Network OS 7.1.0b for Brocade VDX

Release Notes v2.0

Contents

Document History

Version	Summary of Changes	Publication Date
1.0	Initial Release	October 16, 2017
2.0	Defect tables updated	January 15, 2018

PREFACE

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OVERVIEW

Brocade Network OS 7.1.0 release introduces incremental capabilities to further enhance the Layer 3 Brocade® IP Fabrics functionality, Layer 2 VCS ® Data Center Fabrics, Standards (BGP-EPVN) based network Virtualization for Intra DC and DC-Interconnect solutions.

Hardware

The following section lists new hardware introduced with this release as well as hardware that are no longer supported with this release.

New devices

Newer optics and passive twinax cables supported

- DM7051 (10G Copper)
- 100G-QSFP28-CWDM4-2KM
- 100G-QSFP28-LR4-LP-10KM
- 10G-SFPP-TWX-P-0101 (10G Cu passive 1M)
- 10G-SFPP-TWX-P-0108 (10G Cu passive 1M)
- 10G-SFPP-TWX-P-0301 (10G Cu passive 3M)
- 10G-SFPP-TWX-P-0308 (10G Cu passive 3M)

Note: The passive cables are supported only by the VDX 6740 and VDX 6940.

New interface modules

None

Deprecated Hardware

None

Software Features

The following section lists new, modified, and deprecated software features for this release. For information about which platforms support these features, refer to the *Network OS Features and Standards support Matrix*.

Deprecated Software Features

- **VCS fabric cluster (FC) mode:**

- NOS 7.0.x was the last Major Release of Network OS supporting fabric cluster (FC) mode.
  - Network OS 7.1 supports logical chassis cluster (LC) mode only. From 7.0.0 onwards, the default mode is logical chassis cluster mode.
- Guidance:
  - Please evaluate if your customer may need to migrate to LC mode. In most cases, it may not be required e.g.
    - If customer has a fabric with older VDX switches (6710, 6720, 6730, 6746) and plans future growth in separate new fabrics.
    - If customer does not intend to use features beyond Network OS 7.0 release.
  - If your customer needs migration, please see the VCS Logical Chassis Migration Deployment Guide at: http://www.brocade.com/content/html/en/deployment-guide/brocade-vcs-logical-chassis-migration-dp/GUID-FF3F3AE3-602A-4955-A2E0-B51E8CA690D3.html
  - For Customer migration questions/challenges, contact the Engineering Mailer: DL-GRP-PM-FC-LC@Brocade.com
- Separate guidelines for OEM. Please contact your OEM account team with specific questions. If not sure who your OEM contacts are, contact Dianne Olivera dolivera@Brocade.COM for guidance.

- **Support for NSX-MH**

Software Upgrade

ISSU (In Service Software Upgrade) from NOS 7.0.1 to NOS 7.1.0x is not supported.

None

New Software Features for Network OS v7.1.0b

The following software features are new or enhanced in this release

None

New Software Features for Network OS v7.1.0a

The following software features are new or enhanced in this release

None

New Software Features for Network OS v7.1.0

The following software features are new or enhanced in this release:

IP Fabrics and Layer 3 enhancements:

- RT-Constraints for ORF: Outbound Route Filtering- Route Target Constraints: constrained route distribution for BGP
- Duplicate-MAC dampen timers/knob to reintroduce the dampened MACs in EVPN context
- MACs learned over EVPN should be tagged as EVPN MACs and not statically learnt MACs
- MACs in EVPN context, timers to keep host ports down till BGP EVPN session come up
- BGP dynamic neighbors: BGP listen range configuration support
- VRF route leaking for directly connected networks
- Display EVPN attribute in "show mac-address-table"

IP Multicast enhancements:

- PIM BSR: standard-based protocol, full support
- RP support in VCS Fabrics: A rendezvous point (RP) is required only in networks running Protocol Independent Multicast sparse mode (PIM-SM). . In PIM-SM, only network segments with active receivers that have explicitly requested multicast data will be forwarded the traffic. This method of delivering multicast data is in contrast to the PIM dense mode (PIM-DM) model.

VCS Fabrics Enhancements:

Increase supported ISL distances (for non-long-distance) between Metro VCS sites to 80kms for non-storage traffic. This becomes consistent with the ISL distance supported by ZR optics. Increase number of supported sites to 5 (with certain restrictions). There is no need to configure ISLs as LD-ISLs if there is no storage traffic. .

Scale Enhancements

- CML scale: increased to 512K
- VRF scale: increased to 512 support
- ARP scale: limited support for up to 20K of ARP entries on VDX 6740 (VCS fabric only)
- MTU change: 9K Jumbo support in IP fabric
- Scale increase for SAG (to 64 instances)

Management enhancements:

- DB protection: Database shutdown for planned power cycle
- DHCP server on Brocade VDX 6740T
- MAC-move detection and autorecovery
- FlexPort speeds and maximum distances for supported SFPs
- New plugins for OpenStack, support for ONOS
- OVSDB Certificate algorithm and command updates: non SSH support for OVSDB
- Trigger pattern filtering for Programmable Even Manager

Monitoring enhancements:

- System Resource Monitoring Manager (SRM) enhancements
- sFlow enhancements to improve sampling rates on VDX platforms

NETCONF enhancements:

- RPC for "get-mac-address-table" enhancement: provide discovered MAC addresses per port

Security enhancements:

- 802.1x/Radius Interop for Dynamic VLAN Assignment and MAC authentication bypass (MAB) request
- Block show running CLI based on user role
- SSH multiplexed sessions

Modified Features

Layer 2 enhancements

- Updates to "Configuring the VXLAN gateway for NSX Controller deployments" (SHA-2 family hash support)

Manageability Enhancement:

- Support to configure HTTP and HTTPS server at the same time through CLI.

CLI Changes

The following section lists new, modified, and deprecated commands for this release. For details, refer to the Network OS Command Reference.

New Commands for Network OS v7.1.0b

None

Modified Commands for Network OS v7.1.0b

None

Deprecated Commands for Network OS v7.1.0b

None

New Commands for Network OS v7.1.0a

None

Modified Commands for Network OS v7.1.0a

None

Deprecated Commands for Network OS v7.1.0a

None

New Commands for Network OS v7.1.0

The following configuration commands are new in this release:

- auto-config-backup
- chassis power-cycle-db-shutdown
- clear counters all
- dhcpd enable
- dhcpd restart
- dot1x mac-auth-bypass
- dot1x mac-auth-enable
- export map evpn
- firmware peripheral-update microcode
- import map evpn
- ip pim multinet enable
- listen-limit
- listen-range
- mac-address-table mac-move action
- mac-address-table mac-move auto-recovery
- neighbor alternate-as
- resource-monitor cpu enable
- resource-monitor memory

- resource-monitor process memory
- vcs auto-config-backup timer
- clear mac-address-table dynamic non-authenticated

The following show commands are new in this release:

- show debug ipv6 mld
- show dhcpd configuration
- show mac-address-table count evpn
- show mac-address-table evpn
- show radius servers
- show running-config rbridge-id dhcpd enable
- show running-config rbridge-id ssh server
- show vcs auto-config-backup
- show version peripheral phy
- show mac-address-table authenticated interface
- show mac-address-table authentication-failed interface

Modified Commands for Network OS v7.1.0

The following commands have been modified for this release:

- area authentication (OSPFv3)
- area virtual-link authentication (OSPFv3)
- area nssa (OSPFv2)
- bsr-msg-interval
- capture packet interface
- cipherset
- clear counters storm-control
- clear ip igmp statistics interface
- clear ipv6 bgp neighbor
- clear ipv6 mld statistics
- clear mac-address-table dynamic
- copy snapshot
- diag dport-test interface
- fabric trunk enable
- fips selftests
- fips zeroize
- firmware download logical-chassis
- hardware-profile
- hardware-profile vlan-classification
- http server

- interface (range specification)
- ip directed-broadcast
- ip extcommunity-list
- ip icmp address-mask
- ip icmp echo-reply
- ip icmp unreachable
- ip igmp snooping mrouter interface
- mac-address-table consistency-check interval
- mac-address-table mac-move detect
- mac-address-table mac-move limit
- mac-rebalance
- match
- maximum-paths (BGP)
- neighbor bfd
- nsx-controller client-cert
- port-channel path-cost
- port-profile (port-profile-domain configuration mode)
- qos red profile
- rbridge-id
- reload
- rp-adv-interval
- seq (MAC standard ACLs)
- set extcommunity
- set-priority
- show arp
- show capture packet interface
- show debug ip igmp
- show fabric all
- show hardware-profile
- show ip bgp neighbors
- show ip bgp peer-group
- show ip bgp summary
- show ip interface
- show ip pim neighbor
- show ip pim-sparse
- show ipv6 mld interface
- show ipv6 mld statistics
- show ipv6 prefix-list
- show mac-address-table
- show mac-address-table mac-move
- show port-channel

- show port port-channel
- show ssh server status
- show vcs
- snmp-server context
- snmp-server three-tuple-if enable
- snmp-server user
- spanning-tree shutdown
- ssh client cipher non-cbc
- ssh client key-exchange
- ssh server cipher
- ssh server key-exchange
- ssh server shutdown
- system-mode maintenance
- telnet server standby enable
- unhide built-in-self-test
- unhide fips
- vcs replace rbridge-id
- vcs set-rbridge-id
- vcs logical-chassis enable
- vni add
- write erase
- zoning defined-configuration alias
- zoning defined-configuration cfg
- zoning enabled-configuration cfg-action cfg-clear
- zoning enabled-configuration cfg-action cfg-save
- zoning enabled-configuration cfg-action cfg-transaction-abort
- zoning enabled-configuration cfg-name
- zoning enabled-configuration default-zone-access
- zoning defined-configuration zone

Deprecated Commands for Network OS v71.0

The following commands have been deprecated for this release:

- clear counters (IP) (see clear counters access-list, clear counters all, clear counters interface, clear counters slot-id, clear counters storm-control)
- clear counters (MAC) (see clear counters access-list, clear counters all, clear counters interface, clear counters slot-id, clear counters storm-control)
- ip http server enable

- vcs logical-chassis enable (fabric cluster mode)
- vcs rbridge-id (fabric cluster mode)
- vcs vcsid (fabric cluster mode)

API Changes

Network OS follows the YANG model for CLI and NETCONF/REST API. Hence relevant changes in above CLI Changes will get mirrored in API Changes as well.

Newly supported standards and RFCs

The following section lists RFCs and other standards newly supported in this release.

This software generally conforms to Ethernet standards in a manner consistent with accepted engineering practices and procedures. In certain cases, Brocade might add proprietary supplemental functions to those specified in the standards, or choose to implement modifications to the standards for performance or behavioral improvements.

None

HARDWARE SUPPORT

Supported devices

Brocade NOS v7.1.0 supports following VDX Switches:

- Brocade VDX 6940-144S
- Brocade VDX 6940-36Q
- Brocade VDX 6740
- Brocade VDX 6740T
- Brocade VDX 6740T-1G
- Brocade VDX 8770-4
- Brocade VDX 8770-8
- Brocade VDX 2741
- Brocade VDX 2746

Brocade VDX 6940-144S

The Brocade VDX 6940-144S is a 2U platform that offers 96 x 10GbE SFP+ downlink ports for server connectivity and also 12 x 40 GbE QSFP+ uplink ports to connect to the aggregation layer. These ports support the following:

- Available in 64, 96 and 144 ports SKU.
- Each 40GbE port can be broken into 4 independent 10GbE ports, providing a total of up to 144 x 10GbE ports in a 2RU form factor.
- 64 port SKU can be upgraded up to 144 ports with Ports On Demand (POD) software license. There are two POD licenses - 16x10GbE for 10GbE server connecting ports and 6x40GbE for the 40GbE uplink ports. The same 6x40GbE POD license can be used to upgrade up to 12x40GbE uplink ports in both 64 and 96 port SKUs.
- Deployable as high-density 10GbE switch for the Top of Rack (TOR) or Middle of Row (MOR) or for End of Row (EOR) configurations.
- Provides optimized on-chip buffer (24MB) and latency (800ns), making it an ideal switch for a wide variety of workloads.
- Interface 97, 98 103 and 104 are dual personality ports. These ports can be configured in 40GbE or 100GbE mode.

Brocade VDX 6940-36Q

The Brocade VDX 6940-36Q is a 1U platform that offers 36 x 40 GbE QSFP+ ports. Each 40 GbE ports can be further broken out into 4 independent 10 GbE SFP+ ports providing a total of 144 x 10 GbE SFP+ ports. These ports support the following:

- Available in 24 and 36 ports SKU.
- Each 40GbE port can be broken into 4 X 10GbE ports, providing up to 144 x 10GbE ports in a 1RU form factor.
- The 24 port SKU can be upgraded up to 36 ports via 40GbE DPOD license of 12 ports.
- It can be used as a high-density 40GbE spine switch or it can also be used as a leaf switch with dynamic breakout capability.
- It provides optimized on-chip buffer (24MB) and latency (800ns), making it an ideal switch for a wide variety of workloads.

Brocade VDX 6740

The Brocade VDX 6740 offers 48 10GbE SFP+ ports and 4 ports of 40 Gigabit quad small form-factor pluggable plus (QSFP+), each can be broken out into four independent 10 GbE SFP+ ports, providing an additional 16 x 10 GbE SFP+ ports. No 40 GbE ports are enabled as part of the base license. Four 40 GbE ports can be upgraded via the Ports on Demand (PoD) software license. These ports support the following:

- Available in 24, 48 and 64 port SKU.
- 850-ns microsecond latency for any port to port to assure rapid response for latency-sensitive applications.
- The base SKU is available with 24 ports and can be upgraded up to 48 ports via 10Gbe DPOD license of 8 ports.
- Of the 48 10GbE SFP+ ports, 32 ports can be configured as FlexPorts (FC/Ethernet).
- It has 4 X 40Gbe QSFP ports which can be used for the uplink and VCS fabric formation.
- Each 40GbE port is capable of doing a breakout of 4 X 10GbE ports.
- Additional 4X40GbE ports can be added to base version with 2X40GbE POD license increments.
- 100Mb Support – Refer to "Support for 100-Mb interfaces" sections below.

Brocade VDX 6740T

The VDX 6740T offers 48 10GbE Base-T ports and 4 ports of 40-gigabit quad small form-factor pluggable plus (QSFP+), each can be broken out into four independent 10GbE SFP+ ports, providing an additional 16 x 10 GbE SFP+ ports. No 40 GbE ports are enabled as part of the base license. Four 40 GbE ports can be upgraded via the Ports on Demand (PoD) software license.

- Available in 24, 48 and 64 port SKU.
- 3 microsecond latency for any port to port to assure rapid response for latency-sensitive applications.
- The base SKU is available with 24 10GbE Base-T ports and can be upgraded up to 48 ports via 10Gbe DPOD license of 8 ports.
- It has 4 X 40 GbE QSFP ports which can be used for uplink and VCS fabric formation.
- Each 40GbE port is capable of doing a breakout of 4 x 10GbE ports.

- Each 40GbE port is also capable of doing a FC breakout of 4*8G or 4*16G. These ports can be used to connect to the FOS switches.
- Each 40GbE port is also capable of doing an FC breakout of 4 x 8G/16G.
- Additional 4X40GbE ports can be added to base version with 2X40GbE POD license increments.
- 100Mb Support – Refer to "Support for 100-Mb interfaces" below.

Brocade VDX 6740T-1G

The Brocade VDX 6740T-1G offers 48 1000BASE-T ports and two 40 GbE QSFP+ ports in base version. Each 40 GbE port can be broken out into four independent 10 GbE SFP+ ports, providing an additional eight 10 GbE SFP+ ports for uplink. All 48 1000BASE-T ports can be upgraded to 48 10GBASE-T ports via a Capacity on Demand (CoD) software license. Two 40 GbE ports are enabled as part of the base license. The additional two 40 GbE ports can be upgraded via the Ports on Demand (PoD) software license.

- Base version is available with 48 x 1000BASE-T ports and 2 x 40 GbE QSFP+ ports.
- 3-microsecond latency for any port to port to assure rapid response for latency-sensitive applications.
- All 48 x 1000BASE-T ports can be upgraded to 10Gbase-T port with capacity on demand license.
- Additional 2X40Gbe ports can be added to base version with 2X40Gbe POD license.
- It has 4 X 40Gbe QSFP ports which can be used for the uplink and VCS fabric formation.
- Each 40GbE port is capable of doing a breakout of 4 X 10GbE ports.
- Each 40GbE port is also capable of doing a FC breakout of 4 x 8G/16G.
- 100Mb Support – Refer to "Support for 100-Mb interfaces" below.

Brocade VDX 8770-4 and VDX 8770-8

The Brocade VDX 8770 is available in two form factors; a 4-I/O slot system and an 8 I/O slot system with line-card support for 1-GbE, 10-GbE, 10GbE-T, 40GbE, and 100GbE ports. The Brocade VDX 8770 delivers a high-performance switch to support the most demanding data center networking needs, capable of supporting:

- 4 Tbps per slot line-rate design for substantial capacity and headroom.
- ~4-microsecond latency to assure rapid response for latency-sensitive applications.
- Up to 384,000 MAC addresses per fabric for extensive virtualization scalability.
- More than 8000 ports in a single VCS Fabric with Brocade Fabric Multipathing technology, enabling the switch to serve extremely large-scale deployments with the best-possible network utilization.

Supported Blades for VDX 8770

The flexible, modular switch design offers interconnection with other Brocade switches, traditional Ethernet switch infrastructures, and direct server connections. Modular 4-slot and 8-

slot chassis options are available to match the switch to the needs of the organization. These include:

- **Brocade VDX 8770-4**: Supports up to 192 1/10 GbE ports, or 108 40 GbE ports and 24 100 GbE ports, or a combination.
- **Brocade VDX 8770-8**: Supports up to 384 1/10 GbE ports, or 216 40 GbE ports and 48 100 GbE ports, or a combination.

The switches support two Management Modules in an active standby configuration. The 4 slot chassis can hold up to 3 Switch Fabric Modules (SFM) and 4 Power supply Units (PSU) while the 8 slot chassis can hold 6 SFMs and 8 PSUs. The switch supports a variety of wire-speed line cards to offer maximum flexibility in terms of port bandwidth as well as cable and connector technology:

- 1 GbE: LC48×1G line card provides up to 48 SFP/SFP-copper ports.
- 10 GbE: LC48×10G line card provides up to 48 SFP+ ports .
- 10 GbE-T: LC48×10GT line card provides up to 48 RJ-45 ports .
- 40 GbE: LC12×40G line card provides up to 12 x 40 GbE QSFP ports.
- 40 GbE: LC27×40G line card provides up to 27 x 40 GbE QSFP ports.
- 100 GbE: LC6×100G line card provides up to 6 x 100 GbE CFP2 ports.

Brocade VDX 2741

- Brocade VDX blade switch for Converged Ethernet Fabrics in Sugon TC-6600 Chassis.
- Internal Ports (KR)
  - 28 x 10G Eth (with 1GbE/10GbE auto negotiation)
- External Ports
  - 16 x Flex Ports (10GbE or 16G FC)
  - 4 x 40GbE ports with breakout capability
- Support for low cost of entry base with POD upgrades
- Single ASIC with 850ns low latency
- 128K MAC, 32K ARP and 12K ACL support
- Brocade features as supported in NOS 7.0.0
- Sugon specific features:
  - Feature on Demand (S/W upgrades)

Brocade VDX 2746

- Brocade VDX blade switch for the Hitachi BladeSymphony 2500 chassis
- Internal Ports (KR)
  - 42 x 10G Eth (with 1GbE/10GbE auto negotiation)
- External Ports
  - 14 x Flex Ports (10GbE or 16G FC)
  - 2 x 40GbE ports with breakout capability (also Flex)
- Support for low cost of entry base with POD upgrades:
  - Management integration with Hitachi's chassis management module

Support for 100-Mb interfaces

- Full duplex speed support only for P2P connections
- Limited L2 configuration supported. For example Switchport, LLDP, MTU size, L2 ACL and L3 ACL.
- No support for adding a 100 Mbit/s shared media/hub.
- L3, FCoE, TRILL, PFC configuration are NOT supported on 100 Mbit interfaces.
- Examples for 100 Mbit/s usage are as follows:
  - 100 Mbit/s Host device requirement with IPv4/v6 Connectivity.

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
XBR-ACPWR-3000	FRU,3000W AC POWER SUPPLY	VDX 8770-4, VDX 8770-8
XBR-DCPWR-3000	FRU,3000W DC POWER SUPPLY	VDX 8770-4, VDX 8770-8
XBR-250WPSAC-F	FRU,250W,ACPS/FAN,NONPORTSIDE EXHAUST	VDX 6740
XBR-250WPSAC-R	VDX 6740 AC RTF PWR SUPPLY FAN	VDX 6740
XBR-250WPSDC-F	FRU,250W,DCPS/FAN,NONPORTSIDE EXHAUST	VDX 6740
XBR-250WPSDC-R	FRU,250W,DCPS/FAN,PORT SIDE EXHAUST	VDX 6740
XBR-500WPSAC-F	FRU 500W ACPS	VDX 6740T, VDX 6740T-1G, VDX 6940-36Q
XBR-500WPSAC-R	FRU 500W ACPS	VDX 6740T, VDX 6740T-1G, VDX 6940-36Q
RPS9DC+E	FRU,500W DC PSU PORT SIDE EXHAUST	VDX 6740T, VDX 6740T-1G, VDX 6940-36Q
RPS9DC+I	FRU,500W,DCPS/FAN,NONPORTSIDE EXHAUST	VDX 6740T, VDX 6740T-1G, VDX 6940-36Q
XBR-1100WPSAC-R	FRU,1100W PSAC,PORTSIDE EXHAUST AF	VDX 6940-144S

Part number	Description	Compatible devices
XBR-1100WPSAC-F	FRU,1100W PSAC,NON-PORT SIDE EXHAUST AF	VDX 6940-144S
XBR-1100WPSDC-01-R	FRU 1100W DCPS,PORTSIDE EXHAUST	VDX 6940-144S
XBR-1100WPSDC-01-F	FRU 1100W DCPS,NON PORTSIDE EXHAUST	VDX 6940-144S

The VDX 8770 switches ship with multiple, field replaceable, load-sharing AC or DC power supplies based on the configuration selected. The PSU SKU is shared by both 4- and 8-slot systems. The VDX 8770-4 ships with a minimum of 2 AC or DC PSU. Additional 2 PSU can be ordered for redundancy. The VDX 8770-8 system ships with a minimum of 3 PSU and additional PSU may be ordered for redundancy:

- XBR-ACPWR-3000 - 3000 W power supply unit AC
- XBR-DCPWR-3000 - 3000 W power supply unit DC

The VDX -6740 switches are both delivered with two internal, redundant, field-replaceable, load-sharing AC or DC power supplies:

- XBR-250WPSAC-F - FRU 250 W AC power supply/fan, non-port-side exhaust airflow
- XBR-250WPSAC-R - FRU 250 W AC power supply/fan, port-side exhaust airflow
- XBR-250WPSDC-F - FRU 250 W DC power supply/fan, non-port-side exhaust airflow
- XBR-250WPSDC-R - FRU 250 W DC power supply/fan, port-side exhaust airflow

The VDX -6740T switches ship with two internal, redundant, field-replaceable, load-sharing AC or DC power supplies:

- XBR-500WPSAC-F   -FRU 500 W AC power supply/fan, non-port-side exhaust airflow
- XBR-500WPSAC-R - FRU 500 W AC power supply/fan, port-side exhaust airflow
- XBR-500WPSDC-F   -FRU 500 W DC power supply/fan, non-port-side exhaust airflow
- XBR-500WPSDC-R - FRU 500 W DC power supply/fan, port-side exhaust airflow

The VDX -6L940-36Q switches ship with two internal, redundant, field-replaceable, load-sharing AC or DC power supplies:

- XBR-500WPSAC-F   -FRU 500 W AC power supply/fan, non-port-side exhaust airflow
- XBR-500WPSAC-R - FRU 500 W AC power supply/fan, port-side exhaust airflow
- XBR-500WPSDC-F   -FRU 500 W DC power supply/fan, non-port-side exhaust airflow
- XBR-500WPSDC-R - FRU 500 W DC power supply/fan, port-side exhaust airflow

The VDX -6940-144S switches ship with two internal, redundant, field-replaceable, load-sharing AC or DC power supplies:

- XBR-1100WPSAC-F   -FRU 500 W AC power supply/fan, non-port-side exhaust airflow
- XBR-1100WPSAC-R - FRU 500 W AC power supply/fan, port-side exhaust airflow
- XBR-500WPSDC-01-F   -FRU 500 W DC power supply/fan, non-port-side exhaust airflow
- XBR-500WPSDC-01-R - FRU 500 W DC power supply/fan, port-side exhaust airflow

Supported Optics for Network OS v7.1.0

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 VDX switches support following optics types listed below. The FC SFP+ optics are supported only on VDX 6740, 2741 and 2746 switches. Breakout optics are supported only for the VDX 8770 (40G line-card), 6740/T, 2741, 2746 and 6940 platforms. The Mellanox (MAM1Q00A) optic is only supported on the VDX 8770, 6740/T and 6940 platforms. The tunable DWDM optics is supported only on VDX 8770, 6740 and 6940-144S platforms 10G ports.

Speed	FRU and Optics SKU	Description	Part Number
1GbE	XBR-000190 (1-pack)	1 GbE copper	57-1000042-01
	E1MG-SX-OM (1-pack)* E1MG-SX-OM-8 (8-pack)*	1000Base-SX	33211-100
	E1MG-LX-OM (1-pack)* E1MG-LX-OM-8 (8-pack)*	1000Base-LX	33210-100
10GbE	10G-SFPP-SR (1-pack) 10G-SFPP-SR-8 (8-pack)	10 Gbps SR	57-0000075-01
	10G-SFPP-LR (1-pack) 10G-SFPP-LR-8 (8-pack)	10 Gbps LR (10km)	57-0000076-01
	10G-SFPP-ER (1-pack) 10G-SFPP-ER-8 (8-pack)	10 Gbps ER (40km)	57-0000085-01
	10G-SFPP-ZR	10 Gbps ZR (80km)	57-1000180-01
	10G-SFPP-ZRD-T	10 Gbps tunable DWDM SFP+ (80km)	57-1000266-01
	10G-SFPP-TWX-0101 (1-pack) 10G-SFPP-TWX-0108 (8-pack)	1m Twinax copper cable	58-1000026-01
	10G-SFPP-TWX-0301 (1-pack) 10G-SFPP-TWX-0308 (8-pack)	3m Twinax copper cable	58-1000027-01
	10G-SFPP-TWX-0501 (1-pack) 10G-SFPP-TWX-0508 (8-pack)	5m Twinax copper cable	58-1000023-01
	10G-SFPP-AOC-0701	10GbE SFP+ Direct Attached Active Optical Cable, 7m, 1-pack	57-1000273-01
	10G-SFPP-AOC-1001	10GbE SFP+ Direct Attached Active Optical Cable, 10m, 1-pack	57-1000274-01
	10G-SFPP-USR	10GE USR SFP+ optic (LC), target range 100m over MMF, 1-pack	57-1000130-01
	10G-SFPP-BXD-S	10GBase-BXD 10GE Bidi Downstream	57-1000349-01
	10G-SFPP-BXU-S	10GBase-BXU 10GE Bidi Upstream	57-1000348-01
40GbE	40G-QSFP-QSFP-C-0101	40GbE Direct Attached QSFP+ to QSFP+ Active Copper cable, 1m, 1-pack	58-0000041-01
	40G-QSFP-QSFP-C-0301	40GbE Direct Attached QSFP+ to QSFP+ Active Copper cable, 3m, 1-pack	58-0000042-01
	40G-QSFP-QSFP-C-0501	40GbE Direct Attached QSFP+ to QSFP+ Active Copper cable, 5m, 1-pack	58-0000043-01
	40G-QSFP-4SFP-C-0101	4x10GbE Direct Attached QSFP+ to 4 SFP+ Copper Breakout Cable, 1m, 1-pack	58-0000051-01
	40G-QSFP-4SFP-C-0301	4x10GbE Direct Attached QSFP+ to 4 SFP+ Copper Breakout Cable, 3m, 1-pack	58-0000052-01
	40G-QSFP-4SFP-C-0501	4x10GbE Direct Attached QSFP+ to 4 SFP+ Copper Breakout Cable, 5m, 1-pack	58-0000053-01

Speed	FRU and Optics SKU	Description	Part Number
	40G-QSFP-SR4	40 GbE SR4 optic	57-1000128-01
	40G-QSFP-SR4-INT	40 GbE SR4 (4×10 GbE SFPP break-out capable) Breakout optical cable is not included with this optics	57-1000129-01
	40G-QSFP-SR-BIDI	40 GbE QSFP+ Bi-Directional 100m optics	57-1000339-01
	40G-QSFP-ESR4	40GBase-eSR4 QSFP+ optic (MTP 1x12) 300m over MMF, (10GBASE-SR compatible, breakout), 1-pack	57-1000296-01
	40G-QSFP-ER4	40 GbE 40Km optic	57-1000327-01
	40G-QSFP-LR4	40 GbE 10Km optic	57-1000263-01
	40G-QSFP-LM4	40 GbE 140m multi-mode or 2km single-mode optic	57-1000325-01
	40G-QSFP-QSFP-AOC-1001	40GE Direct Attached QSFP+ to QSFP+ Active Optical Cable, 10m, 1-pack	57-1000306-01
	40G-QSFP-4SFP-AOC-1001	4x10GE Direct Attached QSFP+ to 4 SFP+ Active Optical Breakout Cable, 10m, 1-pack	57-1000307-01
8G FC	XBR-000163 (1-pack) XBR-000164 (8-pack)	8G FC SWL	
	XBR-000153 (1-pack) XBR-000172 (8-pack)	8G FC LWL	
	XBR-000174	8G FC ELWL	
16G FC	XBR-000192 (1-pack) XBR-000193 (8-pack)	16G FC SWL	
	XBR-000198 (1-pack) XBR-000199 (8-pack)	16G FC LWL	
FC QSFP	XBR-000245	4x8G or 4x16G FC QSFP breakout. VDX 6740T, 6740T-1G, 2740 and 2746 only (not applicable for VDX 6740).	
100GbE	100G-CFP2-SR10 (1-pack)	100 GbE CFP2 optic, SR10, for distances up to 100 m over MMF	57-1000284-01
	100G-CFP2-LR4-10KM	100 GbE CFP2 optic, LR4, for distances up to 10 km over SMF	57-1000285-01
	100G-CFP2-ER4-40KM	100 GbE CFP2 optic, ER4, for distances up to 40 km over SMF	57-1000328-01
	100G-QSFP28-SR4	100 GbE SR4 QSFP28 optic for distances up to 100m over MMF. Supported on VDX6940-144S and VDX8770-4/8 platforms.	57-1000326-01
	100G-QSFP28-LR4L-2KM	100 GbE QSFP28 optic for distances up to 2 km over SMF. Supported on VDX 6940-144s and VDX 8770 platforms.	57-1000329-01
	100G-QSFP28-LR4-10KM	100 GbE QSFP28 optic for distances up to 10 km over SMF. Supported on VDX 6940-144s and VDX 8770 platforms.	57-1000334-01

Note: 100G QSFP28 SR4 optic use core-12 cables, same cables that are used for 40G QSFP optics.

The following 10GbE CWDM optics from Smartoptics are supported on VDX 6740, 6940-144S and 8770. Please note that these are not Brocade parts and is a reference sale. So, the parts needs to be purchased

directly from SmartOptics. **The mark * one is qualified by Brocade.**

Smartoptics 10GbE CWDM SKU	Description
SO-10GE-ZR-C47	10 Gbps CWDM 1470 nm wavelength (70 km)*
SO-10GE-ZR-C49	10 Gbps CWDM 1490 nm wavelength (70 km)
SO-10GE-ZR-C51	10 Gbps CWDM 1510 nm wavelength (70 km)
SO-10GE-ZR-C53	10 Gbps CWDM 1530 nm wavelength (70 km)
SO-10GE-ZR-C55	10 Gbps CWDM 1550 nm wavelength (70 km)*
SO-10GE-ZR-C57	10 Gbps CWDM 1570 nm wavelength (70 km)
SO-10GE-ZR-C59	10 Gbps CWDM 1590 nm wavelength (70 km)
SO-10GE-ZR-C61	10 Gbps CWDM 1610 nm wavelength (70 km)*

Note: The Smartoptics require at least 20km distance or the appropriate attenuation in order for ISL to form.

10GBase-T Copper SFP+

The 10GBase-T Copper SFP+ optic is supported on VDX 6740, 6940-144S and 8770. Please note that this optic is not Brocade part, and must be purchased from Methode Electronics or their partners. Its Methode part number is SP7051-BRCD.

