release: NI 05.7.00	Technology: Hardware Monitoring	
Symptom: Parity error similar to below mentioned is seen in syslog:		
Mar 24 09:15:42:E:CAM2PRAM Word 2 Double Bit Parity Error on port range 1/1 - 1/10		
Condition: Single bit ECC error occurs on the Line card module NP memory.		

Defect ID: DEFECT000594606			
Technical Severity: High	Probability: Medium		
Product: Brocade NetIron OS	Technology Group: Monitoring		
Reported In Release: NI 06.0.00	Technology: Hardware Monitoring		
Symptom: A Line card reset with the below syslog and It is rarely seen.	nptom: A Line card reset with the below syslog and stack trace without any user intervention. It is rarely seen.		
	SYSLOG: <141>Mar 27 08:56:30 R50-MLXe8 System: Module down in slot 5, reason CARD_DOWN_REASON_REBOOTED. Error Code 0		
Stack Trace:	Stack Trace:		
Possible Stack Trace (function call return address list) 00000000: .zero(pc) 20c18bec: ipc_multi_module_handler(lr) 20c1b1f0: ipc_process_messages 20c1b9cc: ipc_receive_packet 20036d14: ge_process_ipc_data_msg 207f57b4: lp_ipc_task 00040158: sys_end_task Condition: Rarely seen. Corner case			
Workaround: No workaround			
Recovery: The Line card will reboot and come up			

Defect ID: DEFECT000595113		
Technical Severity: High	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer	
Reported In Release: NI 05.8.00	Technology: DHCP - Dynamic Host Configuration	
	Protocol	
	m: When the router is acting as DHCPv6 relay agent, it is not choosing DHCPv6 client facing interface's	
link-local address as the source address in the IPv6 packet when it forwards reply message to the		
client.		
Condition: The device should act as a DHCPv6 relay a	gent	

Defect ID: DEFECT000595261		
Technical Severity: Medium	Probability: High	
Product: Brocade NetIron OS	Technology Group: IP Multicast	
Reported In Release: NI 06.0.00	Technology: PIM - Protocol-Independent Multicast	
Symptom: Multicast source lookup fails due to unavailability of unicast routes in the system.		
Condition: This issue introduced when unicast traffic doesn't have routes in routing table which are required for		
multicast source and RP lookup.		
Workaround: Make sure unicast routing table populated before running multicast traffic.		

Defect ID: DEFECT000595623		
Technical Severity: Medium	Probability: High	
Product: Brocade NetIron OS	Technology Group: IP Multicast	
Reported In Release: NI 06.0.00	Technology: IPv4 Multicast Routing	
Symptom: Line-card may reload while running multicast data traffic in an unlikely user scenario.		
Condition: Trigger for this issue is unknown. Should not occur under normal maintenance operation, represents		
an unlikely user scenario. This system has IPSEC Tunnels with PIM enabled.		

Defect ID: DEFECT000595638	
Technical Severity: High	Probability: Low
Product: Brocade NetIron OS	Technology Group: SDN
Reported In Release: NI 06.0.00	Technology: OpenFlow
Symptom: DUT might experience an unplanned restart, when more than 32K OpenFlow flows are being	
configured over SSL.	
Condition: More than 32K flows are sent from OpenFlow controller.	

Defect ID: DEFECT000595703	
Technical Severity: High	Probability: Low
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching
Reported In Release: NI 05.4.00	Technology: MCT - Multi-Chassis Trunking
Symptom: High LP CPU usage	
Condition: MLX-32 with MCT configuration	

Defect ID: DEFECT000595704		
Technical Severity: High	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer	
Reported In Release: NI 05.8.00	Technology: GRE - Generic Routing Encapsulation	
Symptom: Unable to establish TCP connection over GRE Tunnel.		
Condition: The command "ip tcp redirect-gre-tcp-syn" should be present in the global configuration, while the		
tunnel source port should have the command "ip tcp adjust-mss <value>" enabled.</value>		
Workaround: Remove the command "ip tcp adjust-mss <value>" from the interface configuration.</value>		

Defect ID: DEFECT000595910		
Technical Severity: Medium	Probability: High	
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: Extraneous config lines are added to running-config starting with "no trap".		
Condition: This happens after a reload if OSPFv3 "log-status-change" is configured.		