The VDX 6940x, VDX 8770, and VDX 6740x switches also support the following Quad to Serial Small Form Factor Pluggable Adapters:

Mellanox MAM1Q00A-QSA	Quad to Serial Small Form Factor Pluggable Adapter which can be used with following Brocade P/Ns: 10G-SFPP-SR (10G SR) 10G-SFPP-USR (10G USR) 10G-SFPP-LR (10G LR) 10G-SFPP-ER (10G ER) 10G-SFPP-AOC-0701 (10G AOC 7m) 10G-SFPP-AOC-1001 (10G AOC 10m) 10G-SFPP-TWX-0101 (10G 1m Twinax cable) 10G-SFPP-TWX-0301 (10G 3m Twinax cable) 10G-SFPP-TWX-0501 (10G 5m Twinax cable)
CFP2 to QSFP28 conversion module (PN: 80-1008646-01)	CFP2 to QSFP28 conversion module connects the QSFP28 optic (100G optic) in a CFP2 capable port of 2/6x100G line cards in VDX8770-4/8 chassis.

*Note: Legacy Foundry Networks branded optics are not supported

Note: 100G QSFP28 SR4 optic used in the CFP2 to QSFP28 conversion module uses core-12 cables, same cables that are used for 40G QSFP optics.

SOFTWARE UPGRADE AND DOWNGRADE

Image filenames

Download the following images from www.Brocade.com

Image Filename	Description	Supported Device or Module
nos7.1.0b.tar.gz	Network OS v7.1.0b for unix	NA
nos7.1.0b.zip	Network OS v7.1.0b for Windows	NA
nos7.1.0b_all_mibs.tar.gz	Network OS v7.1.0b MIBS	NA
nos7.1.0b_releasenotes_v2.0	Network OS v7.1.0b Release Notes v2.0 (PDF)	NA
nos7.1.0b.md5	Network OS v7.1.0b MD5 Checksum	NA

Upgrade/Downgrade considerations

Starting with Network OS v6.0.0, a Brocade 4GB USB drive is required for firmware installation using USB. Brocade 2GB USB drives are not supported.

Migration Path

Recommended upgrade/downgrade migration paths in logical chassis cluster modes are summarized in table below.

Note: Firmware download is not available for identical release numbers, such as Network OS 7.0.0 to Network OS 7.0.0.

To / From	6.0.1a	6.0.1a2	6.0.2	7.0.0	7.0.1x	7.1.0x
6.0.1a	NA	ISSU	ISSU	coldboot	coldboot	default-config
6.0.1a2	coldboot	NA	ISSU	coldboot	coldboot	default-config

6.0.2	coldboot	coldboot	NA	coldboot	coldboot	default-config
7.0.0	coldboot	coldboot	coldboot	NA	ISSU*	coldboot
7.0.1x	coldboot	coldboot	coldboot	coldboot**	ISSU for upgrade; Coldboot for downgrade	coldboot
7.1.0x	default-config	default-config	default-config	coldboot	coldboot	ISSU for upgrade; Coldboot for downgrade

NOTES

1. ** CFP2 to QSFP28 conversion module (PN: 80-1008646-01) Version3 downgrade to any release prior to NOS7.0.1 will cause CRC errors on the link.
2. Only Brocade Network Advisor (BNA) v14.2.0 (available separately) supports NOS v7.1.0. It is required to first upgrade to BNA v14.2.0 and then upgrade switches to Network OS v7.1.0.
3. Before downgrading to lower releases, it is recommended to disable all new features that are not supported on lower releases by using the "no" version of the CLIs. Stray configurations left out before downgrade can cause undesired behavior.
4. While upgrading chassis based system, under stress condition (e.g. due to excessive processing load on the processor), some linecards may become faulty during firmware download. To recover, run "power off <linecard>" followed by "power on <linecard>" command.
5. You must remove the IGMP snooping static mrouter configuration from all VLANs before upgrading or downgrading from or to the Network OS 6.0.2x release.
6. Firmware download from NOS7.0.1a to NOS6.x or NOS5.x with default-config option needs AG mode disabled.
7. **Limitations:
   a) After downgrading from Network OS v7.1.0 to Network OS v5.0.x FCoE devices may not log back in or FCoE configuration may be lost. To recover, reload the switch. Alternate recovery method: re-configure FCoE by removing and adding fcoeport configuration (no fcoeport/fcoeport default) on the affected interfaces.
      b) In rare occurance, 40G links may not come up online after upgrade to 7.1.0, need to do shut/no shut to recover
      c) In VDX 8770 platforms, After upgrade from 6.0.2 to 7.1.0 with coldboot, SNMP V3 traps are not received for the V3host which is under Rbridge.

d) Dport test between VDX 6740T and VDX 6940-144S breakout link may fail in upgrade to 7.1.0.

Note: The following defect fixes are not effective for ISSU upgrades to this release. Brocade recommends rebooting after upgrading to activate these fixes:

- DEFECT000626886
- DEFECT000593537
- DEFECT000629138
- DEFECT000635844
- DEFECT000637538
- DEFECT000637857
- DEFECT000629513

Refer to the defect tables for more information.

Management IP connectivity

In regards to SNMP, firmware downgrade from Network OS v7.1.0 to v7.0.x/v6.0.x/v5.0.x that do not support "use-vrf" keyword, the host/v3host with use-vrf value as "default-vrf" or "user-defined vrf" is not supported. The host/v3host configuration should set the use-vrf value as "mgmt-vrf" before downgrade.

Also, firmware downgrade from Network OS v7.1.0 to v7.0.x/v6.0.x/v5.0.x with use-vrf option in host/v3host set to user-defined vrf is not supported. The host/v3host configuration should set the use-vrf value as "mgmt-vrf" or "default-vrf" before downgrade.

Firmware upgrade to v7.1.0 from v7.0.x/v6.0.x/v5.0.x that do not support "use-vrf" keyword will modify the host/v3host configuration to append "use-vrf" keyword with value of mgmt-vrf and all the existing host/v3host entries will be assigned to mgmt-vrf.

Similarly on downgrade, the "use-vrf" keyword will be automatically removed from the configuration & depending upon the version, it will be put into mgmt-vrf.

The above downgrade/upgrade restrictions holds good for other IP services like Syslog-server, sFlow, NTP, Radius, TACACS and LDAP.

For users in 5.x that have configured Inband Management over VE interfaces, may expect to see the configuration fall into Default VRF, however, as noted above, the "use-vrf" keyword pointing to mgmt-vrf will be appended & applied. Thus such customers would need to modify the configuration after upgrade to adapt it according to their needs.

For HTTP services, firmware upgrade to v7.0.1 will add two entries by default under http configuration with "use-vrf" keyword appended with value as "mgmt-vrf" and other entry as "default-vrf".

Firmware downgrade to v6.0.1/6.0.2 with http server on user-defined vrf is not supported. Http server configuration on user-defined vrf should be removed before downgrade.

Firmware downgrade to v6.0.0 or v5.0.x that do not support "use-vrf" keyword, the http server configuration on default-vrf and user-defined vrf are not supported. Http server configuration on default-vrf and user-defined vrf should be removed before downgrade.

Firmware Installation

In logical chassis cluster mode

- The "firmware download logical-chassis" command can be used from the principal node to upgrade one or more nodes in the cluster.
    - Under certain stress conditions firmware download might time out on some nodes, (e.g. due to excessive processing load on the processor) it is recommended to re-run the logical-chassis firmware download command to upgrade these failed nodes and bring their firmware level to be the same as the rest of nodes first before activating any of them.
    - While upgrading the cluster, it is recommended not to make any configuration changes in the cluster until all of the nodes have been upgraded to the same firmware. Otherwise, it may cause cluster segmentation.

    - The firmware download command can also be executed on individual nodes.

This section includes special considerations and caveats to be aware of when upgrading to or from this version of Brocade Network OS, as well as recommended migration paths to use to reach this version of Brocade Network OS.

Note: Installing Brocade Network OS may be service disruptive and any unsaved running configuration may be lost during the process. In Logical Chassis mode, running-config is always preserved across reboots. The firmware version migration path determines if the configuration across upgrade/downgrade shall be preserved.

Upgrading to this Release (Best Practices)

In logical chassis cluster mode it is required to upgrade Principal switch at the end if all nodes in the cluster are not upgraded at the same time.

A. **Upgrade all nodes in the cluster at same time -- Service Disruptive Cluster Wide**
- Download the firmware on all the switches running Network OS v7.0.1 using the coldboot option.
- After all switches complete the firmware download, they will be automatically rebooted.
- Since all nodes reboot at the same time, this procedure is service disruptive.

B. **Upgrade Odd/Even Nodes (one segment at a time)—Lossless Upgrade:**
- This is the most recommended procedure for lossless upgrade. This requires servers to be dual homed.
- Download the firmware in all the odd nodes running Network OS with the coldboot option.
- After these switches complete the firmware download, they will be rebooted automatically. After they boot up, half of the cluster is now on the latest version. Traffic resumes and passes through the other half of the cluster.
- Now download the firmware in all even nodes with the coldboot option.
- After these switches complete the firmware download, they will be rebooted automatically. After they boot up, the entire cluster is loaded with latest image and up and running
-

C. **Upgrade one node at a time -- Service Disruptive at Node level in the Cluster**
- Download the firmware in the switch nodes one node at a time in cluster running Brocade NOS 7.0.1 using the coldboot option. Principal node in a cluster should be last to be upgraded.
- After a node is upgraded, it will join the existing Network OS v7.1.0 cluster. Eventually, when all the nodes are upgraded, they will form one Network OS 7.1.0 VCS Cluster. [Note that no configuration changes are allowed during this time.]

Note:

While ISSU upgrade from NOS7.1.0 to NOS7.1.0a, schema mismatch is observed when doing odd/even/principal upgrades during the upgrade window. However there are no traffic drops. After all the nodes are upgraded to 7.1.0a, VCS forms and working fine.

Cluster wide upgrades don't report schema mismatch error.

Downgrading to a Previous Release

- In normal circumstances, the SW/0 partition is Active. When an ISSU performed, the SW/1 partition becomes active. In order to ensure config is retained during coldboot downgrade, it is important to have SW/0 partition Active before downgrade. The SW/0 partition can be made Active by reloading the switch before initiating firmware downgrade.
- Alternative: Execute a coldboot downgrade with SW/1 Active.
    - Back-up the config to external server by "copy running file" (for logical chassis cluster)
    - Execute a coldboot downgrade.

Upgrade/downgrade Considerations for vLAG deployments

There are 2 approaches by which vLAG nodes can be upgraded.
- **Approach 1**: Graceful shutdown of vLAG ports on one node at a time.
- **Approach 2**: Static vLAGs and Dynamic vLAGs without configuration changes.

vLAG deployment upgrade Illustration
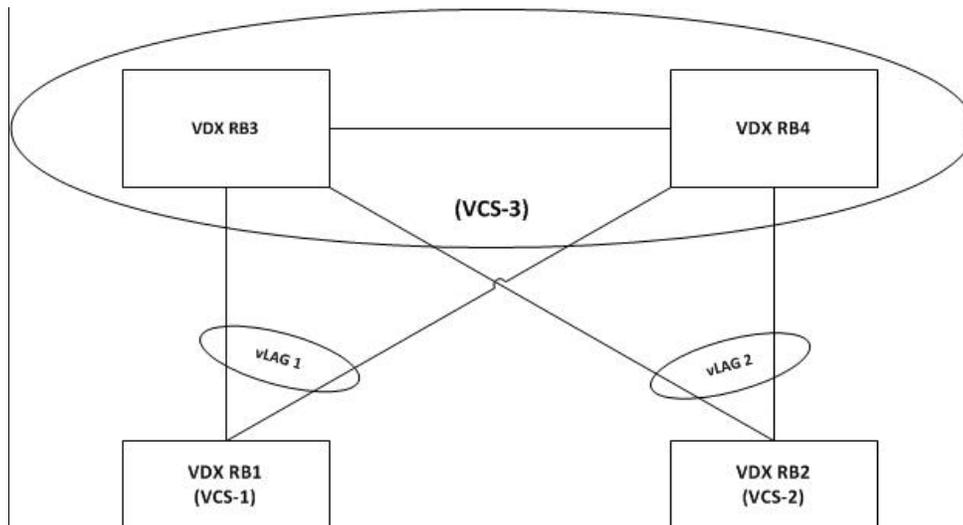
Approach 1: Graceful shutdown of vLAG ports on one node at a time.

Step 1: If in FC mode, shut the port-channel associated with vLAG 1 on RB3. With LC mode, shutting down port-channel takes down entire port-channel including port-channel interfaces on remote RBs. Therefore, if in LC mode, shut all the member ports of the vLAG 1 on RB3.

Step 2: Save running configuration to startup-configuration if VCS is in FC mode. This reduces the vLAG into a single node vLAG/port-channel on RB4. **Note:** if the vLAG is in static mode, all members of the port-channel should be shutdown. This is due to the static LAG behavior where it may bring up the member links even if the port-channel is admin shut.

Step 3: Upgrade RB3 to the desired Network OS version.

Step 4: After RB3 has rebooted from the Network OS upgrade and is operational, repeat step 1 and 2 on RB4. **Warning:** there will be a complete impact to the data path on vLAG 1 at this time.

Step 5: Promptly perform "no shutdown" on all the interfaces that were shut in step 1 and 2 on RB3. **Note:** if the vLAG is in static mode, it is required to perform "no shutdown" on all the shutdown members of the port-channel.

Step 6: Upgrade RB4 to the desired Network OS version.

Step 7: After RB4 has rebooted after Network OS upgrade and is operational, promptly perform "no shutdown" on all the interfaces that were shut in step 1 and 2 on RB4.

Step 8: Verify RB3 and RB4 were successfully upgraded to the desired Network OS version and the vLAG on RB3 and RB4 was re-established and operational with traffic forwarding.

Step 9: If VCS is in FC mode, perform a "copy running-configuration startup-configuration" on RB3 and RB4 to return the startup-configuration back to the original configuration.

Advantages
- Clean upgrade
- No duplicate primary port issues
- Works well for both static and dynamic vLAGs.

Disadvantages
- Requires manual execution by administrator to perform shutdown/no shutdown on port-channel, allowing for human errors particularly with large numbers of vLAGs.
- Requires precise and efficient execution.
- Impact to the data path for a very small period of time when the vLAG is shut on the second node (RB4).

Approach 2: Static vLAGs and Dynamic vLAGs without configuration changes.

Step 1: Upgrade RB3 to the desired Network OS version and reboot. There are two possible behaviors depending on the *ignore-split* configuration as follows:

Ignore-split on (default): No impact/reconvergence to Static or Dynamic vLAGs. Minimal data path impact observed.

Ignore-split off: For Dynamic vLAGs,
- if RB3 is the primary vLAG node, observe vLAG flap and a few seconds of data path impact.
- if RB3 is not the primary vLAG node, there will be minimal data path impact but no vLAG reconvergence.

Step 2: After RB3 has rebooted from the Network OS upgrade and is operational, RB3 will re-join the vLAG.

Step 3: Upgrade RB4 to the desired Network OS version and reboot. There are two possible behaviors depending on the *ignore-split* configuration as follows:

Ignore-split on (default): No impact/reconvergence to Static or Dynamic vLAGs. Minimal data path impact observed.

Ignore-split off: For Dynamic vLAGs:
- If RB4 is the primary vLAG node, observe vLAG flap and a few seconds of data path impact.
- If RB4 is not the primary vLAG node, there will be minimal data path impact but no vLAG reconvergence.

Step 4: After RB4 has rebooted from the Network OS upgrade and is operational, RB4 will re-join the vLAG with the three possible behaviors as follows:

Advantages:
– No manual administrative configuration required.
– Straightforward upgrade process, no special handling for vLAGs.
Disadvantages:
– Data path impact as detailed above.

Upgrade/downgrade with default configuration

Step 1: Copy and save the running configuration to the RBridge flash or FTP server.
Step 2: If default-config option is available in firmware download command in the active NOS version on the switch, execute firmware download using default-config. If default-config option is not available perform copy default configuration to startup configuration.
Step 3: If the VCS is in FC mode, reboot the RBridge manually. If the VCS is in LC mode, all the RBridge(s) in the VCS will reboot automatically.
Step 4: Downgrade the RBridge(s) to the desired Network OS version and reboot the RBridge(s).
Step 5: Restore the original configuration file by copying the configuration saved in step 1 back to the running-configuration (Individually on each RBridge in FC mode, and from principal RBridge if in LC mode)
Step 6: In FC mode, save the configuration by performing copy running-configuration to the startup-configuration. In LC mode, configuration is automatically saved and is persistent.
NOTE: FC mode is not supported in NOS 7.1.0.

Management Gateway IP changes

VDX Fixed-form switches (No L3 license required)

Starting with Network OS v5.x, Management Gateway IP can only be configured under Rbridge-Id context/vrf mgmt-vrf as follows:

```
SW(config)# rbridge-id <RBridge#>
SW(config-rbridge-id-<RBRidge#>)# vrf mgmt-vrf
SW(config-vrf-mgmt-vrf)# address-family ipv4 unicast
SW(vrf-ipv4-unicast)# ip route 0.0.0.0/0 <GW IP Address>
```

Note:
After upgrading to Network OS v5.x or above, remove the old Gateway using "no ip route" command and configure the new route with higher metric to avoid forming ECMP with old and new gateways.

VDX 8770 (with L3 license/without L3 license)

Prior to Network OS v4.0.0, Management Gateway could be configured in two ways based on the availability of L3 license on the node.

- L3 license installed: Configure using command "ip route 0.0.0.0/0 <gateway ip>". Using the command "ip gateway-address" under the management interface will display an error.
- L3 license not installed: Configure using command "ip gateway-address" under the management interface.

In Network OS v4.0 there is only one option to configure the gateway that is "ip route 0.0.0.0/0 <gateway ip>".

Note:

After upgrading to Network OS v4.0.1 or above, it is required to remove the old Gateway using "no ip route" command and configure the new route with higher metric to avoid forming ECMP with old and new gateways.

Management Services

Telnet, SSH and AAA VRF support

Starting with Network OS 7.0.0, support for TELNET, SSH and AAA (RADIUS, TACACS+ and LDAP) on user defined / default vrf is provided.

CLI Changes for Telnet, SSH, AAA

The following CLI has an additional parameter "use-vrf" to support these features.

 [no] ssh server use-vrf <vrf-name> [shutdown]

[no] telnet server use-vrf <vrf-name> [shutdown]

[no] ldap-server host <IPv4|IPv6|hostname> [use-vrf <VRF name>]

[no] tacacs-server host < IPv4|IPv6|hostname > [use-vrf <VRF name>]

[no] radius-server host < IPv4|IPv6|hostname > [use-vrf <VRF name>]

HTTP VRF support

HTTP/HTTPS services are supported on user-defined VRF and default-vrf in addition to mgmt-vrf. CLI option use-vrf is introduced to enable/disable HTTP/HTTPS services on user-defined/default-vrf.

 [no] http server use-vrf <vrf-name> shutdown

NTP VRF support

Starting with Network OS 7.0.0, support for NTP on user defined / default vrf and MGMT-VRF in Inband is provided

CLI Changes for NTP

The following CLI has an additional parameter "use-vrf" to support this feature.

[no] ntp server < IPv4|IPv6|hostname > [use-vrf] <mgmt-vrf | default-vrf | non-default-vrf >]

SNMP- Community string maximum length increased to 64:

Maximum length for community string is increased from 16 to 64 characters.

SNMP - Support for traps during hafailover:

Cpstatuschange trap will be triggered during hafailover with cpLastEvent as hafailoverstart and hafailoverdone to notify that hafailover is started and hafailover is completed in the switch.

SNMP-Trap Source IP support:

CLI option source-interface is introduced in host/v3host commands to select the loopback/ve interface IP as source IP in traps.

[no] snmp-server host ip-address <community-string> source-interface {

loopback number|ve vlan_id}]

[no] snmp-server v3host ip-address <username> source-interface {

loopback number|ve vlan_id}]

SNMP context based query:

A single SNMP agent can be supported by multiple instances of the same MIB module by mapping the context name to a virtual routing and forwarding (VRF) instance created within the switch. Each VRF is mapped with a specific key called context name. The context name is used to identify the VRF and fetch the MIB details of the mapped VRF from the underlying modules. In case of snmp v1 and v2c, we need to map the community with the context name.

[no] snmp-server context <context_name> vrf <vrf_name>

[no] snmp-server mib community-map <community-name> context <context-name>

SNMP MIB – VLAN update

During an snmpwalk or snmpgetbulk, all the VLAN interfaces are filtered out from the IF MIB output. Similarly, there is an object "ifNumber" that tells the number of interfaces in the system. The "ifNumber" object is also correspondingly reduced by this number.

SNMP Trap VRF Support

SNMP is able to receive the packets from any VRF including mgmt-vrf/default-vrf and respond to the corresponding VRF from where the SNMP packet is received. The support is also added to send the notification (trap) to the host/v3host configured in the switch through the vrf-name mapped with the host/v3host.

SNMP-Trap CLI

CLI option use-vrf is introduced to get the vrf-id for each client. This option is applicable for both SNMP V1/V2c and V3 versions in host/v3host commands.

[no] snmp-server host ip-address community <comm-string> use-vrf <vrf-name>

[no] snmp-server v3host ip-address <username> [notifytype traps | informs] use-vrf <vrf-name>

To disable per link TRAP under interface

[No] snmp trap link-status

SNMP – IF MIB

To display Interface details when linecard is powered-off

 [No] snmp-server offline-if enable

Sflow VRF Support

Sflow can be configured to point to collector in either default-vrf, mgmt-vrf, or non-default vrf..

Sflow-CLI

CLI option use-vrf is introduced to assign the vrf-id for each client.

```
[no] sflow collector <ipv4/ipv6 address>  <port> [use-vrf] <mgmt-vrf | default-vrf |
non-default-vrf >
```

Syslog VRF Support

Syslog servers logging can be configured to point to syslog servers in default-vrf, mgmt-vrf, or non-default vrf.

Syslog-CLI

CLI option use-vrf is introduced to get the vrf-id for each client.

```
[no] logging syslog-server <ipv4/ipv6 address> use-vrf <mgmt-vrf | default-vrf | non-
default-vrf > [secure [port <xxxx>]]
```

Firmware download, Copy support, Copy config
The use-vrf option is introduced to these commands to specify the name of VRF where the server resides.

Other Management Services
Other management services like REST, Netconf, HTTP, SNMP MIB's would be available in default, user defined and management VRFs.

SCALABILITY AND INTEROPERABILITY

Scalability numbers

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

NOS v7.1.0 Scalability Numbers	VDX 6740, 6740T, 6740T-1G	VDX 8770	VDX 6940-36Q	VDX 6940-144S
Maximum # of dot1Q VLANs (Virtual-Fabric Disabled)	4096	4096	4096	4096
Maximum # of VLANs (dot1Q + Virtual-Fabric)	6000	8192	8192	8192
Maximum # of Service Virtual Fabric VLANs	2000	4096	4096	4096
Maximum # of Transport Virtual Fabric VLANs	1000	1000	1000	1000
Maximum # of MAC addresses per Switch	120000	256000	75000	75000
Maximum # of MAC addresses per Fabric (with CML)	512000	512000	512000	512000
Maximum # of MAC addresses across VxLAN tunnels per VCS cluster for VMware NSX	8000	N/A	8000	8000
Maximum # of MAC addresses across VxLAN tunnels per VCS cluster for Virtual-Fabric Extension	120000	N/A	75000	75000
Maximum # of MAC-based Virtual-Fabric VLAN Classification per switch	256	1024	1000	1000
Maximum # of Classified Virtual Fabric VLANs per Trunk Interface	2000	4096	4096	4096
Maximum # of port profiles (AMPP)	1000	1,000	512	512
Maximum # of VLANS in port profiles	3500	4000	3500	3500
Maximum # of sites (tunnels) in Virtual-Fabric Extension	50	N/A	50	50
Maximum # of dot1q VLANs that can be attached on VxLAN GW for Virtual-Fabric Extension	4000	N/A	4000	4000
Maximum # of Virtual-Fabric (Service + Transport) VLANs that can be extended via Virtual-Fabric Extension	2000	N/A	4000	4000
Maximum # of dot1q VLANs + Virtual-Fabric VLANs enabled on edge-interfaces that can be attached to VxLAN GW and extended via Virtual-Fabric Extension	(2000+1000)	N/A	(2000+100 0)	(2000+10 00)
Max # of IGMP groups over Tunnels via Virtual-Fabric Extension	6000	N/A	6000	6000

NOS v7.1.0 Scalability Numbers	VDX 6740, 6740T, 6740T-1G	VDX 8770	VDX 6940-36Q	VDX 6940-144S
Max # of BFD sessions over Virtual-Fabric Extension Tunnels	10	N/A	10	10
Maximum # of dot1q VLANs that can be attached on VxLAN GW for VMware NSX	2000	N/A	2000	2000
Maximum # of VLANs (dot1q VLANs attached to VxLAN GW for NSX + Virtual Fabric VLANs enabled on edge-interfaces)	(2000+1,000)	N/A	(2000+100 0)	(2000+10 00)
Maximum # of VxLAN tunnels with VMware NSX	250	N/A	250	250
Maximum # of service-nodes with VMware NSX	5	N/A	5	5
Maximum # of MAC Associations for AMPP	8000	4000	8000	8000
Maximum # of per priority pause levels	3	8	3	3
Maximum # of VMware vCenters per Fabric	4	4	4	4
Maximum # of ELD instances in the fabric	2000	2000	2000	2000
Maximum # of IGMP Snooping Interfaces supported	512	512	512	512
Learning rate for IGMP snooping (groups/second)	512	512	512	512
Maximum # of L2 (IGMP Snooping) multicast groups	6000	6000	6000	6000
Maximum # of MLD Interfaces	256	256	256	256
Maximum # of MLD Groups	4000	4000	4000	4000
Learning rate for MLD snooping (groups/second)	512	512	512	512
# of L3 (S,G) forwarding Entries	2000	2000	2000	2000
# of L3 (*,G) forwarding Entries	256	256	256	256
# of L3 (*,G) joins per RP	256	NA	256	256
PIM Interfaces Supported	32	32	32	32
IGMP interfaces supported	32	32	32	32
Learning Rate for PIM-SM (flows/second)	32	32	32	32
Maximum # of L2 ACL(ingress/egress) *	3000/120	12000/20 00	6128/496	6128/49 6
Maximum # of L3 ACL ipv4 (ingress/egress) *	1500/120	12000/20 00	3064/475	3064/47 5
Maximum # of class-maps	2048	2048	2048	2048
Maximum # of policy-maps	2048	2048	2048	2048
Maximum # of class-maps per policy map	50	50	50	50
Maximum Total # of L3 ACL ipv6 (ingress/egress) *	500/120	4000/200 0	1000/500	1000/50 0
Maximum # of VF/FCoE interfaces/Logins (Per switch)	1000	1000	1000	1000
Maximum # of Enodes/FCoE Devices per Fabric	2000	2000	2000	2000
Maximum # of NPIV per Port	64	64	64	64

NOS v7.1.0 Scalability Numbers	VDX 6740, 6740T, 6740T-1G	VDX 8770	VDX 6940-36Q	VDX 6940-144S
Maximum # of SAN Devices (FC + FCoE) per Fabric	3000	3000	3000	3000
Maximum # of MSTP instance	32	32	32	32
Maximum # of VLAN in PVST	128	128	128	128
Maximum # of LAGs (Port Channels)	64	288	144	144
Maximum # of members in a standard LAG	16	16	16	16
Maximum # of members in a Brocade Trunk (10G)	16	8	12	12
Maximum # of members in a Brocade Trunk (40G)	2	NA	3	3
Maximum # of members in a Brocade Trunk (100G)	NA	NA	NA	NA
Maximum # of switches in Logical cluster mode **	48	48	48	48
Maximum # of L2 ECMP Paths	16	8	16	16
Maximum # of vLAGs in a fabric	2000	2000	2000	2000
Maximum # of member ports in a vLAG	64	64	64	64
Maximum # of nodes in a vLAG	8	8	8	8
Maximum # of member ports per vLAG per Node	16	16	16	16
Maximum # of Management ACL	256	256	256	256
Maximum # of ARP Entries *	16000	126000	72000	72000
Maximum # of OSPF areas	20	64	20	20
Maximum # of OSPF routers in a single area	64	200	64	64
Maximum # of OSPF adjacencies	100	200	100	100
Maximum # of OSPF routes *	8,000	64,000	10000	10000
# of OSPF Interfaces	100	1,000	100	100
# of OSPF enabled subnets	100	1,000	100	100
# of local subnets in a single area	100	1,000	100	100
Maximum # of OSPFv3 areas	9	9	9	9
Maximum # of OSPFv3 routers in a single area	64	200	64	64
Maximum # of OSPFv3 adjacencies	100	200	100	100
Maximum # of OSPFv3 routes *	1500	64000	1500	1500
# of OSPFv3 Interfaces	100	256	100	100
# of OSPFv3 enabled subnets	100	256	100	100
Maximum # of IPv4 routes in SW *	8000	280000	10000	10000
Maximum # of IPv6 routes in SW *	1500	64000	1500	1500
Maximum # of IPv4 static routes *	2000	40,000	2000	2000
Maximum # of IPv6 static routes *	500	20,000	500	500
Maximum # of VRRP instances per system	255	1024	512	512
Maximum # of VRRP v3 instances per system	255	1024	512	512

NOS v7.1.0 Scalability Numbers	VDX 6740, 6740T, 6740T-1G	VDX 8770	VDX 6940-36Q	VDX 6940-144S
Maximum # of VRRP instances per interface	32	32	32	32
Maximum # of routers participating in a VRRP-E session	8	8	8	8
Maximum # of virtual IP addresses per VRRP instance	16	16	16	16
Maximum # of FVG instances per system	256	4096	1024	1024
Maximum # of FVG instances per interface	1	1	1	1
Maximum # of routers participating in a FVG session	32	32	32	32
Maximum # of Gateway IP addresses per FVG instance	1	1	1	1
Maximum # of IPv4 routes with ECMP supported *	8000	200000	10000	10000
Maximum # of IPv6 routes with ECMP supported *	1500	64000	1500	1500
Maximum # of L3 ECMP	16	32	32	32
Maximum # of IPv4 interfaces per system *(Ve intf)	2000	4000	2000	2000
Maximum # of IPv6 interfaces per system * (Ve intf)	512	4000	512	512
Maximum # of VRF per node	32	512	512	512
Maximum # of VRFs support protocols per node	32	128	128	128
Maximum # of I-BGP peers	256	512	256	256
Maximum # of E-BGP peers	256	256	256	256
Maximum # of IPv4 BGP routes in HW *	8000	200000	10000	10000
Maximum # of IPv6 BGP routes in HW *	1,500	64000	1500	1500
Maximum # of IPv4 RIB (IN + OUT) Routes *	110000	1300000	110000	110000
Maximum # of IPv6 RIB (IN + OUT) Routes *	110000	1300000	110000	110000
Maximum # BGP IPv4/IPv6 Peer Group	100	250	100	100
Maximum # of BFD sessions per node	100	100	100	100
Maximum # of UDLD enabled interfaces	64	384	144	108
Maximum # of PVLAN domain supported	1000	1000	1000	1000
Maximum # of Secondary vlans per PVLAN supported	24	24	24	24
Maximum # of primary vlans per PVLAN supported in promiscuous mode	24	24	24	24
DHCP IP Helper Addresses per interface	16	16	16	16
DHCP IP Helper VE interfaces	256	1,000	256	256
DHCP IP Helper physical ports	60	384	60	60
DHCP IP Relay Addresses per Node	2000	4000	2000	2000
DHCP IPv6 Relay Address per Node	2000	4000	2000	2000
Max Number of configurable PBR route maps	64	64	64	64

NOS v7.1.0 Scalability Numbers	VDX 6740, 6740T, 6740T-1G	VDX 8770	VDX 6940-36Q	VDX 6940-144S
Max Number of configurable PBR stanzas	1024	1024	1024	1024
Max Number of HW entries available for PBR	512	8192	512	512
Max Number of configurable next hops within a single PBR stanza	128	128	128	128
Max # of OpenFlow Active Connections	1	1	1	1
Max # of OpenFlow Passive Connections	1	1	1	1
Maximum # of OpenFlow L2 flows	1000	4000	879	879
Maximum # of OpenFlow L3 flows	1000	4000	879	879
Maximum # of Total OpenFlow GROUP	768	768	768	768
Maximun # of OpenFlow GROUP Type ALL	256	256	256	256
Maximun # of OpenFlow GROUP Type SELECT	256	256	256	256
Maximun # of OpenFlow GROUP Type INDIRECT	256	256	256	256
Max # of Buckets per GROUP ALL	16	16	16	16
Max # of Buckets per GROUP SELECT	8	8	8	8
Max # of Buckets per GROUP INDIRECT	1	1	1	1
Max # of ACTIONS per Bucket	3	3	3	3
Max # METERS	1024	4096	1024	1024
Maximum # of MAPS policy	10	10	10	10
Maximum # of MAPS rules	250	250	250	250
Maximum # of MAPS groups	64	64	64	64
Maximum # of MAC's supported for 802.1x MAC authentication	3000	3000	3000	3000

* Parameters mentioned are applicable on specific HW profiles. Please check the Network *OS* documentation for the specific HW profiles.

**Please consult your Brocade SE for best practices when designing a 48-node VCS Fabric. In Hybrid cluster environment (a cluster involving various VDX platforms), the scalability limit of the cluster is determined by the scalability limit of the lowest denominator. For instance, in such a fabric, if the MAC scalability limit on one VDX platform is lower than the other, then the fabric supports the lower scale value.