Defect ID: DEFECT000595942	
Technical Severity: High	Probability: Medium
Product: Brocade NetIron OS	Technology Group: MPLS
Reported In Release: NI 06.0.00	Technology: MPLS Traffic Engineering
Symptom: System reset is seen sometimes when select-path is retrying a new instance due to IGP neighbor down	
event and no path is available.	
Condition: The system has IGP sync enabled and an LSP has selected path as the Active path and in addition to	
that there is no alternated path for the selected secondary to come UP. Under these conditions, if an	
interface flap in the network triggers neighbor down event, this issue may be seen.	

Defect ID: DEFECT000595982		
	Probability: High	
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer	
Reported In Release: NI 05.6.00	Technology: BFD - BiDirectional Forwarding	
	Detection	
Symptom: BFD session state is staying UP even after un-tagging the port from VLAN.		
Condition: Sometimes after untagging a port from VLAN.		
Recovery: Execute the below command after untagging ports from VLAN if a BFD session state does not		
transition to DOWN state		
"clear bfd neighbors A.B.C.D/X:X::X:X"		

Defect ID: DEFECT000596110		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Layer 2 Switching	
Reported In Release: NI 05.9.00	Technology: LAG - Link Aggregation Group	
Symptom: A LAG can be deployed with inconsistent sFlow configuration on primary port and secondary port.		
Condition: "sflow forwarding" is enabled on an interface and is added to a deployed LAG whose primary port does not have it enabled.		
Note: This does not affect the LAG configuration		

Defect ID: DEFECT000596126	
Technical Severity: High	Probability: High
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: Router restart is observed.	
Condition: This sometime occurs if clearing of all BGP and OSPF neighbors is performed just after the switch-	
over to standby MP.	

Defect ID: DEFECT000596167		
Technical Severity: Medium	Probability: High	
Product: Brocade NetIron OS	Technology Group: Security	
Reported In Release: NI 06.0.00	Technology: PBR - Policy-Based Routing	
Symptom: After reload PBR counters are not getting updated on CES devices.		
Condition: This happens only in reload scenario.		
Recovery: Rebind the PBR.		

Defect ID: DEFECT000596196	
Technical Severity: Medium	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Monitoring
Reported In Release: NI 05.6.00	Technology: Syslog
Symptom: Alarm messages similar to the ones given below will be seen in Syslog/LP console along with trap message when 10GE Tunable SFP+ optics are connected.	
Apr 20 14:17:38:A: Latched low RX Power alarm, port 1/3 Apr 20 14:17:38:A: Latched low RX Power alarm, port 1/1	
Condition: Tunable Optic SFPs connected	
Recovery: Contact Brocade Support for guidance on how to suppress the alarm messages in the Syslog.	

Defect ID: DEFECT000596208	
Technical Severity: Medium	Probability: High
Product: Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NI 06.0.00	Technology: BFD - BiDirectional Forwarding
	Detection
Symptom: The router restarts sometime.	
Condition: When BFD sessions are established over LAG ports.	

Defect ID:	DEFECT000596272	
Technical Se	verity: High	Probability: Medium
Product:	Brocade NetIron OS	Technology Group: Layer 3 Routing/Network Layer
Reported In	Release: NI 05.6.00	Technology: IP Addressing
Symptom: Unable to ping a small number of IPs (including some directly connected IPs).		
Condition: On CER/CES platform, with high number (100s) of directly connected hosts with multiple non-		
	major subnets	

Defect ID: DEFECT000596289		
Technical Severity: Medium	Probability: High	
Product: Brocade NetIron OS	Technology Group: Monitoring	
Reported In Release: NI 06.0.00	Technology: Telemetry	
Symptom: No able to clear ACL/PBR counters using command "clear access-list ethertnet x/y"		
Condition: Clearing of counters not working		
Workaround: User can use "clear access-list ethertnet x/y policy-based-routing" for clearing PBR counters. And "clear access-list" for clearing ACL counters.		