IP Fabric Scalability:

IP Fabric Scalability Numbers	VDX-8770	VDX-6940		VDX 6940-144s		VDX 6740, VDX 6740T
	Spine	Spine	Leaf	Spine	Leaf	Leaf
VLANS extended with VxLANs (no. of tunnels * VLANs * ECMP)	NA	NA	16k	NA	16k	16k
Software MAC entries (CML)	NA	200k	200k	200k	200k	200k
Software ARP entries (Conversational ARP)	NA	100k	100k	100k	100k	100k
Software ND entries (Conversational-ND)	NA	50k	50k	50k	50k	50k
BGP eVPN IPv4 routes	200k	200k	200k	200k	200k	200k

BGP eVPN IPv6 routes	64k	2k	2k	2k	2k	2k
BGP eVPN MAC-IP routes	100k	100k	100k	100k	100k	100k
BGP eVPN MAC routes	200k	200k	200k	200k	200k	200k
Max # of IP Unnumbered interface	384	36	36	144	144	52
Max # of IP Port channel interface	384	36	36	144	144	52
Max # of members per IP Port-Channel Interface	8	8	8	8	8	8
Max # of Leaf – Spine ECMP	16	16	16	16	16	16
Max # of SAG addresses per interface	64	64	64	64	64	64

HW Profile and Platorm Specific Scale Numbers

Route Profile Scale:

VDX 6740, 6740T, 6740T						
NOS v7.x Scalability Numbers	ROUTE PRFILE					
	DEFAULT	IPV4-MAX-ROUTE	IPV4-MAX-ARP	IPV4-MIN-V6	IPV6-MAX-ROUTE	IPV6-MAX-ND
Maximum # of IPv4 routes with ECMP supported *	4000	8000	8000	6000	2000	2000
Maximum # of IPv6 routes with ECMP supported *	1000	0	0	500	1500	1500
Maximum # of OSPF routes *	4000	8000	8000	6000	2000	2000
Maximum # of OSPFv3 routes *	1000	0	0	500	1500	1500
Maximum # of IPv4 BGP routes in HW *	4000	8000	8000	6000	2000	2000
Maximum # of IPv6 BGP routes in HW *	1000	0	0	500	1500	1500
Maximum # of IPv4 routes in SW *	4000	8000	8000	6000	2000	2000
Maximum # of IPv6 routes in SW *	1000	0	0	500	1500	1500
Maximum # of ARP Entries *	16000	16000	16000	16000	16000	16000
Maximum # of IPv6 neighbor cache Entries *	4000	0	0	4000	4000	4000

VDX 6940-36Q, VDX 6940-144S	
NOS v7.x Scalability Numbers	ROUTE PRFILE

	DEFAULT	IPV4-MAX-ROUTE	IPV4-MAX-ARP	IPV4-MIN-V6	IPV6-MAX-ROUTE	IPV6-MAX-ND
Maximum # of IPv4 routes with ECMP supported *	6000	10000	10000	8000	2500	2500
Maximum # of IPv6 routes with ECMP supported *	1000	0	0	500	2000	2000
Maximum # of OSPF routes *	6000	10000	10000	8000	2500	2500
Maximum # of OSPFv3 routes *	1000	0	0	500	2000	2000
Maximum # of IPv4 BGP routes in HW *	6000	10000	10000	8000	2500	2500
Maximum # of IPv6 BGP routes in HW *	1000	0	0	500	2000	2000
Maximum # of IPv4 routes in SW *	6000	10000	10000	8000	2500	2500
Maximum # of IPv6 routes in SW *	1000	0	0	500	2000	2000
Maximum # of ARP Entries *	43000	49000	73000	49000	6000	6000
Maximum # of IPv6 neighbor cache Entries *	12000	0	0	10000	30000	30000

VDX 8770						
NOS v7.x Scalability Numbers	PROFILE					
	DEFAULT	IPV4-MAX-ROUTE	IPV4-MAX-ARP	IPV4-MIN-V6	IPV6-MAX-ROUTE	IPV6-MAX-ND
Maximum # of IPv4 routes with ECMP supported *	65000	280000	198000	163000	20000	12000
Maximum # of IPv6 routes with ECMP supported *	16000	2000	2000	8000	64000	12000
Maximum # of OSPF routes *	64,000	64,000	64,000	64,000	20000	12,000
Maximum # of OSPFv3 routes *	16000	2000	2000	8000	64000	12000
Maximum # of IPv4 BGP routes in HW *	65000	280000	198000	163000	20000	12000
Maximum # of IPv6 BGP routes in HW *	16000	2000	2000	8000	64000	12000
Maximum # of IPv4 routes in SW *	65000	280000	198000	163000	20000	12000

Maximum # of IPv6 routes in SW *	16000	2000	2000	8000	64000	12000
Maximum # of ARP Entries *	98000	40000	129000	98000	12000	20000
Maximum # of IPv6 neighbor cache Entries *	28000	2000	2000	12000	12000	65000

L2 L3 Multicast Scale :

TCAM PROFILE DEFAULT,DYN-ARP-INS,OPENFLOW				
Maximum # of L2 (IGMP Snooping) multicast groups	1000(openflow)	6000	6000	6000
Maximum # of MLD Groups	0	512	4000	4000
# of L3 (S,G) forwarding Entries	2000	2,000	2000	2000
# of L3 (*,G) forwarding Entries	256	256	256	256

TCAM PROFILE IPV4-IPV6-MCAST				
Maximum # of L2 (IGMP Snooping) multicast groups	1000	6000 (16000)	6000	6000
Maximum # of MLD Groups	500	4000 (8000)	4000	4000
# of L3 (S,G) forwarding Entries	2,000	2,000	2000	2000
# of L3 (*,G) forwarding Entries	256	256	256	256

ACL Scale:

VDX8770-4									
NOS v7.x Scalability Numbers	TCAM PROFILES								
	DEFAULT	DNY-ARP-INSP	IPV4-ACL	IPV4-V6-MCAST	IPV4-V6-PBR	IPV4-V6-QOS	L2-ACL-QOS	L2-IPV4-ACL	OPEN FLOW
Maximum # of L2 ACL(ingress/egress) *	16000/ 2000	12000/ 2000	512/1016	500/ 1000	500/ 1000	500/ 1000	32000/ 2000	16000/ 2000	12000/ 2000
Maximum # of L3 ACL ipv4 (ingress/egress) *	16000/ 2000	16000/ 2000	51000/ 2000	500/ 2000	8000/ 2000	8000/ 2000	5000/ 2000	24500/ 2000	12000/ 2000
Maximum # of L3 ACL ipv6 (ingress/egress) *	500/2000	500/2000	0/2000	500/ 2000	4000/ 2000	4000/ 2000	0/ 1000	0/ 2000	500/ 2000

VDX6940									
NOS v7.x Scalability Numbers	TCAM PROFILES								
	DEFAULT	DNY-ARP-INSP	IPV4-ACL	IPV4-V6-MCAST	IPV4-V6-PBR	IPV4-V6-QOS	L2-ACL-QOS	L2-IPV4-ACL	OPENFLOW
Maximum # of L2 ACL(ingress/egress) *	500/256	500/256	NA	500/256	0/0	0/0	3000/256	1500/256	500/256
Maximum # of L3 ACL ipv4 (ingress/egress) *	1000/256	1000/256	NA	500/256	500/256	500/256	1000/256	1500/256	500/256
Maximum # of L3 ACL ipv6 (ingress/egress) *	500/256	500/256	NA	500/256	500/256	500/256	0/256	500/256	0/256

VDX6740									
NOS v7.x Scalability Numbers	TCAM PROFILES								
	DEFAULT	DNY-ARP-INSP	IPV4-ACL	IPV4-V6-MCAST	IPV4-V6-PBR	IPV4-V6-QOS	L2-ACL-QOS	L2-IPV4-ACL	OPENFLOW
Maximum # of L2 ACL(ingress/egress) *	500/120	500/120	500/120	0/0	0/0	0/0	3000/120	1000/120	500/120
Maximum # of L3 ACL ipv4 (ingress/egress) *	500/120	500/120	500/120	500/120	500/120	500/120	0/120	1500/120	500/120
Maximum # of L3 ACL ipv6 (ingress/egress) *	500/120	500/120	500/120	500/120	500/120	500/120	0/120	0/120	0/120

Compatibility and Interoperability

The following tables list the devices tested for IP storage, FC/FCoE storage and host adapters for VDX as of Network OS v7.1.0. This is a representative list of devices, Network OS v7.1.0 supports all standards-based devices connected to it for these types of storage.

IP Storage

Vendor	Storage Array Model	Protocol	Switch Model	Initiator
EMC	Isilon	NAS	6740	Windows 2008 R2, Windows 2012 R2, ESXi 5.5u2, RHEL 6.6
EMC	VG2	NAS	6740	Windows 2008 R2, Windows 2012 R2, ESXi 5.5u2, RHEL 6.6
EMC	VNX 5300	iSCSI	6740	Windows 2008 R2, Windows 2012 R2, ESXi 5.5u2, RHEL 6.6
EMC	VMAX 40K	iSCSI	6740	Windows 2008 R2, Windows 2012 R2, ESXi 5.5u2, RHEL 6.6
HDS	4060	NAS	6740	Windows 2008 R2, Windows 2012 R2, ESXi 5.5u2, RHEL 6.6
HDS	4060	iSCSI	6740	Windows 2008 R2, Windows 2012 R2, ESXi 5.5u2, RHEL 6.6
NetApp	3170	NAS	6740	Windows 2008 R2, Windows 2012 R2, ESXi 5.5u2, RHEL 6.6

FC/FCoE Storage

Vendor	Storage Array Model	Protocol	Switch Model	Initiator
Netapp	FAS3250-cdot	FC, FCoE	6740, 8770 (FCoE only)	Windows 2012, VMWare
HDS	R800	FC	6740	RHEL 6.5, 7.0, SLES 11sp3, 12, Windows 2012 R2, Windows 2008 R2 SP1
	R700	FC, FCoE	6740, 8770 (FCoE only)	RHEL 6.5, 7.0, SLES 11sp3, 12, Windows 2012 R2, Windows 2008 R2 SP1
	HUSVM	FC	6740	RHEL 6.5, 7.0, SLES 11sp3, 12, Windows 2012 R2, Windows 2008 R2 SP1
	DF850	FC	6740	RHEL 6.5, 7.0, SLES 11sp3, 12, Windows 2012 R2, Windows 2008 R2 SP1
	DF800	FC	6740	RHEL 6.5, 7.0, SLES 11sp3, 12, Windows 2012 R2, Windows 2008 R2 SP1
EMC	CX4-120	FC, FCoE	6740, 8770 (FCoE only)	RHEL 6.3, 6.5, Solaris 10, Windows 2008, Windows 2008 R2
	VMAX 40K	FC, FCoE	6740, 8770 (FCoE only)	RHEL 6.3, 6.5, Solaris 10, Windows 2008, Windows 2008 R2, Windows 2012
	VNX-5300	FC. FCoE	6740, 8770 (FCoE only)	RHEL 6.3, 6.5, Solaris 10, Windows 2008, Windows 2008 R2
	VNX-5500	FC, FCoE	6740, 8770 (FCoE only)	RHEL 6.3, 6.5, Solaris 10, Windows 2008, Windows 2008 R2, Windows 2012
	VSP	FC, FCoE	6740	RHEL 6.5, Windows 2012
IBM	DS8100	FC	6740/T	Windows 2012 R2
	Flash 840	FC	6740/T	Windows 2012 R2
	XIV	FC	6740/T	Windows 2012 R2
HP	MSA2040	FC	6740/T	RHEL 7.0, Windows 2012, Windows 2012 R2
	P10000	FC	6740/T	RHEL 7.0, Windows 2012, Windows 2012 R2
	P6500	FC	6740/T	RHEL 7.0, Windows 2012, Windows 2012 R2

Vendor	Storage Array Model	Protocol	Switch Model	Initiator
	P6300	FC, FCoE	6740, 8770 (FCoE only)	RHEL 7.0, Windows 2012, Windows 2012 R2
	P4330	FC	6740/T	RHEL 7.0, Windows 2012, Windows 2012 R2
	P9500	FC, FCoE	6740/T	RHEL 7.0, Windows 2012, Windows 2012 R2

Network Adapters

Vendor	Model	Protocol	Switch Model	OS
HP	526FLR	FCoE	6740	Windows 2012. SuSE 12
	554FLR	FCoE	6740	RHEL 7.0, Windows 2008 R2 SP1, RHEL 6.5
	CN1000E	FCoE	6740, 8770	RHEL 7.0, SuSE 12
	CN1000R	FCoE	6740, 8770	Windows 2012 R2, VMWare ESXi 5.5
	CN1000Q	FCoE	6740, 8770	Windows 2012, RHEL 6.6
	CN1100R	FCoE	6740	Windows 2012 R2,
	CN1000Q	FCoE	6740	Windows 2012, RHEL 5.1
	CN1000E	FCoE		RHEL 6.5
Emulex	OCe10102	FCoE	6740	RHEL 6.5
	LPe16002	FC	6740	RHEL 6.5, Windows 2008, Windows 2012
	LPe16202	FCoE	6740	RHEL 6.5
	90Y3556 (IBM)	FCoE	2740	Windows 2008 R2, Windows 2012 R2
	OCe14102	FCoE	6740	Windows 2012 R2, RHEL 6.5
	OCe11002-FM	FCoE	6740	Windows 2008 R2, RHEL 6.4
	90Y3556	FCoE	6740	Windows 2012 R2, Windows 2008 R2
Qlogic	1020	FCoE	6740	Windows 2012
	1860	FCoE	6740	RHEL 6.5, 6.3, SLES 11sp3, 12, Windows 2012 R2, Windows 2008 R2 SP1, Solaris 10
	2672	FC	6740	RHEL 6.5, Windows 2008
	8152	FCoE	6740	ESX 5.1
	8142	FCoE	6740	Windows 2012, RHEL 6.5
	2672	FC	6740	RHEL 6.5
	2762	FC	6740	RHEL 5.1, Windows 2012

ADDITIONAL CONSIDERATIONS

Limitations and Restrictions

Command Line Interface

- Break command is not supported. ctrl-c can be used as an alternative.
- Few commands may not display paginated output.
- For few clear and show commands "?" will not show all options for VRF. Tab completion will give all possible values.
- For certain commands (including "no" form with some commands), "?" shows unsupported additional options.
- Some CLI commands will generate an "Error:Access denied" message upon failure. This means the operation failed on the switch and may not be related to permissions.
- Tab completion and <ctrl>-c (cancel) does not work for some commands.
- Incorrect range might be displayed in the help text for some of the show commands.
- Range support is available for all the interfaces in Network OS v7.1.0. Following limitations are applicable:
  - Interface range command is supported on breakout ports of same connector. Range is not supported involving breakout ports of multiple connectors.
  - Interface range command does not support mix of regular ports and breakout ports.
  - Range command is not supported across multiple slots of the chassis.
  - Range command for rbridge-id is not supported.
  - In some instances, there could be a delay in starting of operation specified in the range command after being issued.
  - When range issued for very large subset (e.g 4k VLAN, 2k port-channels, etc.), timeout can occur or user may temporarily see switch being unresponsive or with high CPU utilization. Brocade recommends using range in smaller chunks. Especially, while configuring VLANs/VEs and Port-channels, Brocade recommends range to be less than 500.
  - Range prompt doesn't get updated when few or all of interface in that range are deleted. Therefore, user should exit from Range submode if few or all interfaces are deleted that are part of that range. New configuration performed on same range submode may give unpredictable results.
  - On a large VCS cluster, configurations performed on Range of physical interfaces and port-channels may spike high memory usage.
- System does not warn user on deleting the IP config when VRF is configured.
- If "switchport trunk allowed vlan all" is already configured on any interface, then VLAN creation using range command will be slow as each VLAN will get provisioned individually.
- Some unsupported debug commands may be seen in Network OS v7.1.0. Brocade recommends not to run them on switches:
  - Show confd-state –, for debugging purpose only.
  - Show parser dump –, for debugging purpose only.
  - Show notification stream –, for debugging purpose only.

- ▪ Autoupgrade command in config mode
- During "copy running-config startup-config" or "copy support" user might see occasional and temporary CPU spikes (up to ~30-40%).
- show mac-address-table command on console with include option can not be aborted with a break/ctrl-C. Use a telnet session for the same.
- Short form of MAC-Address is not supported as filter in "show running-config".
- For IP access lists, display filtering based on sequence number alone does not work as expected.
- Certain oscmd commands may not work or give a different output under admin login
- If an alias exactly matches a partial keyword anywhere in the command line, pressing the TAB key for CLI command completion will claim that the input is invalid, and pressing the ENTER key will first replace the partial keyword with the alias expansion string. To avoid this, make sure that any partial keywords are not an exact match for an alias name.
- The authentication mode with primary & secondary sources of authentication cannot be updated to a configuration containing only the primary source. For example, the authentication mode cannot be changed from "radius local or radius local-auth-fallback" to 'radius'. The workaround is to remove the existing configuration and then configure it to the required configuration.
- The "logging syslog server" command returns an error on the "secure" keyword. Use "secure port" to assign a nondefault port number.
- OSPFv3 on default VRF can be created without mentioning VRF name but while removing default VRF needs to be provided like "no ipv6 router ospf vrf default-vrf".
- The "show ip interface ve xx" displays "ICMP unreachables are always sent" even though it is disabled.

Platform

- After "chassis disable" it is recommended to wait for 60 seconds for VDX fixed-form switches and 300 seconds for VDX 87xx before performing the next "chassis enable".
- Chassis-name is limited to 15 characters.
- 1G copper SFPs do not support exchanging flow-control settings during the auto-negotiation process. It is recommended to configure static mode of configuration of flow-control on both the ends of the desired link.
- 1G Optical ports should use the same speed config (speed auto or speed 1000) on both sides of the link for a proper link up.
- The VDX6940-36Q and VDX6940-144S requires 40 seconds between the removal and insertion of the 100G QSFP28 optics in order to establish a stable link.
- System verification/ offline diagnostics tests need "chassis disable" before the test and "chassis enable" followed by immediate reboot.
- After "power-off line-card <x>" please wait for 120 seconds before doing the next "power-on line-card <x>" to avoid hitting a known defect where some interfaces might remain in administratively shut state.

- The speed on the management interface for VDX 8770 can be hardset to desired speed after configuring speed as auto. The speed on VDX 6740x and 6940x is supported only in auto mode.
- Multiple OIR (Online insertion and removal) of 40G LR optics when connected to ICX/FCX may cause link to remain down. Performing "shutdown" followed by "no shutdown" of the interface will recover the link.
- VDX 6740/6740T/6740T-1G/6940 platforms do not support IP fragmentation. MTU errors are reported in "show interface" as "Errors" under the "Transmit Statistics".
- When a switch fan or PSU is removed or is faulty, switch status LED will blink green on VDX6940-144S and amber-green on VDX6940-36Q and VDX6740.
- For 6940 platform family, if all ports in a given trunk-group are used as ISLs, it is recommended to configure only 1 lossless priority on the switch.

Line cards

- The VDX 8770 supports following line-cards only on Network OS v4.1.2 and above:
    - LC48×10G
    - LC12×40G
    - LC48×10GT
    - LC27×40G
    - LC6x100G
- It is required to upgrade the chassis to the line-card's supported Network OS version before plugging the line-card into the chassis.
- If there exists a configuration for a line-card on the slot of VDX8770, before inserting a new line-card of other type in the same slot, it is required to remove the configuration of the old line-card from that slot. The "no line-card" command should be used to remove the old line-card configuration from the slot where the new line-card is to be inserted. The new line card may be faulted with appropriate code if the new line-card is plugged into the slot which has configuration of a line card of other type.

USB

- Starting with Network OS v6.0.0, Brocade 4GB USB drive support is added. But, Brocade 2GB USB drives should still work as before.

Licensing

- On VDX platforms that have Flexport FC capable interfaces, enabling FibreChannel ports requires only the FCoE license to be installed and does not require any Port Upgrade license. The Port Upgrade license only controls Ethernet ports (number of ports or speed supported).
- An Integrated Routing license is NOT required on FOS-based SAN platforms running FOS 7.0.1 or above for FCR interoperability connectivity with VCS fabrics and the VDX6740x. Please refer to the FOS v7.0.1 Admin Guide documentation on configuring FOS platforms for connectivity to VDX 674x switches and VCS fabrics.
- The Layer 3 license is required on VDX8770 switches to enable Layer 3 feature set including OSPF, VRRP, BGP, VRF etc. A separate Layer 3 license is not required on VDX fixed-form factor switches as Layer 3 features are included in the default license.

- The Advanced Services License provides a single upgrade option to enable Fibre Channel over Ethernet (FCoE) and Layer 3 features on VDX8770 switches.

VCS

- Loopback connection is not supported in VCS mode. If a loopback connection is done (either using loopback plugs or port to port connections on the same switch), those interfaces become ISL interfaces.
- A node with default configuration will not join a cluster if the intermediate nodes between the node being defaulted and rest of the cluster are also undergoing reload. If the node boots up earlier than the intermediate nodes, it will form its own VCS and not join the parent cluster. In such situations, reload the node that is required to join the cluster.
- Logical Chassis Cluster Mode:
  - When a new switch is added to an existing VCS Fabric and if the new switch takes the role of principal node, the other switches in the fabric will receive the configuration of the distributed features such as Virtual IP and VM-Aware Network Automation from the newly added switch. This will cause the existing distributed configuration to be overwritten by the newly added switch in the principal role. This can be avoided by following the new switch addition procedures in *the Network OS Management Configuration Guide*.
  - After a cluster reboot, Brocade recommends to do both "show fabric all" and "show vcs" to ensure that cluster is entirely formed without any issue. User might see that 'show vcs' takes an additional 2-3 minutes to show all participating switches. This is an existing behavior and doesn't affect data path functionality in most cases.
- "show fabric isl" & "show fabric trunk" may show the interfaces in random order without sorting.
- The default-configuration behavior may be different depending on the default-configuration triggers.
- The snapshot restore feature in VCS should be used to restore the local configuration and not the global configurations.
- Usage of Rbridge-range option to configure Rbridge context specific configurations is not recommended.
- Fastboot option is not recommended as a preferred method of reloading the switch.
- VCS for NOSv7.0.1:
  Note the following results for the given actions.

Default-config trigger	Global Config (i.e. virtual-fabric)	Local Config (i.e. SFP breakout)
copy default-config startup-config	Preserved	Preserved
VCS-ID and/or Rbridge-ID change	Preserved	Removed
firmware download default-config	Removed	Removed
write-erase	Removed	Removed

Logical Chassis

- Configurations are not auto preserved on mode transitions (between Fabric Cluster and Logical Chassis mode). Please follow the mode transition procedure as outlined in the

Network OS Management Configuration Guide. Non-default User Id/password will be lost when migrating from FC to LC.

- User should not make configuration change during Logical Chassis firmware upgrade or while ISL toggling to prevent the switch segmenting from the cluster due to configuration mis-match.

- Upon Node segmentation from the cluster, user should run "copy default start" or exercise the default-config boot feature on the segmented switch to bring it back to the cluster.

- For Netconf and SNMP, user has to poll using individual node Management IP.

- Creating a snapshot with "\" in snapshot-id creates the snapshot file with incorrect name.

- Config snapshot cannot be restored on pizza box platform when SW1 is active.

- There will not be any raslog to the user when replacement of a node fails.

- With large configs, while a switch is rejoining a fabric with default config, "%Error:Could not find Interface" may be printed temporarily. The switch will recover and join the fabric.

- Config changes during principal switch-overs are not supported and may segment the cluster.

- Disabling virtual-fabric may take up to 10 minutes depending on the number of ISLs and VLAN interfaces configured in the VCS.

Brocade Trunks

- The VDX 6740, VDX 6740T, VDX 2741 Brocade trunk (BTRUNK) can support up to 16 member links with a maximum throughput of 160G using 16x10G ports in the same trunk group. On these platforms traffic may not be distributed evenly across all member of a trunk at lower traffic rates.

- The VDX 6740, VDX 6740T, VDX 2741, VDX 2746 and VDX 6740T-1G Brocade trunk (BTRUNK) can support up to 2x40G member links in the same trunk group for a maximum throughput of 80G. The VDX 2746 can support 4x40G.

- The VDX 8770 Brocade trunk (BTRUNK) can support up to 8 member links with a maximum throughput of 80G using 8x10G ports in the same trunk group. Full link utilization of 8 ports in a trunk group is achievable with larger packet size (>128 Bytes).

- In the VDX 6940-36Q and VDX 6940-144s, only 63 port-channels are supported including LACP and Brocade PO.

- The VDX 6940-36Q Brocade trunk (BTRUNK) can support up to a maximum throughput of 120G using 3x40G or 120G using 12x10G breakout ports in the same trunk group.

- The VDX 6940-144S Brocade trunk (BTRUNK) can support a maximum throughput of 120G using 3x40G or 12x10G links in the same trunk group.

- In order for two 40G ports on VDX 8770 to form Brocade trunk, it is required that the ports be in breakout mode and in same trunk group. Breakout optics with a single QSFP optical cable must be used.

- Prior to Network OS v4.1.0, "fabric trunk enable" configuration on the 40G interfaces on VDX 8770 is allowed, however it does not provide non-breakout mode trunk capability to the ISLs.

- Upgrading from any version before Network OS v4.1.x will change the default configuration on 40G interfaces on VDX 8770 from "fabric trunk enable" to "no fabric trunk enable" to

accurately indicate the capability. Configuring "fabric trunk enable" directly on the 40G interfaces is accordingly blocked.

Breakout Interfaces

- VDX 8770 supports only static breakout of 40G ports. It is required to power OFF and ON linecard for the 40G ports on it to be converted into 10G breakout ports and vice versa.
- VDX 6940-36 and 6940-144S supports only static breakout of 40G ports. It is required to reboot the switch for the 40G ports on it to be converted into 10G breakout ports
- For VDX 6740, 6740T, 2741 and 6740T-1G platforms, the LED state for a breakout interface is deterministic. For all other supported platforms, the LED state for a breakout interface is non-deterministic.
- In breakout mode, the 'show media' CLI will display the same media information for all breakout interfaces, except for temperature, Tx voltage, Tx bias current and Rx power. These parameters would be displayed on per line basis. The TX Power Field in the show media command is not supported by the 40G optics.
- On 40G native mode - Breakout configuration is not blocked. If configured on one side, other side of link won't able be identify peer port config is breakout and link won't be stable.
- On VDX 6740T/6740T-1G/2746, the breakout ports are FlexPort capable, and may be configured to connect to FC switches with 4x16G breakout supported cables and optics.
- On VDX6940-144S, breakout connection using non-breakout cable is not supported.

Dual-personality Ports

- Interface can be brought up in 100GbE or 40GbE mode. This feature is supported on VDX 6940-144S.
- Only static configuration is supported, the switch need to be rebooted for the dual personality mode change to take effect.
- Configuring 40GbE dual personality interface in 100GbE mode would result in the other two 40GbE interface in the port-group being disabled.

1G Mode

- RMON stats are calculated incorrectly for packet sizes 64-127 bytes.
- 1G ports cannot form ISL links. Only 10G ports can be used to form ISL links.
- Brocade Trunks cannot be formed with 1G. Brocade Trunks are only supported on 10G.
- A LAG cannot be created between 1G and 10G ports.
- FCoE configuration is NOT supported on 1G ports.
- DCBX configuration for FCoE is not supported on 1G ports.
- For 1G optics used in VDX6740 and VDX6940-144S, port speed should be set to Auto on both sides. If one side is speed 1000 and other side is Auto, link may not come online.

vLAG

- LAGs are created with default speed of 10G. Therefore Brocade recommends end user to set required speed manually based on member speed using "speed" command.

- When configuring LACP LAG between VDX and non-Brocade switches it is highly recommended to enable the vLAG ignore-split on the VDX . Ignore split option is enabled by default.
- The port-channel interface "load-balance" is not the same as "fabric port-channel <#> load-balance"
    - The port-channel interface "*load-balance*" command configures load-balancing on the actual vLAG member links (effective on Rbridges directly participating in the vLAG).
    - The "*fabric port-channel <#> load-balance*" configures load-balancing on Rbridges NOT participating in the vLAG, but connecting to neighboring vLAG participating Rbridges.

Virtual IP Address Support

- A separate gateway cannot be configured for Virtual IP address. Default gateway will be the same as the gateway address for the management port of this switch.
- For VCS Virtual IP address to work correctly, the management port's IPv4 or IPv6 address should be assigned, functional and both address should be in same subnet.
- There is no Virtual MAC address associated with the Virtual IP address, physical MAC will be used.
- Chassis Virtual-IP is only supported on the VDX 8770.

Security, Management ACLs, Authentication, Authorization

- Login authentication service (aaa authentication login cli):
    - With "local" option specified as secondary authentication service, local authentication will be tried only when the primary authentication service (TACACS+/RADIUS/LDAP) is either unreachable or not available.
    - Behavior of "local" option in pre-4.1.0 releases is changed to the "local-auth-fallback" option.
    - When login authentication configuration is modified, the user sessions are not logged out. All connected user sessions can be explicitly logged out using "clear sessions" CLI.

- ACLs are not supported for egress traffic flows on management interfaces.
- Configuring TACACS+ or RADIUS without a key is not supported. If no key is configured, the switch uses a default key of "sharedsecret". The use-vrf option should be used to enter any additional parameters such as retries, timeout or key.
- Same NTP server configuration with different vrf not supported.
- There is a possibility that locked user accounts will get unlocked after a reboot if the running-config (before reboot) is different from startup-config of user accounts.

- Encrypted text (taken from running-config of any user account password with encryption turned on) should not be used as input for clear-text password for the same user. This may result in login failure of the user subsequently.
- When the ACL is applied to a management interface, only the top 256 rules will be applied if the ACL contains more than 256 rules.
- It is advised to not to apply ACL with 12k rules to management interface.
- When more than 250 rules ACL's are configured (over supported scale), they may be partially installed & effective.
- Access to ONLY the following Active Directory (AD) servers is supported by Brocade LDAP client:
  - Windows 2000
  - Windows 2003
  - Windows 2008 AD
- IPv6 RA Guard feature is not supported on VDX 8770 although the CLIs are visible.

SPAN & RSPAN
- CPU-originated packets cannot be output spanned.
- If SPAN has to be supported to multiple locations, please use RSPAN on VLAN.
- On VDX 8770 and SPAN in VCS feature, ISL can be source port, but the destination has to be on the same RBridge.
- Spanning of LAG port is not supported. To span a LAG, user should individually enable spanning on all the member ports of the LAG. However flow based SPAN is supported on LAG port.
- A profiled port cannot be a SPAN destination.
- After ISSU upgrade on VDX 8770, Port Based SPAN may not work.
- SPAN destination port statistics will keep incrementing even when port is operational or admin down.

MAC Learning Considerations in VCS
- Under rare circumstances, end user might see mac address sync up issues on few nodes of a cluster (where 1 or more MAC addresses might be missing in some nodes). Brocade recommends to do "clear mac-address-table dynamic" in such cases.
- Static mac addresses will be displayed even when interfaces are down. This may cause blackholing of the traffic.
- Under certain conditions, MAC addresses may not be learnt even though ARP's may be learnt for those same MAC addresses.
- Under certain conditions, multicast traffic destined for static multicast address will flood on to other VLANS.

PVLAN
- Following PVLAN features are not supported:

- IGMP on PVLANs but there is no error message displayed if operator configures IGMP snooping on PVLAN
- ARP & Routing in PVLAN domain
- Enabling Routing in Primary and Secondary Vlans.
- CLI to enable Local Proxy ARP on primary VLAN.
- IP Configuration on PVLANs
- Ve Configuration on both Primary and Secondary Vlans
- AMPP on PVLANs
- In case of MSTP if a primary VLAN is added to the instance automatically secondary VLAN also added to the instance.
- When the operator wants to delete the host association on a host port recommended to use "no switchport" rather than "no switchport private-VLAN host-association". This is applicable only when the host port is untagged. When the host port is tagged both the commands can be used.
- Primary VLAN ID needs to be lower than the secondary VLAN IDs. If primary VLAN ID is greater than secondary there is an issue with config replay.
- In Logical Chassis mode source macs may not learn on PVLAN configured ports, after deleting some of the secondary vlans for which the traffic is not flowing.

UDLD

- The UDLD protocol is not supported on the members of a Brocade trunk.
- The UDLD protocol is not compatible with Cisco's proprietary UDLD protocol.
- UDLD needs to use the higher timeout in Scale and Stress environment. UDLD may flap during HA failover and ISSU.

STP/DiST

- VDX does not support tunneling non-standard BPDUs and thus IEEE BPDUs (0180:C200:0000) generated as tagged packets in STP/RSTP/MSTP modes may not be tunneled successfully across VCS Fabric. However, VDX supports tunneling standards' based BPDUs such as untagged IEEE BPDUs and tagged or untagged PVST BPDUs (0100:0CCC:CCCD). Post 3.0.1, the tagged IEEE BPDU can be tunneled across VCS fabric using command: "tunnel tagged-ieee-bpdu" under interface configuration.
- By default global spanning-tree and interface level spanning-tree will be disabled, user has to explicitly enable on the desired ports. VLAN spanning-tree state is default enabled.
- BPDU tunnel configurations are permitted only when spanning-tree is disabled in VCS.
- For Cisco proprietary Per Vlan Spanning Tree protocols (PVST and RPVST) user needs to configure Brocade switch to send BPDU on Cisco multicast destination mac address "0100.0ccc.cccd" for non-native VLANs. By default, NOS 6.0.1 software uses Brocade "0304.0800.0700" multicast mac to send BPDU's on non-native VLANs.
  Since Cisco boxes use Cisco multicast mac address to send spanning tree BPDU on non-native VLANs, this configuration is needed in VDX switches to interoperate. This is an interface specific configuration.

Below is the example to configure Cisco BPDU mac for PVST and RPVST under interface mode:

```
VDX 6740-VCS1# conf t
VDX 6740-VCS1(config)# protocol spanning-tree rpvst
VDX 6740-VCS1(config-rpvst)# exit
VDX 6740-VCS1(config)# interface Port-channel 100
VDX 6740-VCS1(config-Port-channel-100)# spanning-tree bpdu-mac ?
Possible completions:
  0100.0ccc.cccd   Cisco Control Mac
  0304.0800.0700   Brocade Control Mac
VDX 6740-VCS1(config-Port-channel-100)# spanning-tree bpdu-mac 0100.0ccc.cccd
VDX 6740-VCS1(config-Port-channel-100)# exit
VDX 6740-VCS1(config)#
```

- STP Interop with certain vendor switches

    To allow for STP interop with certain 3rd party switches that would not accept the BPDU source MAC's with default OUI. The selection can be changed using the below command now:

    system-id oui <01.e0.52 | 00.e0.52> (under stp configuration)

Edge Loop Detection (ELD)

- ELD is supported on the edge ports that are connected either by end-hosts OR another switch OR another VCS.
- ELD is also supported for edge interfaces connected to hosts.
- ELD may not be enabled after line-card powercycle.
- The edge-loop-detection port-priority with the higher number takes priority for shutting down the loop interface. If the port-priority is the same, the highest interface ID followed by the highest Rbridge-ID are used as the deciding metric.

Long Distance ISL Ports

- Long distance ISL configuration ("long-distance isl" command) is not allowed if CEE Map/fcoeport is configured on any edge ports in the same port group.
- CEE Map modification is not allowed when long distance ISL is configured.
- A maximum of three PFCs can be supported on a long distance ISL configured platform.
- When long distance ISL is configured on the switches, all ports in the port group will be bounced.
- Both side of long distance link should have long-distance-isl configuration. Otherwise end to end PFC might not work appropriately.
- For 10Km/Extended Range long distance configuration all other ISLs in the port group will be disabled.
- For 2Km/5 Km long distance configuration, one other ISL will be allowed to come online in the port group.
- For 2 km, 5 km and 10 km long-distance, use Brocade supported Long Range (LR) optics for direct connectivity.
- For 30 km long-distance, use Brocade-supported Extended Range (ER) optics for direct connectivity.

- The "long-distance isl" command based extended fabrics are supported only on 10G interfaces.
- The 40G and 100G interfaces do not support "long-distance isl" command, however can extend distances for non-lossless traffic up to 40Km using standard ISLs.
- On standard ISLs, the 10G, 40G and 100G interfaces support lossless traffic up to 1Km.
- The "long-distance-isl" command will not be supported on the SO-10GE-ZR-CX, 10G-SFPP-ZR, and 10G-SFPP-ZRD-T 80km optics.
- The SO-10GE-ZR-CX, 10G-SFPP-ZR, and 10G-SFPP-ZRD-T 80km optics requires a minimum distance of 20km in order to successfully form a standard ISL connection
- To form an ISL between 10G tunable ZR optics (57-1000266-01) when initially inserting the optic and configuring "tunable sfpp channel x", please configure any channel other than 1 on both ends.

AMPP and Port-Profiles

- Port-profile status does not reflect the remote interface info in VCS mode.
- Native VLAN support inside AMPP does not honor the global enable/disable flag .
- SPAN destination port cannot be a profiled port.

  Brocade recommends deleting all manually created port-profiles when migrating from a legacy AMPP environment to VM Aware Network Automation.

- Vmkernel related port-profiles removed/reapplied during HA operations may result in vmotion failures.
- MAC-based classification allowed only on access port-profile and C-tag classification allowed only on trunk port-profile.
- When a port becomes a profiled-port, all SERVICE VFs in that domain are provisioned on this port.
- "Switch trunk allow VLAN all" can only be present in one domain, it cannot co-exist with other c-tag based classifications in that domain.
- User is not allowed to edit/delete the default-profile-domain when Service VF is disabled.
- New port-profile is not auto added to the default domain when Service VF is enabled. It can only be explicitly added to or removed from the default profile-domain.
- On disabling Service VF UpgradedVlanProfile should be re-configured with "switchport trunk allowed VLAN all" in Default-profile-domain if it is removed /modified.
- Newly created port-profiles which is not part of any domain should be added to the default-profile-domain explicitly while disabling the Service VF.
- SERVICE VF classification cannot conflict across port-profiles in the same port-profile domain, but it can conflict across PP in different domains. i.e. a port-profile-domain cannot contain conflicting SERVICE VF classifications.

vCenter

- Receiving more than five vCenter events within a span of 30 seconds, results in asset discovery getting initiated. Post discovery cluster configuration will be in sync with vCenter.

- vCenter auto-profile is automatically added/deleted to the default port-profile-domain in Service VF enabled/disabled mode.
- Modifying/editing the auto port-profiles in the default-domain is not recommended, which may cause auto-pp application failure during vCenter operation and end up in traffic failure.
- Adding/removing the auto-port-profile to the user-created domain when Service VF is enabled is not recommended which may cause auto-pp application failure during vCenter operation and end up in traffic failure.
- vCenter auto-profile does not support SERVICE VF classification.
- Output of show vnetwork vss displays the vmnic against the vSwitch even after the removal of the vmnics from the vSwitch through vCenter. Recovery happens in the next auto-discovery cycle.

QoS

- LC27x40G and LC12x40G linecards do not respond to incoming Ethernet pause (802.3x) and PFC frames in native 40G interface mode. This does not impact throttling of incoming traffic in response to PFC or Pause frames transmitted by the linecards. In order for LC27x40G and LC12x40G linecards to respond to pause frames, it is required to configure the 40G interfaces in breakout mode and use 40G breakout optics with regular native 40G cables.
- It is recommended to use the same CoS tail-drop threshold on all members of a port-channel to avoid unpredictable behavior.
- In a hybrid logical-chassis, if a user configures a platform specific feature, it will be configured only on the rbridges which support that feature.
- Asymmetric pause is supported on 1G port interfaces.
- It is recommended to enable maximum 2 PFC s on edge interfaces on VDX 6740/6740T and 6940-36Q platforms. Flow control is disabled by default on all interfaces.
- Priority 7 is reserved for control traffic on VDX switches. User data traffic should use priorities 0 through 6. Priority 3 is used for the FCoE lossless traffic by default.
- Brocade VDX architecture prioritizes Unicast traffic over Broadcast or Multicast traffic under port congestion.
- The interface queues operate in Strict Priority mode when there are no ISLs online on the switch. This could result in potential starvation of the CPU queue if line-rate traffic flows through an interface.
- Byte count is not supported for match ACL statistics on the VDX 6740/6740-T and 6940-36Q.
- Byte count is not supported for RED statistics on either the VDX 8770 or the VDX 6740/6940-T and 6940-36Q.
- For 6940-36Q its not recommended to configure "log" option in ACL for Flow based QoS and System based QoS as it may lead to throughput issues with larger packet size.
- The "count log" option in ACL is not supported for Flow based QoS and SysFBQ.
- The CLI "qos trust cos" is not applicable in VCS mode. However, "show qos int" will show as cos is trusted on ports on which "cos-mutation" or "cee default" config is applied.
- Configuring an interface with a nondefault DSCP-to-traffic class-map is allowed. However, configuring an interface with a nondefault CoS-to-traffic class-map is not supported.

FCoE

- On switches shipped with NOS7.1.0, the default mode of operation is Access Gateway for the VDX 6740, 6740T, 6740T-1G, VDX 2741, VDX 2746. The VDX 2741 was supported in 5.0.x (not supported in 6.0.x) and is upgradable to 7.0.1.
- Logical SANs have been supported since Network OS v6.0.0. If user needs to enable Fibre Channel Forwarder (FCF) mode, switch needs to be configured in FCF mode. If the switch is upgraded from a lower NOS version (pre 4.1.2 builds) to v7.0.1, it will be in FCF mode.
- FCoE logical SAN is not supported in an FC cluster.
- Brocade recommends not having FCoE ports and Long Distance ISL ports in the same port-groups. This configuration will NOT be prevented by the CLI; however it can result in unpredictable behavior for FCoE traffic.
- If the FCoE FCMAP is changed from default to non-default, user might see that FCoE login may not happen. Please toggle the interface using "shutdown" followed by "no shutdown" to work this around.
- When an RBridge is removed from VCS cluster, it does not need to be manually removed from fcoe fabric-map.
- MAC binding for remote SANs is not honored during config replay.
- In case the FIF is multiple hops away from the FCF, it is recommended that the interfaces of the intermediate switch shouldn't be configured with the same remote san as that of the FIF/FCF
- VLAN's which are reserved for FCoE may not be used for any other purpose. This is true for both Fabric Cluster and Logical Chassis modes.
- Brocade recommends that for all LAGs with FSB, the fcoeport config must be applied on the LAG itself. And for all LAGs with directly attached CNAs, the fcoeport config must be applied on the member ports.
- Binding an enode mac to FCoE interface is not allowed in range context, as only one enode mac can be bound to one FCoE interfac.e
- While providing range for FCoE interfaces, it's recommended to provide the range only in ascending order. For ex: interface fcoe 1/48/11-38 is recommended, interface fcoe 1/48/38-11 is not recommended.
- FCoE traffic may not be mirrored using RSPAN. Workaround is to use SPAN.
- In use cases with FSB, it is noticed that after converting dynamic port-channel to static, hosts and targets don't see each other.
- In NETWORK OS V6.0.1 and later, up to four FCoE Vlans are supported in VDX . But on a single VDX , All member ports in a LAG have to be configured with the same FCoE Vlan. Different LAG can be configured with different FCoE Vlan.
- In NETWORK OS V6.0.1 and later, it is recommended user define different fabric-map for Remote Logical SAN and Local Logical SAN configuration. If user configures a fabric-map to work on Remote Logical SAN first and then later change the same fabric-map to become Local Logical SAN, it may cause FCoE port continuously flapping.
- In NETWORK OS V6.0.1 and later, when FCoE CNA connect through VDX 6940-36Q/VDX 6940-144S to a Remote Logical SAN, if user performs certain operation in AG switch (e.g. N-port failover, VF-port remapping, fcmap change etc), FCoE CNA may fail to login. The workaround is to do shut and no shut on the FCoE port on which FCoE CNA is connected.
- LC27x40G and LC12x40G linecards do not respond to incoming Ethernet pause (802.3x) and PFC frames in native 40G interface mode. This does not impact throttling of incoming traffic

in response to PFC or Pause frames transmitted by the linecards. In order for LC27x40G and LC12x40G linecards to respond to pause frames, it is required to configure the 40G interfaces in breakout mode and use 40G breakout optics with regular native 40G cables. This is required for FCoE traffic.

FlexPorts

- The port transceiver optic type must match the configured FlexPort type. If a port is configured as Fibre Channel then an appropriate FC SFP+ transceiver must be used; likewise when the port is configured as an Ethernet port then an appropriate Ethernet SFP+ transceiver must be used. The same applies to QSFP+ transceivers – the transceiver type must match the configured Flexport type for the QSFP links.
- Only Brocade-branded FC SFPs are supported.
- Setting the connector-group speed to HighMixed allows only one FC port speed (16G) but the port speed configuration can still be set to auto.
- Changing the connector-group speed always disrupts any other active ports in the connector-group, independent of configured Flexport type.
- The FCoE Base license is required to enable any FibreChannel interface.

Fibre Channel

- F_Port can support only 63 NPIV devices.
- Loop devices are not supported.
- Long distance is not supported on Fibre Channel ports.
- Proprietary features such as QoS, D-Port, FAPWWN are not supported on Fibre Channel ports.
- Credit Recovery is supported on Fibre Channel ports.
- FEC is supported on Fibre Channel E/Ex ports only (no support on F/N ports).
- Trunking is not supported on Fibre Channel ports running at 2G or 4G speeds.
- On the VDX 6740, VDX 6740T, VDX 6740T-1G, VDX 2741 and VDX 2746 platforms Fibre Channel trunks are limited to 2 FC trunks per port group.
- To configure a connector-group as Fibre channel need to have all the interfaces in the connector group as type Fibre channel.
- Fibre Channel trunks only form with ports running at the same speed.

Access Gateway

- The switch can be operated as Fibre Channel Forwarder (FCF) by disabling Access Gateway mode.
- AG does not bridge the VCS and SAN fabrics because hosts connected to the AG switch are registered in the SAN name-server only. Therefore, all zoning operations for AG are done on the SAN fabric.
- At least one N-port must be online in order for FCoE devices to log in.
- After enabling Remote Logical SAN on AG switch, FCoE devices connected to AG switch will not login with "fcoeport default" provisioning and needs to be configured as "fcoeport <logical-san>".
- Cannot configure the default Logical SAN to the interfaces in the FCF-group switch.

IP Fabric

Provisioning :

- A new CLI has been introduced in 7.0.1a under Rbridge mode that allows the user to disable the ISL capability of all interfaces in the switches using single command. Specific interfaces that needs ISL capability can be enable the functionality using "no" form of command under interface mode.
  fabric neighbor-discovery disable (under Rbridge mode)

- Similarly, there are new CLI's added to assist in MTU configuration across all interfaces for a switch using single CLI. This allows quickly setting the jumbo frame capability across the switch for Vxlan / Storage traffic.

BGP eVPN :

- RD should be unique across the VLANs/VRFs and across the leaf nodes.
- If the leaf nodes are in different BGP AS, then ignore-as option should be specified to the route-target configuration under eVPN instance.
- BGP MAC route dampening is applicable only for frequent MAC moves across leaf nodes not part of vLAG pair.
- On a vLAG pair, eVPN instance configuration should be symmetric.
- If the leaf nodes are in the same BGP AS, "allowas-in 1" should be configured.
- On VDX6740, part of a 2 node VCS, remote VTEP destination should not be reachable via another node in the VCS.
- For VRF extended using L3VNI over eVPN, at least one prefix should be advertised by both of the leaf nodes extending the VRF.
- It is recommended to configure different BGP AS numbers on each set of spine nodes when connecting 2 PoDs.
- Traffic tromboning is not supported for IPV6 in IP Fabric with /128 routes.
- In the scale environment with a large number of /32 routes, traffic disruption may be seen upon reload or HA failover.
- Tunnel creation is triggered by BGP NH installation resulting in creating more tunnels than configured which might be seen at the Border Leaf.

ARP/ND Suppression:

- ARP/ND suppression should be configured on the VLAN if IPv4/IPv6 Static Anycast Gateway is being configured.
- Upto 512 VLANs are supported with DAI hardware profile. Default hardware profile supports upto 32 VLANs.
- ARP/ND suppression feature is supported only on VDX 6740, 6940, 6940-144s platforms.

Conversational ARP:

- It is recommended to enable both Conversational-ARP and Conversational-MAC together.

Static Anycast Gateway:

- ARP/ND suppression should be configured on the VLAN if IPv4/IPv6 Static Anycast Gateway is being configured.
- Static Anycast Gateway address/static Anycast MAC configuration should be identical for a given VLAN across leaf nodes in IP Fabric.
- IP services/protocols cannot be enabled on an interface where only Static Anycast Gateway address is configured.
- VRRP/VRRP-E configuration should be identical for a given VLAN across leaf nodes in IP Fabric. But it is recommended to use Static Anycast Gateway.
- All VLANs having Static Anycast Gateway configuration should be extended into eVPN on a vLAG pair.
- In 7.0.1a, the scale support for SAG been increased from 32 to 64 under each interface.

ND/RA

- Proxy ND is not supported.

IPv4

- IP Directed Broadcast is not supported under non-default VRF context. It is supported only in Default-VRf context.

BFD

- Static Route BFD, BGP BFD and OSPFv2/v3 BFD
  - For Single HOP BFD sessions configured with source IP as secondary IP is not supported, since significance of Source IP in BFD configuration is only to determine on which interface BFD session should be started and hence interfaces' Secondary IP is not used as source in BFD PDU.
  - BFD is not supported on leaked routes.
  - BFD for multi-HOP BFD neighbor reachable via multiple paths with equal cost(ECMP) will not be supported since BFD requires BFD session to be created for the neighbor for each ECMP path.
  - BFD is not supported for OSPFv2 & OSPFv3 virtual links.
  - For single hop BFD sessions, BFD will consider the interval values that are configured on interface, and not the non-default values that are configured within the global command.
- BFD for VxLAN tunnels

- BFD session may not come online or may flap if VCS cluster is in transient state during reload, vLAG failover, fabric split, chassis disable/enable and such scenarios. It is required to have a stable VCS cluster in order for BFD sessions on VxLAN tunnels to work as expected.
- BFD parameters are not configurable on VCS VxLAN Gateway for Type NSX. The parameters are derived from NSX controller.

VRRP

- VRRP and VRRP-E cannot be enabled together on VDX 6740 and VDX 6740T platforms.
- IPv6 and IPv4 VRRP sessions cannot be configured with the same VRRP group-ID on the same Layer3 interface.
- If an IPv6 VRRP session is configured with only global VIP address without Link-Local VIP, VIP configuration will fail for that session during download of configuration from file.
- VRRP v4 or v6 can be enabled with VRRP-E v4 and v6 on the VDX 6940 family.
- VRRP v4 and v6 cannot be enabled together on an interface on the VDX 6940 family.
- "show vrrp summary" and "show ipv6 vrrp summary" will display all sessions in default vrf. In earlier NOS versions, these commands displayed sessions across all vrf.

Fabric Virtual Gateway (FVG)

- FVG co-existence with VRRP/VRRP-E in VDX 6740 and VDX 6740T
  - FVG ipv4 or FVG ipv6 with default global mac cannot be enabled with VRRP but can be enabled with VRRPE-E.
  - FVG ipv4 or FVG ipv6 with non-default global mac cannot be enabled either with VRRP or VRRPE-E.
- FVG co-existence with VRRP/VRRP-E in VDX 6940
  - FVG ipvx with non-default global mac: when the global gateway-mac-address is changed using the "gateway-mac-address" command to something other than the default mac. for eg. 0000.1111.2222.
  - There are two groups of protocols
    - Group 1:
      - VRRP ipv4
      - VRRP ipv6
      - FVG ipv4 with non-default global mac
      - FVG ipv6 with non-default global mac
    - Group 2:
      - VRRPE ipv4
      - VRRPE ipv6
      - FVG ipv4 with default global mac
      - FVG ipv6 with default global mac
    - A maximum of only two protocols from group 1 can be enabled at a time.
    - All protocols of group 2 can be enabled at a time.

- If 2 protocols from group 1 are enabled, no protocol from group 2 can be enabled. While if only 1 of the group 1 protocols is enabled, all the group 2 protocols can be enable at the same time.
- Fabric Virtual Gateway (FVG) is not applicable in IP Fabric environment, Static Anycast Gateway to be used to achieve similar functionality.

OSPFv3

- OSPFv3 HA with Graceful restart is not supported but GR-helper mode functionality is supported. VRF-Lite-Capability CLI and support for Down bit handling is not available in OSPFv3 as in OSPFv2. When the BGP4+ route from the MPLS cloud is redistributed into OSPFv3 domain the redistributed route is always installed in the OSPFv3 routing table.

BGP

- Conditional advertisement of default-route using route-map match prefix not supported.
- Over a link-local eBGP session, updates are not carrying the new nexthop that is set using a route-map.

Layer 2/Layer 3 Multicast

- The following PIM features are not supported in this release:
  - IP version 6
  - VRF

  Traffic duplication is seen on Last hop router on shared RP tree initially when new source traffic starts for about 40 seconds in scale scenarios.
- Static or Dynamic RP Candidate is not supported on VDX 8770

VRF

- Under VRF submode there is a syntax change for the address-family ipv4 command.
  Old format: address-family ipv4 [max-route <value>]
  New format:
      address-family ipv4 unicast
      max-route <value>
  Note: "max-route" command is now moved to address-family submode.
- There is no provision to configure "max-routes" for default-vrf.
- There is no use case for "rd" configuration in VRF and this command will be deprecated in next release.
- On configuring VRF on an interface, all previous IP config on that interface will be deleted.
- Removing VRF address family on a non-default VRF will delete all relevant address-family configurations including the interface and protocol configuration for that VRF.

BGP-VRF

- Local-as <num> can be configured for particular VRF under "address-family ipv4 unicast vrf <vrfname>" and is not supported under "address-family ipv6 unicast vrf <vrf-name>".

- "maxas-limit in" can be configured for particular VRF under "address-family ipv4 unicast vrf <vrfname>" and is not supported under "address-family ipv6 unicast vrf <vrf-name>".
- When route-map is applied to BGP, and route-map has multiple 'set ip next-hop' statements in a single instance, BGP will consider the last 'set ip next-hop' in the route-map.

ACL

- L2 User ACL deny rule can prevent trapping of L3 control frames.
- IPv6 ACLs at ingress are not applicable for packets with Link local source address.
- ACL Logging at egress can impact forwarding traffic at high rates.
- Counters for hard-drop ACLs may not count accurately.
- Statistics are not supported for hard-drops at Egress.
- For VDX 8770, IPV6 Egress ACLs, Match on DSCP value compares only 4 LSBs instead of all 6 DSCP Bits.
- ACL with "Routed" keyword functions only for VE/Router Port MACs. It does not work for VRRP Routed.
  - Work-around: Apply default mode ACLs (No "routed" keyword).
- For Private VLANs, Egress ACLs on Primary VLAN is applied only for all traffic which ingresses primary VLAN i.e.
  - If the traffic ingresses from Primary VLAN but gets translated to Secondary VLAN at egress, ACL on primary VLAN at egress is still applicable to it.
  - If the traffic ingresses from Secondary VLAN but gets translated to Primary VLAN at egress, ACL on primary VLAN at egress is still not applicable to it.

Policy-based Routing (PBR)

- If a PBR route-map is applied to an interface that is actively participating in a control protocol and the ACL specified in the route-map also matches the control protocol traffic the control protocol traffic will be trapped to the local processor and not be forwarded according to the route-map.

Inter-VRF Leaking (Static)

- S+ symbol routes indicates leaked routes.
- VRF route leak cascading is not supported– only one level of indirection.
- User should avoid making Static, dynamic and connected route conflict with routes in target VRF when configuring route leak.
- For bidirectional traffic with router leak, user needs to configure route leak in both direction separately.
- Route leak configuration to next hop IP on the same box on different VRF is not a valid configuration, but CLI will be accepted.
- Precaution needs to be taken when leaking default routes - this can result in routing loops.
- Switch management from non-management VRF by leaking route from non-management to management VRF is not supported.

DHCP IP Helper

- There is no HA support for DHCP relay statistics. When a switchover happens, the statistics will not be replicated to the new active MM.
- Clients may not converge in some IP Fabric environment. Care should be taken to not configure DHCP IP helper and Static Anycast Gateway on the same interface.
- Two DHCP OFFER per one DHCP DISCOVER and two DHCP ACK for single DHCP request seen IP fabric setup.
- DHCP relay is not supported in conjunction with Fabric Virtual Gateway (FVG) on a same VE interface.

Dynamic ARP Inspection (DAI)

- The ARPs learnt on trusted ports would be deleted when DAI is enabled or DAI filter changed.
- Static ARPs not permitted by DAI filter would be promoted to active state. Administrator is responsible for configuring static ARPs in sync with DAI ACLs.
- ARP packets more than 190 bytes on a DAI enabled VLAN will be dropped.
- ARP access-list with longer names is not effective (greater than 20 characters)

DHCP-based Firmware Download (DAD – DHCP Automatic Deployment)

- In order for successful version upgrade using DAD method, switch should undergo 2 reloads. For switch in factory default, there is additional reboot to cancel bare metal mode.
- If firmware download is skipped only config download is allowed.
- For dual MM chassis, dual MM must be in sync for DAD to function.
- DAD is a disruptive. ISSU is not supported.
- In FIPS mode, DAD is not supported.
- Cluster principal node failover is not supported.
- DAD over in-band is not supported. Virtual Fabrics is not supported with DAD. You must disable Virtual Fabrics before starting the DAD process in the global configuration file or in the script.
- DAD must complete and succeed on Principal node alone before turn on power for all secondary nodes.
- When the switch is in Factory default, DAD is enabled upon power up the switch
- DAD executes only if the switch configuration is the default configuration. If the configuration on the switch is not the default configuration, DAD exits.
- If the switch is in the default configuration before DAD is triggered, DHCP will remain enabled after the deployment completes. However, this setting can be overwritten by the switch-specific configuration file or the dad.py script.
- You must enable DHCP in the DCMD default configuration to ensure that the switch receives its IP address from the preconfigured DHCP server.
- The factory default DAD runs only once in a DHCP-enabled environment. Irrespective of whether this process is a success or failure, DAD will not be triggered again after a reboot or power off. You can run DAD manually using the dhcp auto-deployment enable command if required.
- Must set ztp=0 in dad configuration file since ZTP (Zero Touch Provisioning) is enabled by default.

- The "vcsmode" value in dad.conf MUST be set to "LC" regardless of whether the existing cluster is in LC or FC mode. If "vcsmode" set to "FC" value in dad.conf, the DAD request can fail.
- DAD is enabled automatically upon switch reboot when you use NOSCLI "write erase" command.

  Zero Touch Provisioning (ZTP) consideration
  DAD supports up to two nodes for IP fabric in logical chassis mode
  All nodes can either be powered up at the same time or enabled from the CLI. This is the key difference vs regular DAD process.

Link State Tracking

- The "track enable/disable" command can only be used to enable or disable the tracking. In order to remove tracking configuration from internal database for a given interface "track remove all" command must be used.

- When there are no uplink interfaces configured, the track disable command will remove tracking configuration from internal database and this behavior is applicable only in 6.0.1a patch and not in prior releases.

- If track min-link number is greater than the number of uplinks, then the downlink will be shutdown with a warning message.

- After toggling the line card using "power-off / on", LC related interfaces that are configured as uplink interfaces are not seen in "show track summary" cli output.

OpenFlow

- Interoperability support only with Brocade Controller aka. BVC/BSC.
- Once an interface becomes OpenFlow enabled, very limited set of conventional commands are allowed which includes some of the QoS related configuration commands. For complete list of allowed commands please refer to "*NETWORK OS V6.0.1 SDN Configuration Guide*"
- Priority-tagged frames are not supported.
- L3 Generic flows (incoming port as "*wildcard*") are not supported.
- PUSH/POP operations can only be associated with action type OFPAT_OUTPUT inside a flow-mod.
- Type of an existing GROUP cannot be changed.
- Existing "clear counter all" command applies to OpenFlow ports as well.
- As part of ISSU, all controller driven configurations will be lost. Controller is expected to re-program after re-connection.
- Uncontrolled Line-Card failover would need power-cycle to recover hardware resources which were in use for the feature to continue to work.
- Uncontrolled failover on 6740 and 6940 would need power-cycle to recover hardware resources for the feature to continue to work.
- Pre-provisioned flow-mods will not be replayed to a new slot coming online. GROUP and METER configurations will be always replayed.
- On the Brocade VDX 8770, queue statistics should be interpreted as wire-vlan (COS) priority statistics.

- Actual number of supported flow-mods (L2/L3) may be less since MAX scale values include per port default miss entries, and single LLDP entry is needed for topology discovery. This applies to all supported platforms.
- For layer 3 rules, switch can't differentiate between tagged and untagged flows when matching against rules. This applies to all supported platforms.
- Filtering options are not supported for show openflow CLIs. Show openflow commands with filter option show the complete output.
- For the port based flow mod, if the ivid reference is active, egress tagging is not cleared. The new flow mod will not be installed If the previous flow mod has created the egress tagging behavior. This case has to be handled by work-around flow mods or take the port off from openflow and bring it back.
- With default rcv-queue and after coldboot, group select traffic may not be correct, need to do shut/no shut on the interface. This issue is not there with non-default rcv-queue.
- With large number of flows, "show openflow flow <>" may take 20 seconds to display packet counts.
- "Module Unknown" is shown for CLI "show open resources" in VDX 6940-144S.
- Openflow is not supported on Lag/vlag or port-channel interface.

Mac Port Based Authentication

- For Mac Auth Bypass to work, user should configure 'dot1x reauthentication' followed by 'dot1x reauthMax "3 or more".

Layer 2 and Layer 3 ISSU on VDX 6740x

The ISSU functionality on the VDX 6740x (and derivatives) has been added in Network OS 5.0.1. This functionality leverages the HA model that has been delivered on the VDX 8770. It involves running dual-Network OS images on the multi-core control processor. This allows for non-disruptive (to Layer 2, Layer 3, and FCoE traffic) upgrade/downgrade of Network OS 5.0.1 and subsequent minor releases/patches.

ISSU functionality on the VDX 6740x (and derivatives) covers forwarding of Layer 2, Layer 3, and FCoE traffic through the VDX device. Protocols that involve the sending and receiving of Layer 2 and Layer 3 control packets on the VDX device itself are not covered by ISSU. For example, ISSU covers the forwarding of control packets for protocols such as VRRP and OSPF sent by hosts other than the VDX. ISSU allows for non-disruptive upgrades when the VDX is forwarding control packets for other hosts. ISSU does not currently allow for non-disruptive upgrades when the VDX itself is configured for protocols such as VRRP and OSPF and is sending and receiving control packets.

The implementation is based on a type-1 hypervisor.

Brocade Vyatta Controller (BVC)

- Controller does not update the config database based on the flow rejected notification/group rejected notification/meter rejected notification/delete notification/hard timeout aging notification from switch. Workaround : User needs to delete the flow from the config database and program the correct flow.

- In rare scenario, Controller sends the asynchronous messages leading to flow rejections e.g. flow-mods (associated with group/meter) are rejected after reconnection due to flow-mods being programmed before group/meter config. Work around is that the user needs to delete the group/meter/flow from the config database and program them again.
- In scale scenario, few flow-mods are not programmed after reconnection. Work around is that the user needs to delete the missing flow-mods and program them again.
- Topology/Change of interface states are not reflected correctly on BVC.
- Topology with multiple links are not reflected on BVC. BVC shows only single link between the switches.
- Refer to BVC 1.3.0 release noted for all the known issues/workaround.
- Limitations while configuring flows using BVC:

  1.) MAC addresses- Mac addresses needs to be in uppercase. - Public bug (https://bugs.opendaylight.org/show_bug.cgi?id=2949)

  2.) Ip addresses should have mask – if it is just host say 10.19.18.20 it should be like 10.19.18.20/32 - Public bug (https://bugs.opendaylight.org/show_bug.cgi?id=2950)

  3.) 0s in Ipv6 addresses are rounded ,eg 0000:0000:0000 is rounded to :: . But this is failing in comparison logic and both are treated differently. So use 0000:0000 where :: is there.

  4.) There are some default values ,eg: max_length=0 . They should be set , even though they are 0.

  5.) "vlanid-present" in vlan based flows is one field . If you put true, config vs operational will be out of sync (that means flows will have different ids). If you put false or remove the field, flow will not be configured.

Auto QoS for NAS

- From Network OS v5.0.1 onwards, 'nas auto-qos' configuration appears below 'cee-map' configurations in running-config. In earlier versions, it was the other way round.
As a result of this, if file replay is done using the Network OS v6.0.0 config (with auto-nas configuration) on any previous version (say, Network OS v4.1.0), 'nas auto-qos' configuration will be lost.
User will have to reconfigure 'nas auto-qos' configuration manually.

REST API

- REST configuration for startup-config datastore is not supported.
- Only one command can be configured with one REST request. Configuring multiple commands in a single request is not supported.
- Versioning in API is not supported
- Pagination and Range is not supported.
- Higher level of resource can be obtained with the header "-H "Resource-Depth: x".
- Action related operational commands are not supported.

- Maximum 30 sessions are supported.
- An FCoE Base license is required for the FCoE device to log in. Each FCoE device must have a VF port to log in.

NetConf

- Netconf configuration for startup-config datastore is not supported
- Configuring multiple commands in a single request is supported for configuration/deletion of vlan, switch port, trunk port, VE and rules under IP ACL only.
- Range is not supported.
- On a large cluster (of 32 nodes or more) and with scaled up configuration, it is recommended to query configuration using rBridge ID filter. In extreme scenario, querying cluster wide configuration without specifying rbridge ID filter might cause switch to run out of memory.
- Maximum 16 sessions supported.