Defect ID: DEFECT000596446		
Technical Severity: Me	edium	Probability: High
Product: Brocade NetIro	on OS	Technology Group: MPLS
Reported In Release: N	T 06.0.00	Technology: MPLS Traffic Engineering
Symptom: This happens in scenarios where the server response is very slow, in the order of 10s of seconds, or		
when the request is timed out due to unresponsive server. After a request has been made, if the user		
disables the LSP, removes 'pce compute' from the LSP config and enables it, and the response		
comes or tim	neout happens after all this, the en	rror code of the LSP will be incorrect.
Condition: Happens and is seen only with PCE servers with extremely slow response time, or when the request		
is timed out as per the request timer, and the user changes the config on the LSP during this time to		
make the LS	P locally computed.	

Defect ID: DEFECT000596574		
Technical Severity: Critical	Probability: High	
Product: Brocade NetIron OS	Technology Group: Traffic Management	
Reported In Release: NI 05.9.00	Technology: Traffic Queueing and Scheduling	
Symptom: TM errors on a 32-slot chassis with 24x100	3 modules resulting in traffic drop.	
Condition: Seen on a 32-slot chassis with 24x10G mod	Condition: Seen on a 32-slot chassis with 24x10G modules present. Triggered by either	
- a chassis reload or	- a chassis reload or	
- an LP insertion while traffic is present, or		
- an LP reboot while traffic is present		
Workaround: For the chassis reload - Add the command "wait-for-all-cards" in the configuration before reload.		
This will ensure that the issue does not happen during chassis reload.		
For LP insertion - If LP is inserted without any config present for the LP, the issue will not happen.		
If LP is inserted with a config present for the	If LP is inserted with a config present for the LP, the issue can happen and recovery will need to be	
performed.		
Recovery: Reload the chassis after configuring the "w	ait-for-all-cards" command.	

Defect ID: DEFECT000597226	
Technical Severity: High	Probability: Medium
Product: Brocade NetIron OS	Technology Group: Traffic Management
Reported In Release: NI 05.9.00	Technology: Traffic Queueing and Scheduling
Symptom: While upgrading to a newer version, some of the SFM may go down.	
Condition: This issue is seen rarely.	
Recovery: Power cycle the SFM that has gone down and the issue will not be seen.	

Defect ID: DEFECT000597413		
Technical Severity: Medium	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: Traffic Management	
Reported In Release: NI 05.6.00	Technology: Rate Limiting and Shaping	
Symptom: Link fault signaling settings is not applied after reloading the chassis.		
Condition: Link fault signaling enabled globally and then reload chassis or power cycle LP.		
Recovery: Disable and enable link-fault-signaling globally.		

Defect ID: DEFECT000597443		
Technical Severity: High	Probability: Medium	
Product: Brocade NetIron OS	Technology Group: MPLS	
Reported In Release: NI 05.6.00	Technology: MPLS Traffic Engineering	
Symptom: RSVP-TE LSP is operationally up from control	ol plane point of view but is broken at the data plane.	
Data traffic passing through this LSP is affect	ed.	
Condition: Line card on one of the transit routers through which LSP passes was continuously rebooting. After		
faulty line card was replaced, LSP came up but its data plane was broken.		
Recovery: Resetting the LSP resolved this issue. Execute the following commands		
conf t	conf t	
router mpls	router mpls	
lsp <name></name>		
disable	disable	
==wait for around 1min==		
enable		