VXLAN Gateway for VMware NSX

- VCS VXLAN Gateway for NSX-MH/NSX-V, is supported only on VDX 6740, VDX 6740T,VDX 6740T-1G, VDX 6940-36Q and VDX 6940-144S
- VCS VXLAN Gateway for NSX-MH/NSX-V, is supported only in the VCS Logical Chassis mode.
- A maximum of 4 RBridges are supported in a VXLAN enabled VCS Cluster. VXLAN Gateway should be enabled on all the RBbridges of the VCS Cluster.
- Only 1 VTEP Gateway is supported in a VXLAN enabled VCS Cluster.
- VxLAN GW for VMware NSX-MH/NSX-V, and VF Extension cannot be enabled in the same VCS fabric.
- VMware NSX-MH vSwitch with vSphere version 5.5 (ESXi 5.5), and KVM on Ubuntu 12.04 are supported as hypervisors.
- Only one-to-one VLAN to VNI mapping is supported.
- Service and Transport VF cannot be attached to VxLAN GW.
- Tunnel interfaces cannot be used as SPAN (Switch port Analyzer) destination.
- Only Ingress ACL can be applied on tunnels.
- Ingress/Egress QoS policies cannot be applied to tunnels.
- Unicast/Multicast routing between VXLAN and VLAN/VXLAN is not supported.
- BFD should be enabled for all Service node tunnels.
- ALL the VE interfaces should run VRRP-E with the same VRID and same virtual-mac to terminate the incoming packets on other VLANs.
- Tunnels egressing/ingressing through an ISL port is supported only on VDX 6940-36Q and VDX 6940-144S.
- Fabric-Virtual-Gateway (FVG) based VTEP is not supported. CLIs for configuring FVG as VTEP are available under overlay-gateway, however these CLIs should not be used as the functionality is not available in this release.

VF Extension using VxLAN

- VF Extension overlay-gateway (VTEP) is supported only on the VDX 6740, VDX 6740T, VDX 6740T-1G, VDX 6940-36Q, and VDX 6940-144S.
- VF Extension overlay-gateway is supported only in the VCS Logical Chassis mode.

- VDX 8770 can be in the same VCS fabric where VF-Extension functionality is enabled.
- VxLAN Tunnels are supported over ISL links.
- VF Extension overlay-gateway can be enabled on maximum 4 Rbridges in a VCS Cluster.
- VxLAN GW for VMware NSX and VF Extension cannot be enabled in the same VCS fabric.
- Only 1 VF Extension overlay-gateway is supported in a VCS Cluster.
- Only one-to-one VLAN to VNI mapping is supported.
- Tunnel interfaces cannot be used as SPAN (Switch Port ANalyzer) destination.
- Only Ingress ACLs can be applied to tunnels.
- Ingress/Egress QoS policies cannot be applied to tunnels.
- Multicast routing between VXLAN and VLAN/VXLAN is not supported.
- L3 routing protocols and static routes over tunnels are not supported.
- Connected subnet L3 forwarding is supported over tunnels.
- Tunnels egressing/ingressing through an ISL port is supported only on VDX 6940 as a VTEP beginning with NOS v6.0.1. Such topologies and configuration must be removed before downgrading to any version below NOS 6.0.1.
- Fabric-Virtual-Gateway (FVG) based VTEP is not supported. CLIs for configuring FVG as VTEP are available under overlay-gateway, however these CLIs should not be used as the functionality is not available in this release.

TCAM Profiles

- The TCAM profiles the user can create may not match the max scale numbers due to reserved routes/entries which are created for internal use.
- Use count field is added to show the number of entries currently in use.

Management VRF

Layer 3 protocols such as OSPF/BGP/PIM/VRRP/VRRPe are not supported on Management VRF. The following are not supported on in-band ports when they are part of Management VRF:

- DHCP Client functionality
- Auto-config address
- Out-of-band management ports can only be part of Management VRF.
- Switch cannot be managed from leaked routes pointing to Management-VRF.
- Address family on Management VRF cannot be removed.

Conversational MAC Learning

- Conversational MAC Learning and 'Disable Source MAC Learning' cannot be enabled simultaneously on VDX 674x platform.

System level Flowbased QoS

- System Flow based QOS is not supported on the Egress direction.
- QoS can operate on either of three modes – MLS, CEE and MQC. Hence once service-policy is configured, the interface will be assumed to be in MQC mode and existing MLS and CEE

commands will not be supported on the same interface. Un-configuring the policy will put the interface back to default mode which is MLS.

- For Policer, aggregation is possible only within a single chip. Hence when policer is applied on port- channel interface, multi-chip aggregation is not expected.
- SFLOW as action is not supported on Port-Channel interface.
- Any ACL that is used in Flowbased QoS class-map as a match criterion is considered as "QoS ACL" and is special in nature. Hence behavior in some aspects may differ from that of regular "User ACL".
- System based QoS is not supported in egress direction.

Port level Flowbased QoS

- Policer action or SPAN action or both can be applied in egress direction for Port Level Flowbased QoS.
- No other QoS actions are supported in egress direction for port level flowbased QoS.

Non-trivial Merge

- Non-trivial merge is not supported for global configuration. There are a few exceptions in local configuration as well which are not supported for non-trivial merge. This is because these configurations modify global configuration indirectly.
- Modifying the local configurations listed below will result in both a local and global configuration change thereby causing configuration mismatch when ISLs are brought up during fabric formation resulting in node segmentation.

Command (Local Configuration)	Description
/hardware/flexport <interface tuple>/type fibre-channel	Converting an Ethernet interface to Fibre-Channel causes global configuration changes because the Ethernet interface can have configurations in these global configs L2Sys, SPAN, IGMPs, MLDs.
/rbridge-id <#>/vrf <name>	The creation of a VRF on an RBridge will internally create a global partition object which is not visible to the user and used to track the same VRFs created across rbridges in the cluster.

- The Element Manager GUI is intended for use with the VDX 2741 and VDX 2746 platforms only, and may not be used with any other VDX platform.

HA on TOR switches

- HA failover is supported when a user-space daemon is terminated. However, HA failover is not supported on kernel panic. When kernel panic happens, the entire switch will be rebooted for recovery.

Logical Chassis HA

- HA failover and unplanned failover is supported on VDX 8770 only.
- When the principal switch in the VCS cluster undergoing MM failover, it will remain as the principal switch after the MM failover. All the secondary nodes will first disconnect from it

when the MM failover starts and then rejoin as the VCS cluster is reformed. At the fabric level, the cluster will remain intact and there will be no traffic disruption.

- When the secondary switch undergoing MM failover, the switch will disconnect and rejoin the VCS cluster after reestablishing connection with the principal switch and the rest of the cluster will stay intact. At the fabric level, the cluster will remain intact and there will be no traffic disruption.
- RMON HA is not supported.
- vMotion during HA failover is not supported.
- If UDLD is enabled, HA is supported with a higher range for the UDLD hello time (> ow1 sec)
- HA is not supported for OpenFlow feature, however, system level ISSU is supported. For ISSU, it is recommended that the controller is disconnected first, all flows are cleared using "clear OpenFlow all" command and then perform the upgrade.

Interoperability

- In a VPC environment where the Brocade VDX side has the active LACP settings and the Cisco side has the passive settings on the vLAG, the port-channel takes over 30 seconds to come up.
  Workaround: Reverse the settings and have the Brocade VDX LACP settings passive and the Cisco side set as active. The port channel will then restore after about 10 seconds.
- VDX interop with Cisco Nexus switch with 'peer-switch' enabled on VPC is not supported.
- When interoperating with Brocade 8000, it is recommended to set the *mac-aging* time to 0 on the VDX switch to prevent any adverse impact caused by certain errors generated by the Brocade 8000.
- ADX HA Sync packets use UDLD PDU's which may be dropped by VDX . To enable forwarding, we recommend configuring dot1q tagging to treat UDLD packets as data-packets to be forwarded across VCS.Virtual Fabric.
- PIM-SM is not supported on Virtual Fabric on VDX8770.
- For frames forwarded on a transport fabric, ingress CTAG tagging is preserved at the egress port regardless of the egress tagging classification.
- Default-VLAN can only be configured using TRANSPORT VF IDs.
- The "no vcs virtual-fabric enable" command execution time is dependent on the number of ISLs and VLANs in the VCS.
- To allow for STP interop with certain 3rd party switches that would not accept the BPDU source MAC's with default OUI. The selection can be changed using the below command now:
  system-id oui <01.e0.52 | 00.e0.52> (under stp configuration)
- The virtual-fabric resource allocation are platform dependent as follows:
  - o VDX 8770 – no limitation
  - o VDX 6740/6740T/6740T-1G – uses TCAM table
  - o VDX 6940-36Q – virtual-fabric transport and service VLANs use TCAM and EXM table respectively.

MAPS

- BNA version 14.2.0 is supported with NOS 7.1.0.
- MAPS is supported on VDX 2741, 2746, 6740, 6940 and 8770 platforms.

- MAPS port level alerting in NOS V7.0.x is not available for Flex Ports configured in Fiber Channel mode.
- RX_SYM_ERR MAPS messages are displayed when breakout cable is connected on a 40G interface that is not configured for breakout.
- When line card on the remote end of the link is powered off, MAPS generates Insertion/Removal notification for the SFPs on the local side. These can be ignored.
- 100G SFP threshold monitoring is not supported on VDX6940-144s.

Maintenance Mode

- Port-channel configuration changes while a node is in maintenance-mode is not supported.
- Configuration replay of a saved configuration file or snapshot containing both maintenance-mode and port-channels is not supported.

BNA

Recommendations to customer when the cluster size is 32 or more nodes

- Make sure the lazy polling period is 60 minutes.
- Disable event based polling in such large clusters. Essentially this means there will not be any update from the cluster for BNA till the lazy period is elapsed.

Miscellaneous

- Brocade VDX switches load balance internal and external traffic based on hash functions using standard network headers as keys. Due to this implementation, users may experience traffic imbalance depending upon application flow definition.
- Packet drops will be seen for a short duration due to routing changes with link flaps and/or node failovers.
- On both ISL and Edge ports, sFlow sampling is supported only in inbound direction.
- Sflow collectors are not queried in snmp v1, v2 & v3 versions.
- L2 packets may not be sampled on line-card power OFF & ON.
- If multiple VLANs are configured on a switch, then in order to enable certain features such as IGMP or PVST it is recommended that specific features be enabled on a per-VLAN basis instead of enabling them globally.
- The VLANs 4087-4095 and 1002 are reserved and used for internal cluster operations.
- "Clear ip route all" need to be issued once the maximum number of routes supported by a router is exceeded.
- SNMP supports 2k OCTET-STRING size for MIB objects.
- Snmpwalk operation on TCP MIB (RFC 4022) may become very slow and timeouts may happen on all VDX platforms. The snmpwalk timeout should be set to at least 3 seconds while walking the TCP MIB.
- Under rare conditions, the switch may bootup with the default configuration upon power-cycling the switch.
- Firmware downgrade is not blocked if the scale configured would not be supported in the downgraded release.

- Under rare conditions, after disabling keepalive timeout followed by shut & no shut of the port-channel link may prevent FCoE logins through that port-channel.
- On rare instances of HA failover, SFM may turn faulty. Workaround is to manually reseat the card.
- On rare instances of ISSU, HA failover, line-card may turn faulty. Workaround is to reset the line-card.
- PCAP utility is not supported on standby MM on VDX 8770.
- Please make sure to not have large no of unreachable tacacs+ accounting server configured, else it might cause unit to reboot. This issue is hit only with large config (4K VLAN etc and 20K lines or config).
- Configuration of more than one In-band management port on a single switch is not recommended.
- Under certain stress conditions the 'copy support' command might time out for some modules. In such cases, it is recommended to retry 'copy support' with a higher timeout multiplier value.
- It is highly recommended to copy the configuration file to running-config and then save the running-config to startup-config, instead of directly copying the external configuration file to startup-config, especially when using fabric distributed features such as Zoning, VM Aware Network Automation and Virtual IP.
- It is recommended to keep same values for Global MTU & Interface value as due to a known defect, change in Global MTU may impact the interface MTU too.

Defects

TSBs - Critical Issues to Consider Prior to Installing This NOS Release

Technical Support Bulletins (TSBs) are produced to provide detailed information about high priority defects or issues present in NOS releases. The following sections specify all current TSBs that have been identified as being a risk to or resolved with this specific version of Brocade Network OS. 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 NOS-based platforms).

TSB Issues Resolved in Network OS v7.1.0b

None

TSB Issues Resolved in Network OS v7.1.0a

TSB	Summary

TSB 2017-254-A	ONMd daemon gets terminated and sends below RAS log on console when VDX would undergo an unexpected reload. `2017/03/23-11:21:26, [HASM-1200], 7957057, SW/0	Active	FFDC,` `WARNING, VDX6740, Detected termination of process onmd:4383`
TSB 2017-256-A	VDX may not be able to learn MAC addresses OR in certain cases, it may encounter an unexpected reload due to termination of l2agtd. VDX may encounter mac learning issues OR in certain conditions, undergo an unexpected reload. The issue may reoccur even after the reloads until the preventive workaround is applied. When vdx encounters the state where mac is not learnt anymore, below is the signature to check the existence of this defect occurrence. `sw0#debug internal l2agt 0 p0 dump globals` `is_vcs_enabled: 0` `sw0# debug internal l2agt 0 p0 dump counters all	i msg_len`  `l2agt_recv_msg_len_err : 1` The issue would persist until the layer-2 related configuration is modified.

Network OS v7.1.0 Caveats

BFD

Although the BFD timer values are allowed to be configured below default values of 200 ms (VDX8770) and below 500 ms (VDX6740, 6940), only default values and above are recommended.

VxLAN

- For VXLAN tunnel packets, the IP MTU check on egress is bypassed to allow larger size packets. Any fragmentation occurring on the underlay transit nodes will result in failure of VxLAN termination at the destination VTEP. So, if a packet of size greater than configured L3 MTU of 9018 Bytes is forwarded through the tunnel, the packet will pass through and the transit node shall fragment or discard the packet based on the fragmentation support on the node and the DF bit set on the packet.

  Note:

    DF bit is set on VDX6940 and not set on packets originating from VDX6740

    Packet Fragmentation is supported on VDX8770 and not supported on VDX6740 and 6940 platforms.

- On occurrence of events that may bring down the tunnel on an R-Bridge, there could be few seconds of traffic interruption due to a default de-bounce-timer which is set to 2 secs, this could delay the fail-over of the traffic to redundant path. A debug command "show system internal tnlmgr de-bounce-timer 0 0" can be utilized to reduce the traffic impact, however, the command settings are not persistent across reloads.

- On sending IGMP queries over VF_Extension Tunnel with VLAG as underlay, packets might loop over the tunnel .Queries come back from the same tunnel interface from which its egressed out.

- "show ip igmp groups interface tunnel <tunnel_id>" cli shows all IGMP interfaces instead of just the tunnel interface.

- Adding and Removing RBridges under overlay-gatway may take longer than expected time if large number of VLANs are configured in the fabric.

Long Distance ISL

- The "long-distance-isl" functionality on an interface will not be preserved although "long-distance-isl" configuration is displayed in running-config when the following actions are performed:
    1. Configuring "long-distance-isl" on an "administratively down" ISL interface.
    2. VCS or switch reload/Chassis disable-enable/interface shut-no shut/Firmware download with "coldboot" option
- It is recommended the user configure any "long-distance-isl" configuration while the ISL interface is in the "administratively up" state.
- If the "long-distance-isl" persistent issue is encountered, the user can recover by manually removing the "long-distance-isl" configuration and reconfigure.

Loopback interfaces

- On topologies where same IP address is configured on loopback interfaces on multiple nodes in a cluster, performing admin down of loopback interfaces may result in ping issues.

Route distribution

- When redistribute bgp metric command is unconfigured, the configuration is not completely removed. It is required to configure redistribution without metric and then unconfigure again to unconfigure it completely.

FCoE/Access Gateway
- If a node with FCoE interfaces configured with local logical SAN is reloaded, the FCoE logins may fail to come online. In order to recover, remove and configure the respective local logical SAN fabric-map.

BNA/NetConf/REST

- Special character '$' under the custom RPC "bna-config-cmd" cannot be used for Netconf and REST API for performing copy operation.
- REST API deletion on the main resource will remove all the sub-resources under it. For Example, REST API delete Operation without specifying ACL name will remove all the ACLs in the system. Specify the ACL name in the request in order to delete particular ACL from the config.
- For large scale VCS fabrics with more than 4000 ports, querying the cluster with BNA/REST APIs may result in switch software exception. For this purpose it is not recommended to enable BNA monitoring or querying with REST APIs for large VCS fabrics.

AAA Configuration

- The number of user accounts is limited to 60. Adding any additional accounts and performing add/remove user operations may result in a Switch Software Exception.

Sync Failure Error

- If an error "CRITICAL, VDX8770-4, FSS Error on service component [ethsw1:eswc]: sync-failure: -994" is observed when DHCP IP helper functionality is enabled between 2 different VRFs please contact Brocade Support for defect confirmation and recovery steps.

Mac Loop Detect Feature:

- "Loop detection may not take action of shutting down the interfaces in a high scale environment with greater than 20K macs flapping at a time".
- "MAC-move detect feature may shutdown the Server port under certain conditions".

Port Channel Scalability:

- Under certain circumstances, port-channel configured with Brocade protocol, may limit the maximum scale number to a lower value.
- Port-channel vLAG/LAG may not re-establish after issuing "no vlag-commit-mode disable". User may require to delete and re-configure the port-channel interface and member links.

AMPP/vCenter:

- Event notification is not received for the second host move, when more than one host is moved from one data-center to another in vCenter 6.0.0. The hosts would still be part of old data-center and workaround is to initiate a manual discovery
- Event notification is not received when the VLAN of two identical port-groups are modified and the running config doesn't change. Workaround is to initiate a manual discovery.
- Output of show vnetwork vmpolicy command is not displaying the VM name and datacenter-id for a cloned VM. Workaround is to initiate a manual discovery.

OpenFlow:

- With default rcv-queue and after coldboot group select traffic may not be correct, need to do shut/no shut on the interface. This is not observed with non-default rcv-queue.
- With large number of flows, "show openflow flow <>" may take 20 seconds to display packet counts

- Filtering options (e.g. show | include) will not work for show openflow commands. show commands will display the complete output.
- "Module Unknown" is shown for CLI "show open resources" in VDX 6940-144S.

• Hardware Profile:

- When modifying the route-table profile type and maximum-path using the hardware-profile command, the user should only change one parameter at a time. Otherwise the maximum-path setting will be incorrect. If the issue already occurred, the user can re-run the command to set the maximum-path with the correct value.

• Copy Config command:

- In VDX6940-144S, 100G mode configuration replay can fail when executing "copy <file> running-config" if DPOD license is not reserved. To work around this issue, the user can manually reserve the license and then run "copy <file> running-config".

Syslog:

- Syslog server configured with same IP across the VRFs in inband will not receive the messages.

Closed with code changes for NOS v7.1.0b

This section lists software defects with Critical, High, and Medium Technical Severity closed with a code change as October 16, 2017 in Network OS v7.1.0b.

Defect ID: DEFECT000617887	
Technical Severity: High	**Probability:** High
Product: Brocade Network OS	**Technology Group:** Data Center Fabric
Reported In Release: NOS7.0.1	**Technology:** IP Fabric
Symptom: On upgrade from 6.x to 7.x, one of the python CLI libraries may not be carried forward with all the changes & might impact some of the python scripts.	
Condition: Under certain unknown condition, when upgrading from 6.x to 7.x.	

Recovery: Copy CLI.py file manually to restore the script function.
 	
After restoration, test using below CLI & it should appear as below with "splitlines()" instead of "split()":
 	
sw0:FID128:root> grep -A 2 get_output /etc/fabos/Dcmd/python/CLI.py
  def get_output(self):
    return (self.output.splitlines())	

Defect ID: DEFECT000623066	
Technical Severity: Medium	**Probability:** Low
Product: Brocade Network OS	**Technology Group:** Management
Reported In Release: NOS7.0.1	**Technology:** SNMP - Simple Network Management Protocol
Symptom: When "AG" was enabled, the SNMP traps for login/logout are not sent out.	
Condition: The issue is happened when "AG" was enabled.	
Workaround: Disable "AG" mode.	

Defect ID: DEFECT000623805	
Technical Severity: Medium	**Probability:** Medium
Product: Brocade Network OS	**Technology Group:** Monitoring
Reported In Release: NOS6.0.2	**Technology:** RAS - Reliability, Availability, and Serviceability
Symptom: l2traceroute request failure via REST API	
Condition: After 1000 successful l2traceroute request, any subsequent request for l2traceroute will fail.	
Recovery: Reload of the switch recovers from this state	

Defect ID: DEFECT000626037	
Technical Severity: High	**Probability:** Low

Product: Brocade Network OS	Technology Group: Layer 2 Switching
Reported In Release: NOS7.1.0	Technology: VLAN - Virtual LAN
Symptom: VLAN creation fails along with "Error: VLAN creation failed due to lack of sufficient resources" error.	
Condition: When GVLAN is configured along with "switchport trunk allowed vlan all" on more that 64 interface.	
Workaround: Disabling GVLAN or removing "switchport trunk allowed vlan all" from some interface to make it less than 64 interface.	

Defect ID: DEFECT000628230	
Technical Severity: Medium	Probability: Low
Product: Brocade Network OS	Technology Group: Layer 2 Switching
Reported In Release: NOS6.0.2	Technology: VLAN - Virtual LAN
Symptom: member interface of a port-channel fails to learn source MAC addresses resulting in flooding.	
Condition: port-channel member interface is configured as fcoeport after port-channel is configured as switch port.	

Defect ID: DEFECT000631176	
Technical Severity: Low	Probability: High
Product: Brocade Network OS	Technology Group: Management
Reported In Release: NOS7.1.0	Technology: CLI - Command Line Interface
Symptom: Ambiguity in IP MTU field of "show interface" output. Cosmetic issue, no functional impact.	
Condition: L3 Interface is configured back to L2.	

Defect ID: DEFECT000633831	
Technical Severity: High	Probability: Medium
Product: Brocade Network OS	Technology Group: Layer 2 Switching
Reported In Release: NOS5.0.2	Technology: FCoE - Fibre Channel over Ethernet
Symptom: When a VCS cluster reformation occurs, existing FCOE hosts are logged out.	
Condition: Adding/removing an ISL or adding/removing a switch from a cluster that results in the fabric reformation.	
Recovery: Execute the CLIs "shutdown" and "no shutdown" on the respective interfaces from which FCOE hosts logged out.	

Defect ID: DEFECT000634366	
Technical Severity: Medium	Probability: Medium
Product: Brocade Network OS	Technology Group: Management
Reported In Release: NOS7.1.0	Technology: CLI - Command Line Interface
Symptom: There is no option to view the ACL log buffers for VE interfaces.	
Condition: 'show access-list-log buffer interface' does not have option for VE interfaces.	

Workaround: Can check the ACL logging packet in phy interface as well	

Defect ID: DEFECT000634769	
Technical Severity: Medium	**Probability:** High
Product: Brocade Network OS	**Technology Group:** Management
Reported In Release: NOS6.0.2	**Technology:** Configuration Fundamentals
Symptom: SCP file transfer fails	
Condition: Using double quotes ("") for file names with spaces causes SCP to fail on certain servers.	
Workaround: Use file names without spaces	

Defect ID: DEFECT000635328	
Technical Severity: Low	**Probability:** Low
Product: Brocade Network OS	**Technology Group:** Management
Reported In Release: NOS7.1.0	**Technology:** SNMP - Simple Network Management Protocol
Symptom: Cannot find module message appears during installing and compiling FOUNDRY-SN-NOTIFICATION.mib file.	
Condition: Installing and compiling FOUNDRY-SN-NOTIFICATION.mib file.	

Defect ID: DEFECT000635440	
Technical Severity: Medium	**Probability:** Medium
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer
Reported In Release: NOS7.1.0	**Technology:** IP Addressing
Symptom: "show ip route <prefix>/<mask> longer" is not showing the expected results.	
Condition: When we have more than 500 entries	

Defect ID: DEFECT000636084	
Technical Severity: High	**Probability:** High
Product: Brocade Network OS	**Technology Group:** Data Center Fabric
Reported In Release: NOS6.0.2	**Technology:** Logical Chassis
Symptom: "unqualified SFP transceiver" error appears on VDX for Brocade optic part number 33210-100.	
Condition: Inserting Brocade optic with part number 33210-100 on VDX running can hit the error.	

Defect ID: DEFECT000636143	
Technical Severity: Medium	**Probability:** Low
Product: Brocade Network OS	**Technology Group:** Layer 2 Switching
Reported In Release: NOS6.0.2	**Technology:** LAG - Link Aggregation Group

Symptom:	Cosmetic issue. some of fields (actor system id, Receive link count, Transmit link count, Individual and ready) won't display properly at "show port-channel detail | nomore" output.
Condition:	Rare scenario. Execution of "show port-channel detail | nomore".

Defect ID:	DEFECT000636696		
Technical Severity:	Medium	**Probability:**	Medium
Product:	Brocade Network OS	**Technology Group:**	Monitoring
Reported In Release:	NOS6.0.1	**Technology:**	Hardware Monitoring
Symptom:	RAS log has "Too many interrupts (501) happened" internal error message.		
Condition:	ASIC error. Console error " Too many interrupts (501)" occur, on VDX 6740 and 6940 switches. May be due to improperly seated SFP+ / cable		
Workaround:	Try NOSCLI shut / no shut. If this doesn't help, try reseating or replacing SFP+ and/or cable.		
Recovery:	Try NOSCLI shut / no shut. If this doesn't help, try reseating or replacing SFP+ and/or cable.		

Defect ID:	DEFECT000637104		
Technical Severity:	High	**Probability:**	High
Product:	Brocade Network OS	**Technology Group:**	Layer 2 Switching
Reported In Release:	NOS7.1.0	**Technology:**	VLAN - Virtual LAN
Symptom:	Switch does not allow user to configure L2 configuration on physical interface after config and unconfig of "ip directed broadcast" cli.		
Condition:	After config and unconfig of "ip directed broadcast" cli		

Defect ID:	DEFECT000637684		
Technical Severity:	Medium	**Probability:**	Low
Product:	Brocade Network OS	**Technology Group:**	Data Center Fabric
Reported In Release:	NOS5.0.2	**Technology:**	Logical Chassis
Symptom:	Unexpected reload		
Condition:	Deleting the zone member entry in upper case which is configured as upper case.		
Workaround:	Use lower case letters only to delete the zone member entry.		

Defect ID:	DEFECT000637753		
Technical Severity:	Medium	**Probability:**	Medium
Product:	Brocade Network OS	**Technology Group:**	Management
Reported In Release:	NOS7.1.0	**Technology:**	Configuration Fundamentals
Symptom:	VDX returns "<html><body><h1>401 authentication needed</h1></body></html>" response.		
Condition:	Proxied REST configuration request using persistent connection Authentication-Token.		

Defect ID:	DEFECT000637797

Technical Severity: Medium	Probability: High
Product: Brocade Network OS	Technology Group: Network Automation and Orchestration
Reported In Release: NOS6.0.2	Technology: NETCONF - Network Configuration Protocol
Symptom: DHCP Auto Deployment upgrade from NOS 6.0.2x to NOS 7.0.1x fails.	
Condition: DHCP Auto Deployment upgrade from NOS 6.0.2x to NOS 7.0.1x.	

Defect ID: DEFECT000638197	
Technical Severity: High	Probability: High
Product: Brocade Network OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NOS7.0.1	Technology: BGP4 - IPv4 Border Gateway Protocol
Symptom: peer-group configuration may not exist after the firmware upgrade	
Condition: This happens when the peer-group has only the BFD configuration	
Workaround: Reconfigure the peer-group	

Defect ID: DEFECT000639081	
Technical Severity: Medium	Probability: Low
Product: Brocade Network OS	Technology Group: Management
Reported In Release: NOS6.0.2	Technology: Software Installation & Upgrade
Symptom: vLAG/PO interface flaps for several seconds during firmware upgrade.	
Condition: vLAG/PO has an inactive link during an upgrade.	

Defect ID: DEFECT000639403	
Technical Severity: Medium	Probability: Medium
Product: Brocade Network OS	Technology Group: Monitoring
Reported In Release: NOS6.0.2	Technology: Port Mirroring
Symptom: Monitor traffic may not appear on the monitor ports	
Condition: Two monitor sessions are created with same destination but different source and first monitor session is removed.	

Defect ID: DEFECT000639524	
Technical Severity: Medium	Probability: Medium
Product: Brocade Network OS	Technology Group: Data Center Fabric
Reported In Release: NOS7.1.0	Technology: Logical Chassis
Symptom: 1. Out of memory(OOM) and subsequent switch reload. 2. toamd process termination and subsequent switch reload	
Condition: VDX supposed to receive the packet or short length (<64 byte) packet though UDP port 35512	

Workaround: ACL program to block UDP port 35512

Defect ID: DEFECT000640567	
Technical Severity: High	Probability: High
Product: Brocade Network OS	Technology Group: Data Center Fabric
Reported In Release: NOS7.0.1	Technology: IP Fabric
Symptom: Displaying routes with detail option asterisk are shown on all routes returned. This should only be on the selected route.	
Condition: Execution of "show ip route detail" CLI	

Defect ID: DEFECT000641075	
Technical Severity: Medium	Probability: Medium
Product: Brocade Network OS	Technology Group: Security
Reported In Release: NOS7.1.0	Technology: ACLs - Access Control Lists
Symptom: Management Interface drops ICMP & UDP for permitted hosts.	
Condition: Standard ACL applied inbound on Management Interface drops ICMP & UDP for permitted hosts.	

Defect ID: DEFECT000641485	
Technical Severity: Medium	Probability: Low
Product: Brocade Network OS	Technology Group: Data Center Fabric
Reported In Release: NOS6.0.2	Technology: Logical Chassis
Symptom: Management cluster/VCS goes offline when ISL between two nodes goes down even though the connectivity could have been established through the other nodes' ISL.	
Condition: It happens rarely when the new link/connectivity happens slowly.	

Defect ID: DEFECT000642278	
Technical Severity: High	Probability: Medium
Product: Brocade Network OS	Technology Group: Management
Reported In Release: NOS6.0.2	Technology: SNMP - Simple Network Management Protocol
Symptom: Snmpwalk of in-band Ve interfaces fails with timeout error.	
Condition: SNMP packets are discarded when the ingress interface differs from the egress interface.	

Defect ID: DEFECT000642711	
Technical Severity: Critical	Probability: High
Product: Brocade Network OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NOS5.0.2	Technology: BFD - BiDirectional Forwarding Detection

Symptom:	BGP & BFD is not working as expected.
Condition:	Bringing down the loopback interface and VDX has "bfd interval 300 min-rx 300 multiplier 3" configuration under interface.

Defect ID:	DEFECT000642884		
Technical Severity:	Medium	Probability:	Low
Product:	Brocade Network OS	Technology Group:	Monitoring
Reported In Release:	NOS7.0.0	Technology:	Hardware Monitoring
Symptom:	The following warning will be logged on some interfaces which are installed with 'SR' SFP+ The mentioned threshold in the logs looks like a 10G LR threshold even though the installed SFP+ is 'SR 'Sfp Current for port x/0/y, is below low boundary(High=85, Low=15). Current value is Z mA' on 10G SR SFP+'		
Condition:	This will occur only on interfaces where already inserted 10G 'LR' SFP+. are replaced with a 10G 'SR' SFP+ and the link is up		

Defect ID:	DEFECT000642983		
Technical Severity:	High	Probability:	High
Product:	Brocade Network OS	Technology Group:	Data Center Fabric
Reported In Release:	NOS7.1.0	Technology:	IP Fabric
Symptom:	BFD goes down and BGP does not goes down during unnumbered interface shutdown.		
Condition:	Unnumbered interface shutdown, when ECMP paths exist.		

Defect ID:	DEFECT000643646		
Technical Severity:	High	Probability:	High
Product:	Brocade Network OS	Technology Group:	Data Center Fabric
Reported In Release:	NOS7.1.0	Technology:	IP Fabric
Symptom:	BFD (Bi-directional forwarding detection) state may remain in INIT state on the leaf switch after shut/no shut of L3 port channel to the spine switch.		
Condition:	BFD session remains in INIT state which makes longer time to converge for protocols registered with BFD.		

Defect ID:	DEFECT000643696		
Technical Severity:	Medium	Probability:	Medium
Product:	Brocade Network OS	Technology Group:	Layer 3 Routing/Network Layer
Reported In Release:	NOS7.0.1	Technology:	OSPFv3 - IPv6 Open Shortest Path First
Symptom:	Occasionally in a VCS consisting of two VDX running as ASBR., a few type7 LSAs are not generated on one of the RBridge after reloading VDXs at times.		
Condition:	A VCS cluster with 2 VDXs and distributing 127 routes their own VE interfaces into OSPF Area 21 (NSSA).		

Defect ID:	DEFECT000643924

Closed With Code Changes for Network OS 7.1.0

Technical Severity: High	Probability: High
Product: Brocade Network OS	Technology Group: Data Center Fabric
Reported In Release: NOS7.0.1	Technology: IP Fabric

Symptom: Reachability from border leaf switches to multi homed hosts behind leaf switches will be affected under the following condition.
   - leaf switches have a static route configured to multi homed hosts
    network and next hop as one of its connected networks.	

Condition: Connectivity between border leaf switches to multi homed hosts behind leaf switches will be affected.
Workaround: Deleting and adding static route programmed in leaf switches should be done per rbridge basis.

Defect ID: DEFECT000644087	
Technical Severity: Low	Probability: Low
Product: Brocade Network OS	Technology Group: Management
Reported In Release: NOS6.0.0	Technology: Software Installation & Upgrade

Symptom: VDX6940-2U with new DRAM may encounter machine-checks errors during or after FWDL and can cause unexpected switch reload.	
Condition: VDX6940-2U with new HW component [DRAM]
Workaround: When a newer HW component has been detected, firmware download is being blocked by pre-install script to avoid degrading the system performance of BR-VDX6940-144S platform.
Recovery: Perform FWDL to a newer NOS version where new uboot change does exist.

Defect ID: DEFECT000644227	
Technical Severity: Medium	Probability: High
Product: Brocade Network OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NOS7.1.0	Technology: ARP - Address Resolution Protocol

Symptom: mac learning stops after ARP limit is exceeded and then ARP entries are cleared with "clear arp"	
Condition: Scaling ARP to limit

Defect ID: DEFECT000645046	
Technical Severity: High	Probability: High
Product: Brocade Network OS	Technology Group: Management
Reported In Release: NOS7.2.0	Technology: SNMP - Simple Network Management Protocol

Symptom: ifInErrors counter does not increment when CRC errors are seen on interface.	
Condition: CRC error occurs on interfaces and ifInErrors counter is polled.

Defect ID: DEFECT000645982	
Technical Severity: High	Probability: Low
Product: Brocade Network OS	Technology Group: Layer 3 Routing/Network Layer

Reported In Release: NOS7.1.0	**Technology:** ICMP - Internet Control Message Protocol
Symptom: Packet Loss in IP Fabric topology.	
Condition: ARP/IP moves from one mac to another.	

Defect ID: DEFECT000646528	
Technical Severity: High	**Probability:** Low
Product: Brocade Network OS	**Technology Group:** Data Center Fabric
Reported In Release: NOS6.0.2	**Technology:** Logical Chassis
Symptom: Unexpected reload	
Condition: In rare scenarios, MAC address age out results in corrupt data.	

Defect ID: DEFECT000646908	
Technical Severity: Medium	**Probability:** Medium
Product: Brocade Network OS	**Technology Group:** Monitoring
Reported In Release: NOS7.1.0	**Technology:** Hardware Monitoring
Symptom: The source IP for SNMP traps is not deterministic.	
Condition: When VCS virtual IP address is configured and SNMP traps are enabled.	

Defect ID: DEFECT000647389	
Technical Severity: Medium	**Probability:** High
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer
Reported In Release: NOS6.0.2	**Technology:** IP Addressing
Symptom: CLI prohibits user from adding multiple /31 subnets under L3 interfaces.	
Condition: Configuring multiple /31 subnets under L3 interfaces.	

Defect ID: DEFECT000647398	
Technical Severity: Medium	**Probability:** Low
Product: Brocade Network OS	**Technology Group:** Data Center Fabric
Reported In Release: NOS4.1.3	**Technology:** VCS Fabric
Symptom: Unexpected reload.	
Condition: Rare scenario. During the cluster formation.	

Defect ID: DEFECT000647433	
Technical Severity: High	**Probability:** High
Product: Brocade Network OS	**Technology Group:** Data Center Fabric

Reported In Release: NOS7.1.0	Technology: IP Fabric
Symptom: L2 VNI and tunnel IP value in the BGP route update is set to "zero".	
Condition: In IP fabric topology, when a route-map with set condition is applied to evpn peer.	

Defect ID: DEFECT000648098	
Technical Severity: Medium	Probability: High
Product: Brocade Network OS	Technology Group: VPN
Reported In Release: NOS7.1.0	Technology: EVPN - Ethernet VPN
Symptom: GARP Doesn't flood to hosts to updated their ARP cache irrespective of whether ARP suppression is enabled/disabled.	
Condition: Ipfabric environment where L2VPN is enabled.	

Defect ID: DEFECT000648164	
Technical Severity: Medium	Probability: Medium
Product: Brocade Network OS	Technology Group: Management
Reported In Release: NOS6.0.2	Technology: SNMP - Simple Network Management Protocol
Symptom: SNMP responding on VCS IPv6 instead of management IPv6 address.	
Condition: Both MM/Chassis IPv6 and virtual vcs IPv6 addresses are configured.	
Workaround: Have the management IPv6 configured latest	

Defect ID: DEFECT000649012	
Technical Severity: High	Probability: High
Product: Brocade Network OS	Technology Group: Data Center Fabric
Reported In Release: NOS7.2.0	Technology: IP Fabric
Symptom: Unexpected reload	
Condition: Dampening configuration under BGP	

Defect ID: DEFECT000649847	
Technical Severity: High	Probability: High
Product: Brocade Network OS	Technology Group: Management
Reported In Release: NOS6.0.1	Technology: Access Gateway
Symptom: VDX experiences unexpected reload due to memory leak in AG daemon.	
Condition: When AG mode is enabled.	

Defect ID: DEFECT000651945	
Technical Severity: Medium	Probability: Low

Product: Brocade Network OS	Technology Group: Monitoring
Reported In Release: NOS6.0.2	Technology: Hardware Monitoring
Symptom: Unexpected reload.	
Condition: Rare scenario. Internal polling of memory statistics.	

Defect ID: DEFECT000651956	
Technical Severity: High	Probability: High
Product: Brocade Network OS	Technology Group: Management
Reported In Release: NOS7.1.0	Technology: SNMP - Simple Network Management Protocol
Symptom: SNMP traps will not be seen.	
Condition: Chassis IP and VCS IP not configured.	

Defect ID: DEFECT000652894	
Technical Severity: Medium	Probability: Low
Product: Brocade Network OS	Technology Group: Data Center Fabric
Reported In Release: NOS6.0.2	Technology: Logical Chassis
Symptom: Unexpected reload.	
Condition: Execution of CLI(vcs replace rbridge-id) during the cluster re-join.	
Workaround: Avoid the CLI during cluster re-join	

Closed with code changes for NOS v7.1.0a

This section lists software defects with Critical, High, and Medium Technical Severity closed with a code change as April 17, 2017 in Network OS v7.1.0a.

Defect ID: DEFECT000550177	
Technical Severity: High	Probability: High
Product: Brocade Network OS	Technology Group: VCS
Reported In Release: NOS5.0.1	Technology: Metro VCS
Symptom: A host will experience lost connectivity when a separate host in a separate VLAN uses the same IP address and sends a gratuitous ARP from that IP address. The VDX will learn from that gratuitous ARP an ARP entry for the IP address on a ve interface that doesn't have an address in the same subnet.	
Condition: This issue seems to happen when the wrong host in the wrong VLAN is trying to use an IP address already in use by another host in the correct VLAN for the IP address of the subnet.	

Defect ID: DEFECT000584534	
Technical Severity: High	Probability: Low
Product: Brocade Network OS	Technology Group: Layer 3 Routing/Network Layer

Reported In Release: NOS7.0.0	Technology: BGP4+ - IPv6 Border Gateway Protocol
Symptom: A transport-vlan has been configured with multiple ctags on a port, however only a single ctag is seen in the command, "show vlan brief"	
Condition: This issue is seen when the following configuration is done in the following order. 1. configuring a vni of a vlan in the evpn-instance. 2. configuring the corresponding vlan as a transport-vlan (TVlan). To avoid the issue, do the configuration in the order #2 & #1.	

Defect ID: DEFECT000592902	
Technical Severity: Medium	**Probability:** Medium
Product: Brocade Network OS	**Technology Group:** Management
Reported In Release: NOS6.0.2	**Technology:** SNMP - Simple Network Management Protocol
Symptom: False SNMP traps observed for link status of management interface.	
Condition: Very rare scenario to hit this false status traps	
Recovery: Restart SNMP process.	

Defect ID: DEFECT000593537	
Technical Severity: High	**Probability:** Low
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer
Reported In Release: NOS6.0.2	**Technology:** IP Addressing
Symptom: Host ARP is learnt even when host IP subnet does not match to VE IP subnet.	
Condition: Host is connected to a VLAN where the Ve IP subnet is different than the host IP subnet.	
Workaround: Disable proxy ARP on VE	

Defect ID: DEFECT000601293	
Technical Severity: Medium	**Probability:** High
Product: Brocade Network OS	**Technology Group:** Layer 2 Switching
Reported In Release: NOS7.0.0	**Technology:** VXLAN - Virtual Extensible LAN
Symptom: COS Priority tag frames egressed as Untagged frames	
Condition: Over VxLAN tunnel COS Priority tag frames are egressed as untagged frames.	

Defect ID: DEFECT000602861	
Technical Severity: Medium	**Probability:** Medium
Product: Brocade Network OS	**Technology Group:** VCS
Reported In Release: NOS5.0.1	**Technology:** Logical Chassis
Symptom: High disk usage that ended up out of space.	
Condition: Postgres log file(Dcmd.Linux.powerpc.pg_ctl.log) unconditionally growing	
Recovery: Delete Dcmd.Linux.powerpc.pg_ctl.log file.	

Defect ID: DEFECT000604338	
Technical Severity: Medium	**Probability:** Low
Product: Brocade Network OS	**Technology Group:** Layer 2 Switching
Reported In Release: NOS7.0.0	**Technology:** xSTP - Spanning Tree Protocols
Symptom: After the VDX switch was reloaded, the configured MSTP hello time was ignored and uses default value of 2 seconds. The value configured in the system does not change, NOS simply ignores it and uses default value.	
Condition: The configured the MSTP hello time is not persistent after VDX switch was reloaded.	
Recovery: The configured MSTP hello-time is persistent after the VDX switch was reloaded. That is if MSTP hello-time was configured for example set to 5. The value was applied after the VDX was reloaded.	

Defect ID:	DEFECT000611018	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** VCS	
Reported In Release: NOS7.1.0	**Technology:** Logical Chassis	
Symptom: VDX is not able to join cluster and stuck at "Awaiting Rejoin" state after reload.		
Condition: VDX reload can hit the issue in VCS cluster.		

Defect ID:	DEFECT000611303	
Technical Severity: Medium	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Data Center Fabric	
Reported In Release: NOS5.0.1	**Technology:** AMPP - Automatic Migration of Port Profiles	
Symptom: Unexpected reload.		
Condition: After configuring vCenter and enabling CDP on ESXi vSwitch, due to very mild memory leak.		

Defect ID:	DEFECT000612699	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Layer 2 Switching	
Reported In Release: NOS6.0.2	**Technology:** LAG - Link Aggregation Group	
Symptom: Unexpected reload of VDX		
Condition: In rare cases, deleting PO or reload of LC may cause the VDX to for an abrupt reload due to software daemon termination.		

Defect ID:	DEFECT000614000	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** VCS	
Reported In Release: NOS4.1.3	**Technology:** Logical Chassis	
Symptom: After invoke "copy support" CLI, the CLI will block, not return to user prompt for more than 2 hours, then the switch will go reboot.		
Condition: The failure shows on early NOS release, and is very rare to happen. So far it never failure the same in the field.r		

Defect ID:	DEFECT000615778	
Technical Severity: Medium	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS6.0.2	**Technology:** Configuration Fundamentals	
Symptom: snmp-server ? displays all Possible completions, here "view" display as "view Define an SNMPv2 MIB view" which is incorrect as it is also applicable to SNMP v3.		
Condition: snmp-server ? displays all Possible completions		

Defect ID:	DEFECT000617399	
Technical Severity: Medium	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS6.0.2	**Technology:** BGP4+ - IPv6 Border Gateway Protocol	
Symptom: When VDX receives a BGP update message with duplicate path attribute, It does not send an error message back to neighbor about malformed packet.		
Condition: Handling of malformed BGP packets received by VDX.		

Defect ID:	DEFECT000618268	
Technical Severity: Medium	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS7.0.0	**Technology:** High Availability	

Symptom:	HA Sync failure after ISSU upgrade
Condition:	With 6X100G LC in chassis during ISSU upgrade

Defect ID:	DEFECT000618691		
Technical Severity:	Medium	**Probability:**	Low
Product:	Brocade Network OS	**Technology Group:**	Layer 3 Routing/Network Layer
Reported In Release:	NOS5.0.2	**Technology:**	DHCP - Dynamic Host Configuration Protocol
Symptom:	Customer will notice that the direct unicast DHCP packets between Client and Server are also getting trapped.		
Condition:	When number of DHCP packets getting exchanged between Server and Client are huge (say 1000 pps rate), other protocols like OSPF will have impact.		

Defect ID:	DEFECT000621402		
Technical Severity:	High	**Probability:**	High
Product:	Brocade Network OS	**Technology Group:**	Management
Reported In Release:	NOS7.0.1	**Technology:**	Inband Management
Symptom:	Telnet access to VDX is blocked via default-VRF and user defined VRF.		
Condition:	Firmware install with "no-activate" option.		
Workaround:	Activate the firmware which was installed with "no-activate" option.		

Defect ID:	DEFECT000625243		
Technical Severity:	High	**Probability:**	Low
Product:	Brocade Network OS	**Technology Group:**	Layer 3 Routing/Network Layer
Reported In Release:	NOS7.1.0	**Technology:**	IP Addressing
Symptom:	"show ip in ve <>" does not show "ip icmp address mask" enabled/disabled status.		
Condition:	Execution of "show ip in ve <>" CLI.		

Defect ID:	DEFECT000625751		
Technical Severity:	High	**Probability:**	Low
Product:	Brocade Network OS	**Technology Group:**	VCS
Reported In Release:	NOS6.0.2	**Technology:**	Logical Chassis
Symptom:	Rolling reboot of VDX after firmware download.		
Condition:	Firmware download in cluster. Odd nodes has upgraded from NOS 4.1.3x to NOS 5.x and then to NOS 6.x while Even nodes were still in NOS 4.1.3x.		
Workaround:	Perform firmware download from NOS 4.1.3x to NOS 5.x for Odd nodes and then Even nodes. Once first phase is done please upgrade from NOS 5.x to NOS 6.x for Odd nodes and then Even nodes.		

Defect ID:	DEFECT000626555		
Technical Severity:	High	**Probability:**	Low
Product:	Brocade Network OS	**Technology Group:**	IP Multicast
Reported In Release:	NOS7.1.0	**Technology:**	PIM - Protocol-Independent Multicast
Symptom:	Multicast functionality daemon "PIMd" goes down with memory leak		
Condition:	PIM enable configuration.		

Defect ID:	DEFECT000626685		
Technical Severity:	High	**Probability:**	Low
Product:	Brocade Network OS	**Technology Group:**	IP Multicast
Reported In Release:	NOS7.1.0	**Technology:**	PIM - Protocol-Independent Multicast
Symptom:	User may observe Mcastssd process termination which leads to system reload		

Condition:	When a PIM enabled node becomes the local RP by configuration and user removes the RP configuration or if the RP is changing based on the RP set message while BSR running, we may see this crash.

Defect ID:	DEFECT000626886	
Technical Severity: Medium	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** VCS	
Reported In Release: NOS6.0.2	**Technology:** Logical Chassis	
Symptom: When a VCS cluster reformation happens, existing FCOE hosts gets logged out.		
Condition: Adding/removing an ISL or adding/removing a switch from cluster that results in the fabric reformation.		
Recovery: Execute the CLIs "shutdown" and "no shutdown" on the respective interfaces from which FCOE hosts logged out.		

Defect ID:	DEFECT000627263	
Technical Severity: Medium	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Layer 2 Switching	
Reported In Release: NOS6.0.2	**Technology:** VLAN - Virtual LAN	
Symptom: Multicast drops when traffic from two ingress ports is sent towards one egress port.		
Condition: Traffic from two ingress ports is sent towards one egress port.		

Defect ID:	DEFECT000628198	
Technical Severity: Medium	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS7.1.0	**Technology:** Configuration Fundamentals	
Symptom: Firmware install ftp using prompted path comes up in Fabric Cluster.		
Condition: Firmware install execution		

Defect ID:	DEFECT000628238	
Technical Severity: Medium	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Layer 2 Switching	
Reported In Release: NOS7.2.0	**Technology:** VXLAN - Virtual Extensible LAN	
Symptom: VDX does not connect to NSX6.3.0 EA controllers.		
Condition: VDX to NSX6.3.0 EA controllers connection.		

Defect ID:	DEFECT000628474	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Network Automation and Orchestration	
Reported In Release: NOS7.0.1	**Technology:** NETCONF - Network Configuration Protocol	
Symptom: "RD auto" configuration failing under evpn instance for primary node in vcs when configured through netconf.		
Condition: "RD auto" configuration through netconf.		

Defect ID:	DEFECT000629138	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS7.0.1	**Technology:** LLDP - Link Layer Discovery Protocol	
Symptom: VDX experience unexpected reload due to onmd process termination.		
Condition: VDX can experience unexpected reload due to onmd process termination when it is connected with ESX servers / VMware VMs and any lldp operation occur.		

Defect ID:	DEFECT000629513	
Technical Severity: High	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** VCS	
Reported In Release: NOS7.2.0	**Technology:** Logical Chassis	
Symptom: Very rare scenario, MAC is not learned on port-channel		
Condition: Create and add vlans to port-channel after HA failover		
Recovery: Enable and disable STP on interface.		

Defect ID:	DEFECT000630071	
Technical Severity: Medium	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS6.0.1	**Technology:** Configuration Fundamentals	
Symptom: VDX comes up with default config.		
Condition: execution of "write erase" in past.		

Defect ID:	DEFECT000630220	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** IP Multicast	
Reported In Release: NOS6.0.2	**Technology:** IGMP - Internet Group Management Protocol	
Symptom: Multicast packet drop on mrouter port for short amount (< 1sec) of time.		
Condition: When igmp snooping is enabled and the last locally connected receiver leaves.		

Defect ID:	DEFECT000630310	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS7.0.1	**Technology:** DHCP - Dynamic Host Configuration Protocol	
Symptom: After unconfiguring and configuring dhcp relay address, DHCP offer is not forwarded to client from VDX.		
Condition: DHCP relay		

Defect ID:	DEFECT000630999	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Layer 2 Switching	
Reported In Release: NOS7.1.0	**Technology:** LAG - Link Aggregation Group	
Symptom: 1G SFP [SN 57-1000042-01] does not come online with fix speed		
Condition: SFP SN- 57-1000042-01: Remove cable, Remove SFP, Insert SFP,		

Defect ID:	DEFECT000631332	
Technical Severity: Medium	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Monitoring	
Reported In Release: NOS4.0.0	**Technology:** Syslog	
Symptom: Some Internal RAS log [Ex: BL-5282] are important and good to monitor those, but we don;t display internal RAS log on Console and we also don;t redirect them to syslog server.		
Condition: RAS log monitoring through Console or syslog.		

Defect ID:	DEFECT000631386	
Technical Severity: Medium	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Management	

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Reported In Release: NOS7.1.0	Technology: SNMP - Simple Network Management Protocol
Symptom: Unsupported snmp configuration like snmp v3 user exist in FIPS mode.	
Condition: FIPS mode has unsupported snmp configuration	

Defect ID: DEFECT000631440	
Technical Severity: Medium	**Probability:** High
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer
Reported In Release: NOS6.0.2	**Technology:** ARP - Address Resolution Protocol
Symptom: ARP is not learnt from the incoming packet on the source interface when /31 addressing is used.	
Condition: ARP learning when /31 addressing is used	

Defect ID: DEFECT000631591	
Technical Severity: Medium	**Probability:** Low
Product: Brocade Network OS	**Technology Group:** Security
Reported In Release: NOS5.0.1	**Technology:** AAA - Authentication, Authorization, and Accounting
Symptom: Unable to log into VDX after password change	
Condition: Some alpha numeric passwords having more than 24 character length will not allow the user to log on with the new password.	
Workaround: Create passwords with length less than 24 character.	

Defect ID: DEFECT000631759	
Technical Severity: Medium	**Probability:** High
Product: Brocade Network OS	**Technology Group:** VCS
Reported In Release: NOS7.2.0	**Technology:** Logical Chassis
Symptom: 100Mbps speed can be set on VDX6940-144S with CuSFP P/N 57-1000042-02, 57-1000042-01.	
Condition: Configuring 100Mbps speed on VDX6940-144S with CuSFP P/N 57-1000042-02, 57-1000042-01.	

Defect ID: DEFECT000632115	
Technical Severity: High	**Probability:** High
Product: Brocade Network OS	**Technology Group:** VCS
Reported In Release: NOS7.2.0	**Technology:** Logical Chassis
Symptom: Node cluster rejoin operation fails with VCS-1006 error. VCS-1006, ERROR, , Event: VCS node rejoin, Coordinator IP: <IP>, VCS ID: <id>, Status: rBridge ID <ID> failed to rejoin VCS cluster, Reason: Remote Location is not available.	
Condition: Cluster rejoin operation.	

Defect ID: DEFECT000632769	
Technical Severity: Low	**Probability:** Low
Product: Brocade Network OS	**Technology Group:** Security
Reported In Release: NOS7.1.0	**Technology:** Security Vulnerability
Symptom: Executing show commands(listed in defect) is allowed by default(for non-admin roles)	
Condition: Executing show commands(listed in defect) for non-admin roles	

Defect ID: DEFECT000633219	
Technical Severity: Medium	**Probability:** High
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer
Reported In Release: NOS7.1.0	**Technology:** VRRPv3 - Virtual Router Redundancy Protocol Version 3
Symptom: VDX experience unexpected reload due to DCMd daemon termination.	

Condition:	Execution of "sw0(config-vrrp-extended-group-1)#track network 0.0.0.0/0 priority 50" cause the issue.

Defect ID:	DEFECT000633384	
Technical Severity: High	Probability: Medium	
Product: Brocade Network OS	Technology Group: Layer 3 Routing/Network Layer	
Reported In Release: NOS7.1.0	Technology: OSPF - IPv4 Open Shortest Path First	
Symptom: Unexpected reload due to OSPF daemon termination.		
Condition: When same external LSA is received from multiple ASBRs.		

Defect ID:	DEFECT000633740	
Technical Severity: High	Probability: High	
Product: Brocade Network OS	Technology Group: Layer 2 Switching	
Reported In Release: NOS7.0.1	Technology: LAG - Link Aggregation Group	
Symptom: Port-channels in VDX switch may become stand alone and they will not be part of port channel redundancy group. This can cause a loop between VDX switches and other devices connected to edge ports in VCS.		
Condition: A loop can occur in VCS environment.		

Defect ID:	DEFECT000634094	
Technical Severity: High	Probability: High	
Product: Brocade Network OS	Technology Group: Data Center Fabric	
Reported In Release: NOS7.0.1	Technology: IP Fabric	
Symptom: short traffic outage while shut/no shut best BGP router.		
Condition: Having two adjacent BGP evpn router and shut/no shut one of the best BGP router.		

Defect ID:	DEFECT000634129	
Technical Severity: High	Probability: High	
Product: Brocade Network OS	Technology Group: Layer 3 Routing/Network Layer	
Reported In Release: NOS7.1.0	Technology: OSPF - IPv4 Open Shortest Path First	
Symptom: Route filtering using distribution list will not happen after HA failover.		
Condition: If distance for inter area route is not configured to non-default value and HA failover occurs.		

Defect ID:	DEFECT000634192	
Technical Severity: High	Probability: High	
Product: Brocade Network OS	Technology Group: Data Center Fabric	
Reported In Release: NOS7.0.1	Technology: IP Fabric	
Symptom: Tunnel terminated packets that generate the ARP's may keep looping across VCS nodes in the same VCS		
Condition: VDX puts incorrect source information cause the issue		

Defect ID:	DEFECT000634222	
Technical Severity: High	Probability: High	
Product: Brocade Network OS	Technology Group: Layer 2 Switching	
Reported In Release: NOS7.1.0	Technology: LAG - Link Aggregation Group	
Symptom: MAC movement notification frames are not sent.		
Condition: When a PRG configured active port channel recovers, if any physical interface other than the numerically lowest recovers first.		

Defect ID:	DEFECT000634673	
Technical Severity: High	Probability: Medium	
Product: Brocade Network OS	Technology Group: VPN	

Reported In Release: NOS7.0.1	Technology: EVPN - Ethernet VPN
Symptom: Frames on udp port 4789 are wrongly treated as vxlan packets and not subjected to tunnel source suppression in transit nodes	
Condition: Using of UDP port 4789	

Defect ID: DEFECT000634766	
Technical Severity: High	**Probability:** High
Product: Brocade Network OS	**Technology Group:** Management
Reported In Release: NOS7.0.0	**Technology:** Software Installation & Upgrade
Symptom: "no system-mode maintenance" CLI fails with operation failed.	
Condition: "no system-mode maintenance" CLI execution.	

Defect ID: DEFECT000635078	
Technical Severity: Medium	**Probability:** Medium
Product: Brocade Network OS	**Technology Group:** Management
Reported In Release: NOS7.0.1	**Technology:** CLI - Command Line Interface
Symptom: Rbridge-range command is enabled but it not recommended to execute as it needs more testing cycles.	
Condition: Execution of Rbridge-range command	

Defect ID: DEFECT000635101	
Technical Severity: Low	**Probability:** Low
Product: Brocade Network OS	**Technology Group:** IP Multicast
Reported In Release: NOS6.0.1	**Technology:** IGMP - Internet Group Management Protocol
Symptom: Memory leak in igmpd.	
Condition: When debug igmpd command is enabled and leads to error condition "Illegal multicast group address".	

Defect ID: DEFECT000635411	
Technical Severity: Medium	**Probability:** High
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer
Reported In Release: NOS7.1.0	**Technology:** BGP4 - IPv4 Border Gateway Protocol
Symptom: Routing Administrative distance not honored on 6940 border leaf using EVPN and BGP	
Condition: Routing Protocol running on 6940 border leaf using EVPN and BGP.	

Defect ID: DEFECT000635844	
Technical Severity: High	**Probability:** High
Product: Brocade Network OS	**Technology Group:** Layer 2 Switching
Reported In Release: NOS4.1.3	**Technology:** VLAN - Virtual LAN
Symptom: Newly added VLAN is showing up in RPVST disabled/discarding state on vLAG members.	
Condition: When STP is enabled on a PO interfaces, it is enabled only for vports and not for main physical/po interfaces for PVST/RPVST. In this scenario whenever a RBridge leaves cluster, STP module runs State Machine to re compute the topology and it can hit the issue.	

Defect ID: DEFECT000636734	
Technical Severity: Low	**Probability:** Low
Product: Brocade Network OS	**Technology Group:** Security
Reported In Release: NOS7.1.0	**Technology:** Security Vulnerability
Symptom: Openssl vulnerability CVE-2016-2177, CVE-2016-2180, CVE-2016-2183, CVE-2016-2182	
Condition: Openssl vulnerability	

Defect ID:	DEFECT000637538	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Data Center Fabric	
Reported In Release: NOS7.1.0	**Technology:** IP Fabric	
Symptom: In a IP fabric topology, the leaf (or border leaf) does not forward L3 packets (e.g. ICMP) destined to hosts on to peer leaf nodes. This causes the end to end L3 traffic between leaf nodes to fail.		
Condition: The prefix route learnt over evpn-bgp was incorrectly programed in Linux kernel, thereby forwarding traffic to wrong destination.		
Recovery: Issuing following command at NOS should help to recover from the problem state. clear arp no-refresh vrf <vrf-name>		

Defect ID:	DEFECT000637857	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Layer 2 Switching	
Reported In Release: NOS6.0.2	**Technology:** VLAN - Virtual LAN	
Symptom: VDX do not learn MAC addresses.		
Condition: VDX stops learning MAC addresses when specific configuration exist and it has reached to certain number of lines in configuration.		
Workaround: 1. configure "mac-address-table consistency-check suppress" 2. reload the affected switches or 1. configure dummy vlan 2. Assign it to interface/Po 3. reload		
Recovery: The same above steps works we may expect unexpected reloads during this		

Defect ID:	DEFECT000638990	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** VCS	
Reported In Release: NOS7.0.1	**Technology:** Logical Chassis	
Symptom: VDX is not able to join cluster and stuck at "Awaiting Rejoin" state after reload.		
Condition: VDX has "switchport port-security" configuration and reload occur in VCS cluster.		

Closed with code changes for NOS v7.1.0

This section lists software defects with Critical, High, and Medium Technical Severity closed with a code change as November 22, 2016 in Network OS v7.1.0.

Defect ID:	DEFECT000440702	
Technical Severity: Medium	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS3.0.1	**Technology:** Static Routing (IPv4)	
Symptom: User will be allowed to configure virtual interfaces for all VLANs except the default VLAN 1		
Condition: Configuring virtual interfaces for VLANs		

Defect ID:	DEFECT000443595	
Technical Severity: Medium	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** IP Multicast	

Reported In Release: NOS3.0.0	Technology: IGMP - Internet Group Management Protocol
Symptom: The command "show ip igmp groups detail" may not show updated information (uptime & last reported values) about the learnt groups.	
Condition: This issue is observed only in the show command output & no functionality is impacted.	

Defect ID: DEFECT000471058	
Technical Severity: Medium	**Probability:** Low
Product: Brocade Network OS	**Technology Group:** Management
Reported In Release: NOS3.0.1	**Technology:** SNMP - Simple Network Management Protocol
Symptom: When SNMP with IPv6 is configured & SNMP Manager sends 2 get-requests divided in separate fragments, then "ICMPv6 Destination Unreachable" is returned from the switch.	
Condition: IPv6 & SNMP configuration	

Defect ID: DEFECT000490740	
Technical Severity: Medium	**Probability:** Medium
Product: Brocade Network OS	**Technology Group:** Management
Reported In Release: NOS4.0.1	**Technology:** Configuration Fundamentals
Symptom: Setting 'deny ip any any' ACL does not prevent telnet access via management port as expected.	
Condition: Setting following ACL does not prevent telnet access via management port as expected: sw0# show access-list ip ACL001 in ip access-list ACL001 on Management 1/0 at Ingress (From User) seq 10 deny ip any any (Active) seq 20 permit tcp any any (Active)	

Defect ID: DEFECT000518780	
Technical Severity: High	**Probability:** High
Product: Brocade Network OS	**Technology Group:** Management
Reported In Release: NOS4.1.3	**Technology:** VMWare
Symptom: NSM crashes while configuring Port Group name with 128 or more character in vCenter.	
Condition: PG is configured and soon after that NSM Daemon crash is observed.	
Workaround: So not configure a port-group name with length more than 127 characters.	
Recovery: Once a NSM crash is seen, immediately delete the PG which was more than 128 characters long. Wait for switch to reboot.	

Defect ID: DEFECT000525575	
Technical Severity: Medium	**Probability:** High
Product: Brocade Network OS	**Technology Group:** IP Multicast
Reported In Release: NOS4.1.3	**Technology:** PIM - Protocol-Independent Multicast
Symptom: If there are multiple subnets configured on an interface, PIM First Hop Router mechanism only works for the subnet with the highest IP address.	
Condition: PIM with multiple subnets on an interface.	

Defect ID: DEFECT000532352	
Technical Severity: Medium	**Probability:** High
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer
Reported In Release: NOS5.0.1	**Technology:** OSPFv3 - IPv6 Open Shortest Path First
Symptom: Show IPv6 OSPF neighbor is showing some special characters in the o/p.	
Condition: show IPv6 OSPF neighbor is showing some special characters in the o/p when there is no output to be printed.	

Defect ID: DEFECT000535663

Technical Severity: Medium	**Probability:** Medium
Product: Brocade Network OS	**Technology Group:** Layer 2 Switching
Reported In Release: NOS5.0.1	**Technology:** VXLAN - Virtual Extensible LAN
Symptom: VDX unexpectedly reloads when it connects to an NSX controller when a high scale of MAC addresses are injected over tunnel. It continues to reload unless booted with factory defaults.	
Condition: VDX connects to NSX controller and discovers more than 70000 MACs.	
Recovery: Boot with factory default configuration.	

Defect ID: DEFECT000548633	
Technical Severity: High	**Probability:** Medium
Product: Brocade Network OS	**Technology Group:** VCS
Reported In Release: NOS5.0.1	**Technology:** Logical Chassis
Symptom: IPv6 clients will not be able to fetch IPv6 addresses from DHCP server	
Condition: The issue is observed after re-configuration of IPv6 address on Ve interface	
Workaround: Toggle the Ve interface by "shut" followed by "no shut"	

Defect ID: DEFECT000549174	
Technical Severity: High	**Probability:** High
Product: Brocade Network OS	**Technology Group:** Security
Reported In Release: NOS5.0.1	**Technology:** ACLs - Access Control Lists
Symptom: Continuious reload of switch may be observed on VDX6740 when static MACs are configured on physical interface	
Condition: The issue is observed in a Logical chassis cluster consisting of VDX6740 and VDX8770, if static MACs are configured on the physical interface of a LC of VDX8770. Note that issue is not observed when static MACs are configured on port-channels. Under these conditions if one of the VDX6740s are reloaded (or any action resulting in config replay), the VDX6740 that is reloaded might go into a continuous reload.	
Workaround: Remove any static MACs configured on the VDX8770 pointing to physical interfaces. Static MACs towards port-channels will not result in this issue.	

Defect ID:	DEFECT000551918	
Technical Severity: High		**Probability:** High
Product: Brocade Network OS		**Technology Group:** Layer 3 Routing/Network Layer
Reported In Release: NOS6.0.0		**Technology:** BGP4 - IPv4 Border Gateway Protocol
Symptom: Termination of Pimd process when multicast routes are aging out		
Condition: Issue is seen when PIM has learnt multiple group ranges for RP.		

Defect ID:	DEFECT000555460	
Technical Severity: Low		**Probability:** Low
Product: Brocade Network OS		**Technology Group:** Layer 3 Routing/Network Layer
Reported In Release: NOS5.0.1		**Technology:** IP Addressing
Symptom: 'ICMP unreachables are always sent' displayed in the configuration even when disabled in the configuration		
Condition: Default ICMP unreachable is not set		

Defect ID:	DEFECT000556411	
Technical Severity: Medium		**Probability:** High
Product: Brocade Network OS		**Technology Group:** Layer 2 Switching
Reported In Release: NOS6.0.1		**Technology:** FCoE - Fibre Channel over Ethernet
Symptom: The RASLOG FCPH-1003 generated on console wrongly shows interface type as "Fi" instead of "Fcoe" with wrong tuple information. Functionality is not broken, only port type in raslog is printed wrongly.		
Condition: When logins with Duplicate WWN are attempted on multiple ports at same time with Ethernet port being the port on which second login is attempted.		

Defect ID:	DEFECT000560160	
Technical Severity: Medium		**Probability:** Low
Product: Brocade Network OS		**Technology Group:** Management
Reported In Release: NOS5.0.1		**Technology:** Inband Management
Symptom: Pings to VE interfaces are slow after upgrade		
Condition: In rare upgrade scenarios.		
Recovery: Shut/No shut the affected interface where the ping is seen slow or have a reload.		

Defect ID:	DEFECT000560868	
Technical Severity: Medium		**Probability:** Medium
Product: Brocade Network OS		**Technology Group:** Layer 3 Routing/Network Layer
Reported In Release: NOS5.0.1		**Technology:** IP Addressing
Symptom: IP directed-broadcast feature is not working as expected.		
Condition: With a regular topology, the functionality did not work as expected.		

Defect ID:	DEFECT000562543	
Technical Severity: High		**Probability:** High
Product: Brocade Network OS		**Technology Group:** Management
Reported In Release: NOS5.0.2		**Technology:** SNMP - Simple Network Management Protocol
Symptom: IP ACL for SNMP community and v3 user config lost after loading the config back to running-config from back-up config		
Condition: When we do config upload of running configuration with SNMP IP ACL's applied on SNMP community/ v3 users.		

Defect ID:	DEFECT000562722	
Technical Severity: Medium	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Traffic Management	
Reported In Release: NOS5.0.2	**Technology:** Rate Limiting and Shaping	
Symptom: ipv6 icmpv6 rate-limiting does not work per interface		
Condition: The above situation occurs under two conditions 　　　　1. More than one ipv6 interface 　　　　2. Different rate-limiting value configured 　　　　When both of the above conditions met, then the recently configured rate-limiting value applied to all interfaces		

Defect ID:	DEFECT000562737	
Technical Severity: Low	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Network Automation and Orchestration	
Reported In Release: NOS4.0.1	**Technology:** OpenStack Integration	
Symptom: SNMP trap of topology change will be sent from the switch, when switchport configuration is done on an interface where spanning-tree is shutdown.		
Condition: Topology change trap will be observed, when switchport configuration is done on an interface in spanning-tree shutdown state.		

Defect ID:	DEFECT000566249	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Traffic Management	
Reported In Release: NOS6.0.1	**Technology:** Rate Limiting and Shaping	
Symptom: IPv4 and IPv6 ICMP rate-limiting does not work after HA failover.		
Condition: HA is required for this problem and executing CLI will fix issue.		

Defect ID:	DEFECT000567339	
Technical Severity: Medium	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS7.0.0	**Technology:** ARP - Address Resolution Protocol	
Symptom: debug arp packet output shows destination mac address of ARP request as ffff:ffff:ffff, instead of 0000:0000:0000		
Condition: debug arp packet command is executed		

Defect ID:	DEFECT000568542	
Technical Severity: Medium	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS5.0.2	**Technology:** Static Routing (IPv4)	
Symptom: static route and next-hop gateway on a virtual Ethernet interface should work fine		
Condition: proxy ND ipv6 not supported		

Defect ID:	DEFECT000570331	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** IP Multicast	
Reported In Release: NOS5.0.2	**Technology:** PIM - Protocol-Independent Multicast	
Symptom: Traffic loss will be seen if there is a change in RP(Rendezvous Point) address configuration		
Condition: if there is a change in RP(Rendezvous Point) address configuration in the running system		

Defect ID:	DEFECT000570673	
Technical Severity: Medium	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Layer 2 Switching	
Reported In Release: NOS6.0.1	**Technology:** UDLD - Uni-Directional Link Detection	
Symptom: UDLD blocks links which are connected using certain breakout ports between different brocade devices such as between VDX and CER.		
Condition: UDLD blocks the link after detecting mismatch between locally stored vs received port numbers in UDLD PDUs.		

Defect ID:	DEFECT000572393	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS6.0.1	**Technology:** OSPFv3 - IPv6 Open Shortest Path First	
Symptom: Not able to remove ospf area 0.0.0.0 in ipv6 ospf router user vrf		
Condition: "%Error" mesaage while remove ospf area 0.0.0.0 in ipv6 ospf router under user vrf eventhough the interface doesn't have OSPF configuration		

Defect ID:	DEFECT000573107	
Technical Severity: Medium	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Security	
Reported In Release: NOS6.0.1	**Technology:** ACLs - Access Control Lists	
Symptom: When we applied IP ACL on SNMP community/user configuration, then wildcard subnet mask on IP ACL is not working on SNMP. But subnet mask on IP ACL is working fine on SNMP.		
Condition: When we have wildcard subnet mask on IP ACL applied for SNMP configuration, then we will observe this issue.		

Defect ID:	DEFECT000573422	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Monitoring	
Reported In Release: NOS6.0.2	**Technology:** Port Mirroring	
Symptom: SPAN session fails when the destination port is deleted and rejoins the cluster.		
Condition: When an interface(s) of a node is set as a destination in a SPAN session and the node is removed from the VCS. Removal of the node leaves the SPAN session in un-defined state, causing problems with new SPAN destination configuration.		
Workaround: Remove the SPAN sessions that were monitoring the interfaces whose node was removed from VCS, and create sessions.		

Defect ID:	DEFECT000574438	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Network Automation and Orchestration	
Reported In Release: NOS7.0.0	**Technology:** OpenStack Integration	
Symptom: VDX 6940-144s 40 GbE ports 97 - 108 may flap after changing frame size and/or nframes using noscli "diag dport setargs" command.		
Condition: VDX 6940-144s 40 GbE ports 97 - 108 may flap after changing framesize and/or nframes noscli "diag dport setargs" command.		
Workaround: Shut/no shut the port if persistent link flapping occurs.		
Recovery: Shut/no shut the port if persistent link flapping occurs.		

Defect ID:	DEFECT000574645	
Technical Severity: Medium	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS6.0.2	**Technology:** SNMP - Simple Network Management Protocol	
Symptom: The "fruStatusChanged" trap may be received more than once while power ON the line cards in VDX8770-4 and VDX8770-8 platforms.		
Condition: The "fruStatusChanged" trap may be received more than once while power ON the line cards.		

Defect ID:	DEFECT000576391	
Technical Severity: High	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS7.0.0	**Technology:** SNMP - Simple Network Management Protocol	
Symptom: The HA failover start trap may not be seen for the HA fail over event, for user defined VRF in VDX-6740 platforms.		
Condition: The HA failover start trap may not be seen for user defined VRF, for HA fail over event.		

Defect ID:	DEFECT000577171	
Technical Severity: Medium	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Network Automation and Orchestration	
Reported In Release: NOS7.0.0	**Technology:** OpenStack Integration	
Symptom: The NOSCLI command "show openflow interface" does not reflect the actual operating speed of the OpenFlow interface		
Condition: If the interface speed has been manually changed to something else which is not same as suggested via interface name		

Defect ID:	DEFECT000577563	
Technical Severity: Medium	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Network Automation and Orchestration	
Reported In Release: NOS6.0.2	**Technology:** OpenStack Integration	
Symptom: On upgrade to nos5.0.2b release, certain interfaces may encounter following error message & will remain admin-down: <Date-Timestamp>, [NSM-1028], 7885, M2 | Active | DCE, ERROR, <Host-name>, Incompatible SFP transceiver for interface TenGigabitEthernet 1/1/17 is detected.		

Condition: Issue encounters on upgrade / downgrade of VDX8770 to nos5.0.2b release using following interfaces:
 	
      Linecard 48X10G:
(a)   Links using Copper SFP's (1G) configured with "speed 1000"
(b)   Links using Fiber Optics (1G and 10G) configured with "speed" command
(c)   Links using Twinax cables (10G)
      Linecard 48X1G:
(d)   Links using Copper SFP's (1G)
(e)   Links using Fiber Optics (1G only)
Linecard 6X100G:
(f) Links using 100G Optics		

Defect ID:	DEFECT000577822	
Technical Severity: Medium	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Network Automation and Orchestration	
Reported In Release: NOS5.0.1	**Technology:** OpenStack Integration	
Symptom: Errors [crc, encoding...] on 8G links.		
Condition: The issue is only seen on 8G links to 3Par storage devices using 16G SFPs		
Workaround: Changing the SFP to 8G SFP and running at 8G speed the issue was not seen.		

Defect ID:	DEFECT000577928	
Technical Severity: Medium	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Monitoring	
Reported In Release: NOS7.0.0	**Technology:** MAPS - Monitoring and Alerting Policy Suite	
Symptom: Slot number need to be verified while creating groups on VDX8770.		
Condition: Currently the API which converts slot/port to port index doesn't throw error while creating group on VDX8770.		

Defect ID:	DEFECT000578258	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Data Center Fabric	
Reported In Release: NOS7.0.0	**Technology:** IP Fabric	
Symptom: Traffic loss may be observed for destination subnets under non-default VRF advertised over BGP-EVPN using L3VNI.		
Condition: Leaf nodes extending the VRF over BGP-EVPN are not advertising any prefix route.		
Workaround: One of following options may be chosen: (1) Redistribute connected routes under VRF into BGP VRF. (2) Configure static IP route and redistribute into BGP VRF. (3) Configure network or static-network under BGP VRF instance.		

Defect ID:	DEFECT000578492	
Technical Severity: Medium	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS5.0.2	**Technology:** Inband Management	
Symptom: "show interface status" incorrectly shows the status of some port channels as "connected" even though they are down due to all member interfaces down. No functional impact except the incorrect display.		
Condition: Rarely happens due to a corner case condition for some port channels		
Workaround: "show interface" command can be used to see the correct status.		

Defect ID:	DEFECT000578730	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS7.0.0	**Technology:** BGP4 - IPv4 Border Gateway Protocol	
Symptom: 'Message Generic Error' will be encountered when configuring "extend vlan add <vlan string>" command with large number of vlans on VDX6940 device.		
Condition: Adding vlans with <vlan string> exceeding 1000 characters for overlay gateway using layer2 extension.		
Workaround: Split "extend vlan add <vlan string>" into multiple commands so that <vlan string> does not exceed 1000 characters in a given command.		

Defect ID:	DEFECT000579138	
Technical Severity: Medium	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** VCS	
Reported In Release: NOS6.0.1	**Technology:** Logical Chassis	
Symptom: Very rare case chassis name set CLI fails.		
Condition: After upgrade to 6.0.1		
Recovery: Reload and re-apply the CLI		

Defect ID:	DEFECT000579176	
Technical Severity: High	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS7.0.0	**Technology:** OSPF - IPv4 Open Shortest Path First	
Symptom: BFD may not work over Layer 3 Port Channels when the gateway address and nexthop pointing to port channel overlap		
Condition: Running BFD with Layer 3 Port Channels		

Defect ID:	DEFECT000579234	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Layer 2 Switching	
Reported In Release: NOS7.0.0	**Technology:** VLAN - Virtual LAN	
Symptom: Multicast traffic destined for static multicast address, will flood, if the mac is configured on remote node of VCS.		
Condition: Static multicast MAC is configured in a remote node within a VCS, with no local interface part of the group.		

Defect ID:	DEFECT000579664	
Technical Severity: Medium	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Network Automation and Orchestration	
Reported In Release: NOS5.0.1	**Technology:** OpenStack Integration	
Symptom: "waiting for pending actions to exit" warning message appears on console session and eventually VDX experience unexpected reload.		
Condition: When user query to get any running-config using netconf and if password contains a special char like ";" , VDX throws "waiting for pending actions to exist" error and DCM gets terminated eventually.		

Defect ID:	DEFECT000579695	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS7.0.0	**Technology:** IP Addressing	
Symptom: SNMP walk on the IP-FORWARD-MIB may throw an error		
Condition: SNMP operations on IP-FORWARD-MIB		

Defect ID:	DEFECT000579835	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS7.0.0	**Technology:** SNMP - Simple Network Management Protocol	
Symptom: SNMP Set operation on Port-channel interface for the ipv6RouterAdvertLinkMTU object in ipv6RouterAdvertTable in RFC 4293 will fail. The SNMP Set operation will fail for other objects also in this table.		
Condition: The SNMP Set operation will fail only on port-channel interfaces.		
Workaround: In order to configure the ipv6RouterAdvertLinkMTU, the corresponding CLI "ipv6 nd mtu" needs to be used.		

Defect ID:	DEFECT000579904	
Technical Severity: Medium	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Security	
Reported In Release: NOS5.0.2	**Technology:** AAA - Authentication, Authorization, and Accounting	
Symptom: Command set field on the Windows based TACACS server is empty		
Condition: 1. When TACACS server is windows based 2. Accounting is enabled		

Defect ID:	DEFECT000580478	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Layer 2 Switching	
Reported In Release: NOS7.0.0	**Technology:** VLAN - Virtual LAN	
Symptom: Sometimes, SFP removal messages are displayed incorrectly even though the media is present, when a chassis disable is executed after failover or ISSU.		
Condition: Media presence check is incorrect on the new active partition after failover or ISSU		
Recovery: 'no shut' on the interface would make the correct Media presence state consistent.		

Defect ID:	DEFECT000581205	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS7.0.0	**Technology:** SNMP - Simple Network Management Protocol	
Symptom: In rare case, SNMPv3 traps will not be received when any host is configured as SNMPv3 trap recipient under RBridge mode.		
Condition: Configure SNMPv3 host under RBridge mode.		
Recovery: reconfigure the specific SNMPv3 host config under RBridge mode.		

Defect ID:	DEFECT000581259	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Data Center Fabric	
Reported In Release: NOS7.0.0	**Technology:** IP Fabric	
Symptom: Even though overlay-gateway configuration is deactivated, BGP discovered dynamic tunnels are still present. Traffic loss will be observed if remote Leaf nodes send traffic over dynamic tunnels.		
Condition: Overlay-gateway configuration is deactivated using "no activate" command.		
Workaround: Avoid deactivating the overlay-gateway using "no activate" command. Instead detach the RBridge from overlay gateway configuration.		

Defect ID:	DEFECT000582010	
Technical Severity: Medium	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS5.0.2	**Technology:** ARP - Address Resolution Protocol	
Symptom: Under rare conditions, some of the hosts may lost IP connectivity with the VDX switch acting as a layer-3 gateway.		
Condition: This would occur if the MAC to the IP association of a VDX learnt ARP changes. ie.. For the same IP address, the MAC changes from say MAc1 to Mac2.		
Recovery: "clear arp no-refresh" would clean the ARP table and recover from the problem state.		

Defect ID:	DEFECT000582119	
Technical Severity: High	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** IP Multicast	
Reported In Release: NOS7.0.0	**Technology:** IGMP - Internet Group Management Protocol	
Symptom: The tunnel terminated IGMP frames sent to other nodes can loop back to the source node. The CPU generated IGMP frames are not getting source suppressed in active-active gateway.		
Condition: This happens in specific tunnel topology with multicast root RBridge and BUM forwarder. The tunnel terminated IGMP frames sent to other nodes are trapped and flood back on the VLAN by control path. These packets can loop back to source node.		
Recovery: Shut down the tunnel.		

Defect ID:	DEFECT000582797	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS7.0.0	**Technology:** Configuration Fundamentals	
Symptom: Switch does not responds to any user inputs.		
Condition: Using 'PUT' request to update BGP configuration instead of using 'PATCH' request (when router BGP has neighbor associated to a peer group) causes switch not to respond to further user commands.		
Workaround: Use PATCH request instead of PUT to update any configuration as documented in Brocade Network OS REST API Guide.		

Defect ID:	DEFECT000582847	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS7.0.0	**Technology:** SNMP - Simple Network Management Protocol	
Symptom: On a VDX 6940, when a snmpwalk is done on ifTable in the IF MIB, only the first 36 interfaces are fetched. Remaining interfaces are not retrieved.		
Condition: This issue is seen only on VDX 6940.		

Defect ID:	DEFECT000583123	
Technical Severity: Low	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** VCS	
Reported In Release: NOS5.0.2	**Technology:** Logical Chassis	
Symptom: There is a time delay(debounce-timer delay) of approximately 1 sec between underlay network down and tunnel down because of which traffic impact may occur for this debounce-timer duration .		
Condition: The above mentioned time delay happens whenever tunnel goes down. Now customer is provided with the following knob to suppress the debounce-timer delay. [no] system tunnel suppress-debounce		

Defect ID:	DEFECT000583245	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Monitoring	
Reported In Release: NOS7.0.0	**Technology:** Sysmon	
Symptom: The event-handler trigger-mode options "on-first-instance" and "only-once" incorrectly allows one more execution of an action to be triggered.		
Condition: Activate an event-handler with trigger-mode set to "on-first-instance" or "only-once".		

Defect ID:	DEFECT000583349	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS7.0.0	**Technology:** Licensing	
Symptom: In VDX6940-144S, 100G mode configuration replay fails when executing "copy <file> running-config" because DPOD license has not been reserved.		
Condition: This issue will happen only if the DPOD license has not been reserved.		
Workaround: Manually reserve the DPOD license and then run "copy <file> running-config"		
Recovery: Manually reserve the DPOD license and then run "copy <file> running-config"		

Defect ID:	DEFECT000583626	
Technical Severity: Medium	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS7.0.0	**Technology:** SNMP - Simple Network Management Protocol	
Symptom: Error message is not thrown, if more than the maximum number of SNMP V3 users configured with both global and local configurations combined together.		
Condition: If the SNMP V3 users configured more than the maximum number of supported, for both global and local configurations combined together then the error message is not thrown.		

Defect ID:	DEFECT000584215	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Layer 2 Switching	
Reported In Release: NOS5.0.2	**Technology:** xSTP - Spanning Tree Protocols	
Symptom: IEEE BPDU packets are flooded from one VF to another, in the absence of "spanning-tree ieee-bpdu limit-vlan-flood" configuration.		
Condition: IEEE BPDU packet are received at the ingress port of a switch configured with VFs.		

Defect ID:	DEFECT000584364	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Monitoring	
Reported In Release: NOS7.0.0	**Technology:** Syslog	
Symptom: User can configure the user defined VRF in cluster, though the user defined VRF is not configured on all the RBridge's.		
Condition: In cluster though the VFR is not configured on all the RBridge's, it is allowing to configure syslog-server on user defined VRF.		

Defect ID:	DEFECT000584668	
Technical Severity: High		**Probability:** Low
Product: Brocade Network OS		**Technology Group:** Layer 3 Routing/Network Layer
Reported In Release: NOS6.0.2		**Technology:** IP Addressing
Symptom: The access-list configured for the interface with "Routed" keyword may not act upon the traffic flows on ingress destined towards the VRRP-E VIP.		
Condition: Applicable for the traffic destined to VRRP-E Virtual-mac coming on ingress & access-list using "Routed" keyword.		
Workaround: The traffic flows destined towards VE MAC will not be impacted & thus hosts can be configured to point to VE IP address as default gateway. Alternatively, remove the "routed" keyword in the access-list.		

Defect ID:	DEFECT000584709	
Technical Severity: Medium		**Probability:** Medium
Product: Brocade Network OS		**Technology Group:** Layer 2 Switching
Reported In Release: NOS7.0.0		**Technology:** VLAN - Virtual LAN
Symptom: Physical or port-channel is not added back to normal VLAN in a particular sequence.		
Condition: Physical or port-channel is not added back to normal VLAN after changing a private VLAN to a normal VLAN on a primary VLAN		
Workaround: Delete private VLAN and create the same again instead of changing the type on a private VLAN.		
Recovery:		

Defect ID:	DEFECT000584733	
Technical Severity: Medium		**Probability:** High
Product: Brocade Network OS		**Technology Group:** Management
Reported In Release: NOS5.0.1		**Technology:** Management GUI
Symptom: Firmware downgrade from NOS6.x to NOS5.x using BNA display below error in BNA even though firmware download process is successful on VDX. Download Failed: (Unknow Error Code: 1) Other Errors: Firmware Image download reboot operation has timed out		
Condition: Firmware downgrade from NOS6.x to NOS5.x using BNA cause the issue.		

Defect ID:	DEFECT000584922	
Technical Severity: High		**Probability:** Medium
Product: Brocade Network OS		**Technology Group:** Security
Reported In Release: NOS6.0.2		**Technology:** SSH - Secure Shell
Symptom: Shutting Telnet server on Active and Standby partition fails		
Condition: High Availability fail over		

Defect ID:	DEFECT000585043	
Technical Severity: Medium		**Probability:** High
Product: Brocade Network OS		**Technology Group:** Layer 3 Routing/Network Layer
Reported In Release: NOS7.0.0		**Technology:** BGP4+ - IPv6 Border Gateway Protocol
Symptom: When multi-hop BFD session is created, default BFD interval will be shown for loopback interface in show BFD output		
Condition: Default BFD interval will be shown for loopback interface in show bfd output		

Defect ID:	DEFECT000585337
Technical Severity: High	**Probability:** Low
Product: Brocade Network OS	**Technology Group:** Management
Reported In Release: NOS7.0.0	**Technology:** NTP - Network Time Protocol
Symptom: Configuring more than one NTP server with same IP address but different VRF name will always use the first VRF name in the list to sync with NTP server. Also removing one of the NTP server entry fails to remove it completely	
Condition: This issue is introduced as part of NTP VRF support. Issue will be seen with more than one NTP server with same IP address and different VRF name.	
Workaround: Remove all NTP servers and configure the desired servers again	

Defect ID:	DEFECT000585392
Technical Severity: High	**Probability:** Medium
Product: Brocade Network OS	**Technology Group:** Management
Reported In Release: NOS7.0.0	**Technology:** CLI - Command Line Interface
Symptom: BNA unable to discover NOS switch, when NOS switch is connected to a FCR.	
Condition: 1.Have a setup with VCS connected to FCR 2. Install BNA 14.0.1 3. Shift to IP tab. 4. In Discovery dialog, add IP of one of the VCS switches and click okay. 5. Observe the device is not discovered and shows "Discovery Failed" message.	

Defect ID:	DEFECT000585422
Technical Severity: High	**Probability:** Medium
Product: Brocade Network OS	**Technology Group:** VCS
Reported In Release: NOS7.0.0	**Technology:** Logical Chassis
Symptom: IPv6 traffic loss since neighbor resolution fails, as neighbor solicitation packet forward might fail if it is switched over VDX6940.	
Condition: IPv6 traffic that ingress on a specific set of ports which are serviced by odd numbered RTEs on VDX6940 platform will not be forwarded properly.	
Workaround: Use ports that are part of trunk group 3 and 4 for VDX6940-144s or Use ports that are part of trunk group 1 and 4 for VDX6940-36Q platform.	

Defect ID:	DEFECT000585445
Technical Severity: High	**Probability:** Medium
Product: Brocade Network OS	**Technology Group:** Data Center Fabric
Reported In Release: NOS7.0.0	**Technology:** Logical Chassis
Symptom: Some 40 GbE ports on VDX 6940-144S may not come online after cold boot.	
Condition: Some 40 GbE ports on VDX 6940-144S may not come online after cold boot.	
Workaround: Execute noscli command shut / no shut on the 40 GbE port to bring it online.	
Recovery: Execute noscli command shut / no shut on the 40 GbE port to bring it online.	

Defect ID:	DEFECT000585634
Technical Severity: High	**Probability:** Low
Product: Brocade Network OS	**Technology Group:** Data Center Fabric
Reported In Release: NOS7.0.0	**Technology:** VCS Fabric
Symptom: On consecutive reboot certain ports may be shown administratively down.	
Condition: Multiple switch reboots.	
Recovery: Enable the port to administratively up.	

Defect ID:	DEFECT000585723
Technical Severity: High	**Probability:** Medium
Product: Brocade Network OS	**Technology Group:** Management
Reported In Release: NOS7.0.0	**Technology:** SNMP - Simple Network Management Protocol
Symptom: MIB walk for IP Forwarding MIB will return with an error with unnumbered interfaces.	
Condition: MIB walk of IP Forwarding MIB and has ECMP routes with unnumbered/L3 VNI interfaces will lead to error.	

Defect ID:	DEFECT000585818
Technical Severity: Low	**Probability:** Low
Product: Brocade Network OS	**Technology Group:** Management
Reported In Release: NOS7.0.0	**Technology:** Configuration Fundamentals
Symptom: REST GET request fails to retrieve an empty leaf	
Condition: When 'cli-show-no' annotation is used along with the cli-run-template to customize the display of an empty leaf in the 'show running config', the same might not be retrieved through the REST GET request.	

Defect ID:	DEFECT000585895
Technical Severity: High	**Probability:** High
Product: Brocade Network OS	**Technology Group:** Network Automation and Orchestration
Reported In Release: NOS7.0.0	**Technology:** OpenStack Integration
Symptom: VDX 6940 and 6940-144S ports may not come online after converting from 40 GbE to breakout mode 4 x 10 GbE.	
Condition: VDX 6940 and 6940-144S ports may not come online after converting from 40 GbE to breakout mode 4 x 10 GbE.	
Workaround: Execute noscli shut / no shut commands	
Recovery: Execute noscli shut / no shut commands	

Defect ID:	DEFECT000585903
Technical Severity: Medium	**Probability:** Medium
Product: Brocade Network OS	**Technology Group:** Monitoring
Reported In Release: NOS7.0.0	**Technology:** MAPS - Monitoring and Alerting Policy Suite
Symptom: IPMAPS Custom policy modifications are not reflected.	
Condition: IPMAPS Custom policy modifications are not dynamically reflected.	
Workaround: Revert to default policy, and then reapply custom policy. Run CLI "enable policy <policy_name> actions <actions_list>" then we can re-enable the same policy to reflect the changes made. Here actions_list can be same as what was already configured.	

Defect ID:	DEFECT000585927	
Technical Severity: Medium	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Monitoring	
Reported In Release: NOS6.0.1	**Technology:** Port Mirroring	
Symptom: Mirrored VXLAN packets outer header was getting removed while going out on destination mirror port. This gives misleading information when validating the VXLAN mirroring. The data path traffic goes out properly but mirrored copy has the outer header stripped only in VXLAN frames.		
Condition: The VXLAN packets outer header is not handled properly and causing the stripped packet to go out on destination mirror port		
Recovery: This is not functional data path issue, but mirrored information shows wrong details.		

Defect ID:	DEFECT000585960	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Data Center Fabric	
Reported In Release: NOS7.0.0	**Technology:** VCS Fabric	
Symptom: 40G Interface is administratively (or) protocol down with FFDC raslogs		
Condition: Admin operations on 40G Interface.		
Recovery: Shut/no-shut both interfaces on either side of the link		

Defect ID:	DEFECT000585970	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS7.0.0	**Technology:** VRRPv2 - Virtual Router Redundancy Protocol Version 2	
Symptom: On VDX 8770 switch, maximum VRRPv2 and VRRPv3 sessions supported on an interface are 16 in NOS6.0.x. This limit got increased to 32 in NOS7.0.0. Firmware downgrade from NOS7.0.0 to NOS6.0.x need to be blocked in case if more that 16 sessions are present on an interface.		
Condition: Issue can be seen if more that 16 VRRPv2 and VRRPv3 sessions are configured on an interface and firmware is downgraded from NOS7.0.0 to NOS6.0.x. In this case only 16 sessions will get enabled and rest will be disabled.		
Workaround: As a workaround user should delete/unconfigure more than 16 VRRPv2/VRRPv3 sessions present on an interface in NOS7.0.0 before downgrading it to NOS6.0.x.		

Defect ID:	DEFECT000586001	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS7.0.0	**Technology:** ARP - Address Resolution Protocol	
Symptom: IPv4 DHCP relay packets forwarded through a VxLAN tunnel is trapped but not forwarded unless ARP is forcefully resolved.		
Condition: Running DHCP Relay in IP Fabric EVPN.		
Workaround: Resolve ARP forcefully.		

Defect ID:	DEFECT000586125	
Technical Severity: Medium	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Data Center Fabric	
Reported In Release: NOS7.0.0	**Technology:** Logical Chassis	
Symptom: ISL between VDX8770 and VDX6940 could be flapping continuously.		
Condition: One side of the link connects to VDX8770 from VDX 6940		
Workaround: Toggle the flapping ISL link by doing "shutdown" and "no shutdown" of the ports.		

Defect ID:	DEFECT000586178	
Technical Severity: Medium	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** VCS	
Reported In Release: NOS7.0.0	**Technology:** Logical Chassis	
Symptom: Non-existent port-channel shows up in "show fcoe interface ethernet"		
Condition: 1. Create a port-channel 　　　　　　2. Add members to it and make it fcoe-provisioned 　　　　　　3. Delete the port-channel		
Workaround: Remove FCOE provisioning from port-channel before deleting it		

Defect ID:	DEFECT000586205	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Monitoring	
Reported In Release: NOS7.0.0	**Technology:** Syslog	
Symptom: Syslog server not working via inband under def-vrf, mgmt.-vrf and user-vrf, all having different IP address		
Condition: Configure inband under def-vrf, mgmt.-vrf and user-vrf for syslog server.		

Defect ID:	DEFECT000586230	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** VCS	
Reported In Release: NOS7.0.0	**Technology:** AMPP - Automatic Migration of Port Profiles	
Symptom: System goes for unexpected reboot		
Condition: More than 8000 profiled and non-profiled mac addresses are learnt on profiled port and all these flows are moving across the ports.		

Defect ID:	DEFECT000586252	
Technical Severity: Medium	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS7.0.0	**Technology:** Configuration Fundamentals	
Symptom: Physical or port-channel is not added back to normal VLAN in a particular sequence.		
Condition: Physical or port-channel is not added back to normal VLAN after changing a private VLAN to a normal VLAN on a primary VLAN.		
Workaround: Delete private VLAN and create the same again instead of changing the type on a private VLAN.		

Defect ID:	DEFECT000586577	
Technical Severity: Medium	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS6.0.1	**Technology:** Multi-VRF	
Symptom: VDX switch can go for unexpected reload after configuring no vrf.		
Condition: If static route leaks exist in system and we configure "no vrf" command.		

Defect ID:	DEFECT000586614	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Layer 2 Switching	
Reported In Release: NOS7.0.0	**Technology:** VLAN - Virtual LAN	
Symptom: 100G port-channel displays some junk values after HA failover some times.		
Condition: 100G port-channel may not show proper statistics after HA failover.		
Workaround: .Clear the counters on 100G port-channel.		
Recovery: .shut/no-shut on port-channel followed by clearing counters.		

Defect ID:	DEFECT000586638	
Technical Severity: High		**Probability:** Low
Product: Brocade Network OS		**Technology Group:** VCS
Reported In Release: NOS7.0.0		**Technology:** Logical Chassis
Symptom: VDX6740 and VDX6740-T are unable to transmit control plane traffic. As a side effect, "Fabric Hello Timeout: Inter-switch Frame Delivery problem" may be seen in any of the nodes in the VCS cluster		
Condition: ISSU or HA failover on VDX6740 or VDX6740-T		
Workaround: Perform another HA Failover from the NOSCLI		

Defect ID:	DEFECT000586771	
Technical Severity: Medium		**Probability:** Medium
Product: Brocade Network OS		**Technology Group:** Management
Reported In Release: NOS7.0.0		**Technology:** Configuration Fundamentals
Symptom: Secondary to primary association fails in a particular sequence.		
Condition: Cannot associate secondary vlan to primary vlan, once its type is changed from community to isolated or vice versa.		
Workaround: Delete secondary vlan, create, configure secondary type and associate again.		

Defect ID:	DEFECT000586852	
Technical Severity: High		**Probability:** Low
Product: Brocade Network OS		**Technology Group:** Management
Reported In Release: NOS7.0.0		**Technology:** CLI - Command Line Interface
Symptom: Chassis enable may fails after ISSU followed by chassis disable in a scaled environment.		
Condition: Chassis enable fails sometimes in a scaled environment with ISSU followed by chassis disable because of slow responding clients.		
Workaround: Not to try ISSU followed by chassis disable/enable		
Recovery: Reload the switch		

Defect ID:	DEFECT000586856	
Technical Severity: High		**Probability:** Low
Product: Brocade Network OS		**Technology Group:** Layer 3 Routing/Network Layer
Reported In Release: NOS7.0.0		**Technology:** BGP4+ - IPv6 Border Gateway Protocol
Symptom: BGP add path is not showing up all the 4 available paths.		
Condition: Sometimes when the RR is reloaded the BGP add path is not showing up all the 4 available paths.		

Defect ID:	DEFECT000586891	
Technical Severity: High		**Probability:** Low
Product: Brocade Network OS		**Technology Group:** Management
Reported In Release: NOS7.0.0		**Technology:** CLI - Command Line Interface
Symptom: The CLI command 'show debug ipv6 nd' is not provided to the user		
Condition: When the user tries to issue the CLI command 'show debug ipv6 nd' he won't see an option for 'nd'		

Defect ID:	DEFECT000586973	
Technical Severity: High		**Probability:** High
Product: Brocade Network OS		**Technology Group:** Security
Reported In Release: NOS7.0.0		**Technology:** LDAP - Lightweight Directory Access Protocol
Symptom: LDAP authentication is not working		
Condition: LDAP authenticaion is not working via inband deafult and non-default-vrf		

Defect ID:	DEFECT000587139	
Technical Severity: High	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** VCS	
Reported In Release: NOS7.0.0	**Technology:** Metro VCS	
Symptom: During VDX6940-144S switch bootup, FFDC core is seen.		
Condition: Slow processing of switch during bootup stage leads to core file generation.		
Workaround: Reload the switch again.		

Defect ID:	DEFECT000587154	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** VCS	
Reported In Release: NOS4.1.3	**Technology:** Logical Chassis	
Symptom: Switch may reload when BNA queries with get-config when the config is large OR when BNA polls at an aggressive rate (not configured for lazy-polling).		
Condition: Issue can happen when BNA does get-config for large cluster which has more than 4500+ interface config OR when BNA is polls aggressively.		
Workaround: Please do not use BNA if the cluster is large (with 4200+ interfaces) & ensure it is configured with lazy-polling		

Defect ID:	DEFECT000587170	
Technical Severity: Medium	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** VCS	
Reported In Release: NOS6.0.1	**Technology:** Logical Chassis	
Symptom: Continuous occurrence of ECC correctable errors		
Condition: This is very rare scenario to occur.		

Defect ID:	DEFECT000587208	
Technical Severity: High	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Monitoring	
Reported In Release: NOS7.0.0	**Technology:** RAS - Reliability, Availability, and Serviceability	
Symptom: An unexpected reboot of Dcmd might occur while collecting support-save data in a scenario where OSPFv2 config on Loopback interface is missing from protocol while config present in running config		
Condition: collecting support-save while OSPFv2 config on Loopback interface is missing from protocol although config is present in running config		
Workaround: Remove Loopback interface and collect support-save		

Defect ID:	DEFECT000587276	
Technical Severity: High	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Monitoring	
Reported In Release: NOS6.0.2	**Technology:** Hardware Monitoring	
Symptom: Blocked or stopped fan units may not show up as faulty.		
Condition: This was a defect in the original release of this product.		

Defect ID:	DEFECT000587380	
Technical Severity: Low	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS6.0.1	**Technology:** CLI - Command Line Interface	
Symptom: "no snmp trap link-status" does not show up in show running config after executing it under an interface level.		
Condition: "no snmp trap link-status" under interface is enhanced and it got missed to keep the same in running config.		

Defect ID:	DEFECT000587419	
Technical Severity: High		**Probability:** High
Product: Brocade Network OS		**Technology Group:** Monitoring
Reported In Release: NOS7.0.0		**Technology:** Syslog
Symptom: Ipv6 syslog-server not working via inband def-vrf and user-vrf. When multiple server configured as default-vrf or user-defined vrf.		
Condition: Was deferred from 7.0.0 but fixed in 7.0.1.		

Defect ID:	DEFECT000587463	
Technical Severity: High		**Probability:** Medium
Product: Brocade Network OS		**Technology Group:** Management
Reported In Release: NOS7.0.0		**Technology:** Software Installation & Upgrade
Symptom: At time of Firmwaredownload, the switch may fail to come back to an online state		
Condition: Issue can happen when the inetd file needs to be updated with a large configuration change		
Recovery: An additional reload will recover the switch.		

Defect ID:	DEFECT000587615	
Technical Severity: High		**Probability:** Medium
Product: Brocade Network OS		**Technology Group:** Management
Reported In Release: NOS7.0.0		**Technology:** SNMP - Simple Network Management Protocol
Symptom: The SNMP V3 traps may not be received for the SNMP v3 host recipients configured under RBridge mode.		
Condition: The trap may not be received after upgrade from NOS6.0.1a to NOS7.0.0 with cold boot option		

Defect ID:	DEFECT000587617	
Technical Severity: High		**Probability:** High
Product: Brocade Network OS		**Technology Group:** Layer 3 Routing/Network Layer
Reported In Release: NOS7.0.0		**Technology:** BGP4 - IPv4 Border Gateway Protocol
Symptom: Static leaked VRF route can not be imported into BGP RIB-IN and can't advertise via eBGP/iBGP using network/static command.		
Condition: Advertise static leaked VRF route via BGP.		
Workaround: Use "redistribute static" command to leak the static VRF route into BGP RIB-IN and then can advertise it via eBGP/iBGP.		

Defect ID:	DEFECT000587637	
Technical Severity: High		**Probability:** High
Product: Brocade Network OS		**Technology Group:** Network Automation and Orchestration
Reported In Release: NOS7.0.0		**Technology:** NETCONF - Network Configuration Protocol
Symptom: Netconf RPC "get-interface-detail" does not provide physical interfaces details. It provides only port-channel details.		
Condition: This issue will happen only when number of port-channels configured are equal to or more than 70. If number of port-channels are less than 70, this issue will not be encountered.		
Workaround: Total number of port-channels configured should be less than 70.		
Recovery: If total number of port-channels configured are exceeding 70, delete few port-channels to reduce the total count to be less than 70.		

Defect ID:	DEFECT000587654	
Technical Severity: High	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS7.0.0	**Technology:** OSPF - IPv4 Open Shortest Path First	
Symptom: The ECMP configuration in the hardware profile shows incorrect values.		
Condition: This will only happen when a user changes both route-table profile type and maximum-path at the same time using the hardware-profile command		
Workaround: The user can change the route-table profile type and maximum-path one at a time.		
Recovery: The user can re-run the hardware-profile command to set the maximum-path with the correct value.		

Defect ID:	DEFECT000587704	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** VCS	
Reported In Release: NOS7.0.0	**Technology:** Logical Chassis	
Symptom: Traffic is not being forwarded and a member of lag shows up on one side and but show lag/negotiation failed on other side even though the link is shown in LLDP neighbor.		
Condition: LAG hasat least two members and after performing ISSU/reboot sometimes member port goes into LAG negotiating/failed.		
Recovery: Shut./no shut on the member port/LAG.		

Defect ID:	DEFECT000587767	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** VCS	
Reported In Release: NOS7.0.0	**Technology:** Logical Chassis	
Symptom: Possible for Edge port interfaces to stay inactive after chassis enable command.		
Condition: This issue can occur in releases prior to NOS 7.0. If multiple attempts to issue the chassis enable command is failed and the command is retried, it is possible that the configuration replay will be blocked after the chassis enable succeeds.		
Recovery: Issue chassis disable then chassis enable.		

Defect ID:	DEFECT000587804	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Data Center Fabric	
Reported In Release: NOS7.0.0	**Technology:** IP Fabric	
Symptom: Even though there are no matching EVPN import route-targets configured under VRF, imported EVPN routes are present in BGP VRF table.		
Condition: EVPN import route-target(s) is/are removed while matching routes are present in BGP-EVPN and imported into BGP VRF table.		
Workaround: Issuing "clear bgp evpn neighbors all soft in" command should cleanup the routes which are still imported in BGP VRF instance after matching EVPN import route-targets are removed.		

Defect ID:	DEFECT000587828	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS7.0.0	**Technology:** BFD - BiDirectional Forwarding Detection	
Symptom: BFD Session on a tunnel interface, could go down when one of the egress vLAG member node is disabled.		
Condition: This issue could occur only if the underlay egress interface of the tunnel is a vLAG interface and also the vLAG membership exists only in remote RBridge(s), i.e., vLAG membership not exists in RBridges doing tunnel termination.		
Recovery: Disabling and re-enabling of the complete vLAG interface will bring up the BFD session.		

Defect ID:	DEFECT000587925	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Layer 2 Switching	
Reported In Release: NOS5.0.2	**Technology:** FCoE - Fibre Channel over Ethernet	
Symptom: Syslog daemon generates a silent core file as it is restarted to reload configuration. There is no crash or loss of traffic in this case.		
Condition: Defect exists in previous releases of NOS. Core file is generated due to SIGTERM signal received by syslog instead of SIGHUP.		

Defect ID:	DEFECT000587984	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Network Automation and Orchestration	
Reported In Release: NOS7.0.0	**Technology:** OpenStack Integration	
Symptom: VDX6940-144S 100GbE port may not come online after fastboot in NOS release 7.0.0.		
Condition: VDX6940-144S 100GbE port may not come online after fastboot NOS release 7.0.0.		
Workaround: "shut" then "no shut" the 100GbE port to bring it online.		
Recovery: "shut" then "no shut" the 100GbE port to bring it online.		

Defect ID:	DEFECT000588001	
Technical Severity: High	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** VCS	
Reported In Release: NOS7.0.0	**Technology:** AMPP - Automatic Migration of Port Profiles	
Symptom: Traffic may flood though the source mac was seen behind profiled port		
Condition: Port-profile is configured on a VLAG and 'clear-mac-address table' command is executed more than 10 times in short interval.		

Defect ID:	DEFECT000588041	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS7.0.0	**Technology:** BFD - BiDirectional Forwarding Detection	
Symptom: BFD session state for tunnels do not come up		
Condition: When tunnel toggles on one RBridge (which has least RBridge ID) in the VTEP, BFD session state will not come up for that tunnel.		
Workaround: It is recommended to remove and add the RB-X in overlay gateway configuration.		

Defect ID:	DEFECT000588062	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS7.0.0	**Technology:** OSPFv3 - IPv6 Open Shortest Path First	
Symptom: OSPFv6 is not coming up when IPSEC authentication is configured on the peers but inbound and outbound are not updated with IPsec authentication value.		
Condition: IPsec authentication to be configured on the switch over OSPFv3. When IPsec authentication key is configured, it will take key roll-over time for the key to get updated on the box.		
Workaround: The neighbor ship will automatically come up after the key rollover time		

Defect ID:	DEFECT000588178	
Technical Severity: High		Probability: High
Product: Brocade Network OS		Technology Group: Network Automation and Orchestration
Reported In Release: NOS7.0.0		Technology: OpenStack Integration
Symptom: Interface remains protocol down after speed change		
Condition: speed change config performed on an interface which is not in protocol up state.		
Recovery: shut/no-shut the interface		

Defect ID:	DEFECT000588190	
Technical Severity: High		Probability: Medium
Product: Brocade Network OS		Technology Group: Data Center Fabric
Reported In Release: NOS7.0.0		Technology: IP Fabric
Symptom: Aggregate route(s) configured under BGP VRF instance are not exported into BGP-EVPN.		
Condition: BGP VRF address-family is removed and added back.		
Workaround: Remove the aggregate route configuration under BGP VRF instance and configure it again.		

Defect ID:	DEFECT000588238	
Technical Severity: High		Probability: High
Product: Brocade Network OS		Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NOS7.0.0		Technology: BGP4 - IPv4 Border Gateway Protocol
Symptom: 'Invalid value' error is thrown for 'vni add' command under 'rbridge-id evpn-instance' mode.		
Condition: Configure 'vni add' command under 'rbridge-id evpn-instance' mode. If the value falls in 10000000-15999999 range.		
Workaround: 1. Use a VNI range in 'vni add' command that is less than 10000000-15999999. 2. Use 'vni <vni-number>' CLI under 'rbridge-id evpn-instance' mode.		

Defect ID:	DEFECT000588241	
Technical Severity: High		Probability: High
Product: Brocade Network OS		Technology Group: Management
Reported In Release: NOS7.0.0		Technology: Configuration Fundamentals
Symptom: breakout lane 1 will not go admin down with incompatible media		
Condition: A QSFP28 media is present in the cage when breakout is configured.		
Workaround: Remove the QSFP28 media from the cage before executing the breakout CLI.		
Recovery: Manually 'shut' first lane on the cage.		

Defect ID:	DEFECT000588265	
Technical Severity: High		Probability: Low
Product: Brocade Network OS		Technology Group: Management
Reported In Release: NOS7.0.0		Technology: Management GUI
Symptom: Gradual increase of memory for process DCMd when REST requests are sent continuously for a long period of time.		
Condition: Continuous REST requests are sent to the switch to retrieve operational information such as 'show interface', 'show running-config', etc.		
Recovery: If standby management module is available, please perform HA failover when DCMd memory consumption crosses 600MB..		

Defect ID:	DEFECT000588323	
Technical Severity: Critical		**Probability:** Low
Product: Brocade Network OS		**Technology Group:** Management
Reported In Release: NOS7.0.0		**Technology:** CLI - Command Line Interface
Symptom: Switchport configuration may fails in a particular sequence.		
Condition: After having a L3 configuration on a physical interface and upgrading to a particular build mentioned in the defect description switchport configuration may fails.		
Workaround: Save and reboot with default configuration.		
Recovery:		

Defect ID:	DEFECT000588333	
Technical Severity: High		**Probability:** High
Product: Brocade Network OS		**Technology Group:** VCS
Reported In Release: NOS7.0.0		**Technology:** Logical Chassis
Symptom: Switch will go for an unexpected reload when trying to enter into RBridge ID context in configuration mode.		
Condition: if any special character other than " - " or "," is given for specifying the range of RBridge ID will cause and exception and will trigger switch reload. E.g. : rbrdige 9*1		
Workaround: For specifying the RBridge ID range, use only '-' or ',' and do not use other special characters		

Defect ID:	DEFECT000588451	
Technical Severity: High		**Probability:** Low
Product: Brocade Network OS		**Technology Group:** Layer 3 Routing/Network Layer
Reported In Release: NOS7.0.0		**Technology:** BGP4 - IPv4 Border Gateway Protocol
Symptom: IPv6 traffic may not forward when it received on tunnel		
Condition: When bigger VNI like 10000000 configured as l3vni		

Defect ID:	DEFECT000588463	
Technical Severity: High		**Probability:** Low
Product: Brocade Network OS		**Technology Group:** VCS
Reported In Release: NOS7.0.0		**Technology:** Logical Chassis
Symptom: For IPv6/v4 Virtual-IP Address stops responding to pings after protocol change from VRRP to VRRP-E.		
Condition: Protocol is changed from VRRP to VRRP-E with some enabled sessions, and vice-versa.		
Recovery: Reload system.		

Defect ID:	DEFECT000588519	
Technical Severity: Medium		**Probability:** Low
Product: Brocade Network OS		**Technology Group:** Layer 2 Switching
Reported In Release: NOS6.0.1		**Technology:** VXLAN - Virtual Extensible LAN
Symptom: When the RBridge responsible for Multicast distribution over VXLAN Tunnels is powered off, there is a multi-second delay before the multicast stream changes to the standby RBridge.		
Condition: Issue when the RBridge responsible for multicast distribution is powered off or the ISL cables are physically disconnected.		

Defect ID:	DEFECT000588610	
Technical Severity: High		**Probability:** Low
Product: Brocade Network OS		**Technology Group:** Layer 3 Routing/Network Layer
Reported In Release: NOS7.0.0		**Technology:** Multi-VRF
Symptom: On removing VRF, clean up of ipv4 prefixes from EVPN database may lead to unexpected restart of routing component (ribmgr daemon)		
Condition: Removing VRF in a controller less IP Fabric environment		

Defect ID:	DEFECT000588644	
Technical Severity: High		**Probability:** Low
Product: Brocade Network OS		**Technology Group:** Layer 2 Switching
Reported In Release: NOS7.0.0		**Technology:** VLAN - Virtual LAN
Symptom: Unwanted message on the console.		
Condition: When removing VLAN's under port-channel or under overlay.		
Recovery:		

Defect ID:	DEFECT000588647	
Technical Severity: High		**Probability:** High
Product: Brocade Network OS		**Technology Group:** Security
Reported In Release: NOS7.0.0		**Technology:** AAA - Authentication, Authorization, and Accounting
Symptom: Allocated memory is not freed while log-in to the switch via web browser		
Condition: Login to the switch using web browser		

Defect ID:	DEFECT000588730	
Technical Severity: Medium		**Probability:** Medium
Product: Brocade Network OS		**Technology Group:** Network Automation and Orchestration
Reported In Release: NOS6.0.2		**Technology:** NETCONF - Network Configuration Protocol
Symptom: When querying the VDX netconf server an invalid yang model "ietf-netconf-notifications-ann" is advertised.		
Condition: This issue will show up when trying to view the mounted netconf capabilities for a VDX mounted with Brocade SDN Controller (BSC).		

Defect ID:	DEFECT000588764	
Technical Severity: High		**Probability:** Low
Product: Brocade Network OS		**Technology Group:** Layer 2 Switching
Reported In Release: NOS7.0.0		**Technology:** LAG - Link Aggregation Group
Symptom: Error RASLOG related to vLAGs is issued erroneously. The RASLOG indicates vLAG that spans RBridges is connected to different end devices. The raslog is issued on RBridges that are not connected to the vLAG and only occurs when running in new vlag-commit-mode disable configuration.		
Condition: Can occur when change vlag-commit-mode to disable when there are a large number of active vLAGs.		

Defect ID:	DEFECT000588822	
Technical Severity: High		**Probability:** High
Product: Brocade Network OS		**Technology Group:** Data Center Fabric
Reported In Release: NOS6.0.1		**Technology:** TRILL - Transparent Interconnection of Lots of Links
Symptom: An ISL (Inter Switch Link) flap is seen on VDX6940.		
Condition: This can be seen due to un-handled internal memory parity error interrupts.		

Defect ID:	DEFECT000588823	
Technical Severity: High		**Probability:** High
Product: Brocade Network OS		**Technology Group:** IP Multicast
Reported In Release: NOS7.0.0		**Technology:** IGMP - Internet Group Management Protocol
Symptom: MCASTSS process termination may be seen in standby partition of VDX8770-8.		
Condition: When lag or tunnel is configured on active and standby MM has just come up. When active MM sends a LAG dump, the standby may see MCASTSS process termination.		
Workaround: LAG configuration should not be done before send dump is complete.		

Defect ID:	DEFECT000588837	
Technical Severity: High		**Probability:** Medium
Product: Brocade Network OS		**Technology Group:** Management
Reported In Release: NOS7.0.0		**Technology:** Configuration Fundamentals
Symptom: when min-link value is equal to number of online uplinks, the downlink will go lst down.		
Condition: When min-link configured is equal or greater than the number of online uplinks.		
Workaround: Config min-link with one less than the number of online uplinks		
Recovery: Removing min-link config will bring the downlink online.		

Defect ID:	DEFECT000588918	
Technical Severity: High		**Probability:** High
Product: Brocade Network OS		**Technology Group:** Data Center Fabric
Reported In Release: NOS6.0.1		**Technology:** VCS Fabric
Symptom: Customer encountered an unexpected VDX6740 reload:RAS logs & stack trace for the reset as below:2016/02/16-01:02:57, [SEC-1203], 795596, SW/0 | Active, INFO, NINMUM03-DC1-R107-NSPL-RTR-049, Login information: Login successful via TELNET/SSH/RSH. IP Addr: A.B.C.D.2016/02/16-01:03:13, [SEC-3022], 795597, SW/0 | Active, INFO, NINMUM03-DC1-R107-NSPL-RTR-049, Event: logout, Status: success, Info: Successful logout by user [admin].2016/02/16-06:38:11, [HSL-1012], 795598, INFO, VDX6740T-1G, Interface lo is link up2016/02/16-06:38:11, [HSL-1012], 795599, INFO, VDX6740T-1G, Interface eth0 is link up2016/02/16-06:38:11, [HSL-1012], 795600, INFO, VDX6740T-1G, Interface eth1 is link up2016/02/16-06:38:11, [HASM-1004], 795601, INFO, VDX6740T-1G, Processor reloaded - Software Fault:Kernel Panic.2016/02/16-06:38:11, [HASM-1026], 795602, WARNING, VDX6740T-1G, The last reboot is due to Kernel Panic in kernel .NOSCLI show support:Tue Feb 16 09:25:17 IST 2016**********************************		
Condition: When high rate of TFTP ip_directed broadcast packets are sent destined to known subnets.		

Defect ID:	DEFECT000589277	
Technical Severity: Medium		**Probability:** High
Product: Brocade Network OS		**Technology Group:** Layer 3 Routing/Network Layer
Reported In Release: NOS7.0.0		**Technology:** BGP4 - IPv4 Border Gateway Protocol
Symptom: VLAN is unprovisioned by BGP in the case of unexpected flapping of IMR EVPN routes from the peer node.		
Condition: Tunnel discovery option is enabled in BGP EVPN address-family.		
Workaround: Delete and re-create the provisioned VLAN.		

Defect ID:	DEFECT000589286	
Technical Severity: Medium		**Probability:** Medium
Product: Brocade Network OS		**Technology Group:** Layer 2 Switching
Reported In Release: NOS6.0.2		**Technology:** UDLD - Uni-Directional Link Detection
Symptom: Link of 1G Copper SFP comes up too early during the power-cycle on VDX 6940-144S		
Condition: Power-cycle on VDX 6940-144S with 1G Copper SFP		

Defect ID:	DEFECT000589893	
Technical Severity: High		**Probability:** Low
Product: Brocade Network OS		**Technology Group:** Monitoring
Reported In Release: NOS6.0.1		**Technology:** Hardware Monitoring
Symptom: Request for Enhancement to optimize the fan speed to achieve better temperature distribution for the VDX 6740T & VDX6740T-1G switches		
Condition: Applies only to the VDX6740-T-R & VDX6740T-1G-R switches running port-side exhaust fans		

Defect ID:	DEFECT000589911	
Technical Severity: High		**Probability:** High
Product: Brocade Network OS		**Technology Group:** Data Center Fabric
Reported In Release: NOS5.0.2		**Technology:** VCS Fabric
Symptom: Data loss is seen when an ISL port is flapped in a VCS that is employing VXLAN to connect to the remote data center VCS fabric.		
Condition: Flapping ISL link in a VCS fabric connecting to remote data center network using VXLAN/VTEP technology, would incur 1 to 2 seconds of data loss.		

Defect ID:	DEFECT000589967	
Technical Severity: High		**Probability:** High
Product: Brocade Network OS		**Technology Group:** IP Multicast
Reported In Release: NOS7.0.0		**Technology:** IGMP - Internet Group Management Protocol
Symptom: error message seen on console while trying to configure Query-Interval on L3 physical interface Or PO. The queries will be generated at default time interval = 125 sec.		
Condition: This issue is seen when user try to configure Query-Interval on PO/Physical interface being in shut state. The config will not be applied as long as interface is in "protocol-down state"		
Workaround: Customer should bring the interface in "protocol up" state before applying Query-Interval config. Once the interface is up, Config will succeed.		

Defect ID:	DEFECT000590101	
Technical Severity: High		**Probability:** High
Product: Brocade Network OS		**Technology Group:** Layer 3 Routing/Network Layer
Reported In Release: NOS7.0.0		**Technology:** BGP4 - IPv4 Border Gateway Protocol
Symptom: Configuring remote-as or configuring "neighbor x.x.x.x capability additional path" under BGP VRF instance using Netconf can cause unexpected reload.		
Condition: When using Netconf to configure remote-as or configuring "neighbor x.x.x.x capability additional path" under the VRF instance and BGP VRF instance is not present then can cause unexpected reload.		
Workaround: For any configuration under BGP VRF instance using Netconf first configure BGP VRF instance then configure under BGP VRF instance.		

Defect ID:	DEFECT000590108	
Technical Severity: Medium		**Probability:** Medium
Product: Brocade Network OS		**Technology Group:** Layer 3 Routing/Network Layer
Reported In Release: NOS4.1.3		**Technology:** IP Addressing
Symptom: ACL may not work as expected		
Condition: ACL rule configured with /8 (255.0.0.0) mask		
Workaround: Need to apply the specific ACL		

Defect ID:	DEFECT000590465	
Technical Severity: Medium		**Probability:** High
Product: Brocade Network OS		**Technology Group:** Management
Reported In Release: NOS6.0.1		**Technology:** Configuration Fundamentals
Symptom: channel-group configurations for port-channel member interfaces are lost upon reload.		
Condition: VDX replays configuration through file [startup-config] when configuration has been defaulted and it causes channel-group configuration lost.		

Defect ID:	DEFECT000590478	
Technical Severity: Medium		**Probability:** Low
Product: Brocade Network OS		**Technology Group:** IP Multicast
Reported In Release: NOS5.0.2		**Technology:** IPv4 Multicast Routing
Symptom: mcasgt process termination		
Condition: The issue is seen when multicast routes are added and deleted from the system, which leaves some amount of memory leak, which grows over time and causes a system crash.		
Workaround: Yes		

Defect ID:	DEFECT000590517	
Technical Severity: High		**Probability:** Medium
Product: Brocade Network OS		**Technology Group:** Layer 2 Switching
Reported In Release: NOS7.0.0		**Technology:** VXLAN - Virtual Extensible LAN
Symptom: VLAN flooding on a tunnel will not work.		
Condition: VLAN flooding on the tunnel will not work.		
Workaround: Run the following command - "tunnel replicator bum-vlans redistribute" in exec mode of NOSCLI.		
Recovery: VLAN's will be distributed to the available SN tunnels.		

Defect ID:	DEFECT000590808	
Technical Severity: Medium	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS7.0.1	**Technology:** CLI - Command Line Interface	
Symptom: Hidden commands under debug and foscmd hide group were not shown as part of show running config even after unhiding and configuring them. Even the copy running to file was not having the configuration after copy command was executed after unhiding.		
Condition: Config commands under hide group "debug" and "foscmd" have to be executed after unhiding respective hide group. Post this, executing "show running config" will not show these unhiden configurations.		

Defect ID:	DEFECT000591179	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Layer 2 Switching	
Reported In Release: NOS4.1.3	**Technology:** VLAN - Virtual LAN	
Symptom: VDX incorrectly sends packets as untagged over trunk port.		
Condition: NOS4.1.3b can hit the issue.		

Defect ID:	DEFECT000591223	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS6.0.1	**Technology:** SNMP - Simple Network Management Protocol	
Symptom: This is an enhancement that introduces a new CLI under rbridge-id sub-mode to configure the behavior of some IF-MIB attributes: ifName and ifDescr. If this knob is configured to 3-tuple, then the above 2 objects will be of 3-tuple format. Else, they will be of 2-tuple format. These 2 attributes will also be in the same format during Link Up/Down Trap generation.		
Condition: This is applicable only for ifName and ifDescr attributes of IF MIB and the linkUp/Down traps.		

Defect ID:	DEFECT000591225	
Technical Severity: Medium	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Monitoring	
Reported In Release: NOS6.0.1	**Technology:** RAS - Reliability, Availability, and Serviceability	
Symptom: SNMP IP ACL config mismatch between the Frontend & Backend database.		
Condition: Reload with default config will retain the IP ACL data for SNMP community string.		

Defect ID:	DEFECT000591256	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS7.0.0	**Technology:** OSPF - IPv4 Open Shortest Path First	
Symptom: ECMP paths through some VE interfaces might not be calculated in a multi node scenario consisting of VLAGs after Port-channel flap.		
Condition: This issue can happen when a self originated max-age network LSA is received after Port-channel flap and there is a delay in reforming OSPFv2 adjacency among VLAG end points causing the network LSA to contain only one of the neighbor info for some time.		
Workaround: Issue "no shutdown" of port-channel interface after neighbor nodes have flushed the max-age Network LSA.		
Recovery: Issue "shutdown/no-shutdown" on VE interfaces which are missing in the ECMP nexthop list. Also can be recovered by issuing "clear ip ospf all".		

Defect ID:	DEFECT000591616	
Technical Severity: High		Probability: High
Product: Brocade Network OS		Technology Group: Management
Reported In Release: NOS7.0.1		Technology: CLI - Command Line Interface
Symptom: Switch goes for an unexpected reload with the REST request.		
Condition: When the switch is pounded with the REST requests from multiple concurrent sessions simultaneously and continuously over a long period of time.		
Workaround: As far as possible, send REST requests to configure the switch from one session only. Multiple sessions can be used for retrieving information from the switch with GET requests.		

Defect ID:	DEFECT000591700	
Technical Severity: Medium		Probability: Low
Product: Brocade Network OS		Technology Group: Traffic Management
Reported In Release: NOS6.0.1		Technology: QoS - Quality of Service
Symptom: BUM traffic has higher latency compare to data traffic.		
Condition: BUM traffic use store and forward method and data traffic use cut through method.		

Defect ID:	DEFECT000592128	
Technical Severity: Medium		Probability: High
Product: Brocade Network OS		Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NOS6.0.1		Technology: IP Addressing
Symptom: Software Fault: A rare memory corruption issue in the tty driver caused Kernel Panic and rebooting of the switch.		
Condition: The issue was introduced in the 2.6.34 kernel and the same was addressed by a open source fix in the tty driver.		

Defect ID:	DEFECT000592256	
Technical Severity: Medium		Probability: Medium
Product: Brocade Network OS		Technology Group: Data Center Fabric
Reported In Release: NOS4.1.3		Technology: VCS Fabric
Symptom: Downlink ports take long time to come online with the latest FW (10.6) of Hitachi 520X blade LOM.		
Condition: The issue was introduced after the FW upgrade of Hitachi 520X blade LOM.		
Recovery: Upgrade to the new NOS version.		

Defect ID:	DEFECT000592398	
Technical Severity: Medium		Probability: Medium
Product: Brocade Network OS		Technology Group: VCS
Reported In Release: NOS7.0.0		Technology: Logical Chassis
Symptom: During multi-cast tree formation, a RBridge with a configured root priority level may not take effect for the tree's formation. Instead, the configured RBridge behaves as though it has a default or lowest priority configuration. However, when displaying the running configuration, it shows the expected tree root priority configuration.		
Condition: Following an operation where a RBridge boots up with a default configuration, and then downloads it's configuration from the active cluster, a non-default setting for the RBridge's multi-cast root priority may not take affect. This may happen such as after a 'vcs replace' operation.		
Recovery: Rebooting the affected node forces it to refresh the effective priority value for the multi-cast tree root priority. Alternatively, explicitly changing the priority to a different value and then setting it back to the original desired value causes the priority to be updated. However, setting the root priority to a different value may affect the multi-cast tree formation depending on the temporary priority specified.		

Defect ID:	DEFECT000592617	
Technical Severity: Medium	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Layer 2 Switching	
Reported In Release: NOS5.0.2	**Technology:** xSTP - Spanning Tree Protocols	
Symptom: IEEE BPDU Local VLAN tunnel CLI allowed to be configured when protocol spanning tree is already configured or vice versa.		
Condition: When both STP protocol and IEEE BPDU Local VLAN tunnel CLI are enabled at the same time.		

Defect ID:	DEFECT000592647	
Technical Severity: Medium	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS5.0.1	**Technology:** NTP - Network Time Protocol	
Symptom: Timezone set might fail		
Condition: Particular timezone related files got corrupted. It is very rare scenario to hit.		
Recovery: Delete the failed timezone file under /usr/share/zoneinfo/ . Configure the timezone .		

Defect ID:	DEFECT000592669	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS7.0.0	**Technology:** OSPF - IPv4 Open Shortest Path First	
Symptom: "[no]bfd-shutdown" and "bfd-interval<>" commands are not available under port-channel interfaces.		
Condition: Unable to configure BFD commands on L3 port-channel		

Defect ID:	DEFECT000592874	
Technical Severity: Medium	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Monitoring	
Reported In Release: NOS6.0.1	**Technology:** Hardware Monitoring	
Symptom: In very rare scenario they can observe interface flap		
Condition: Due to excessive symbol errors		

Defect ID:	DEFECT000593245	
Technical Severity: Medium	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS6.0.2	**Technology:** Multi-VRF	
Symptom: Ping Round-Trip-Times fluctuate between 4 and 16 ms.		
Condition: Happens in 6.0.2a and later releases.		

Defect ID:	DEFECT000593285	
Technical Severity: High	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS4.1.3	**Technology:** Static Routing (IPv4)	
Symptom: Move Ethernet cable from one VDX to another which causes the PC to loose connectivity.		
Condition: Moving management eth cables between VDX can cause the issue.		
Recovery: Clear mac-address-table will recover the condition.		

Defect ID:	DEFECT000593611	
Technical Severity: High		Probability: High
Product: Brocade Network OS		Technology Group: Monitoring
Reported In Release: NOS7.0.1		Technology: MAPS - Monitoring and Alerting Policy Suite
Symptom: While deleting policy with REST API, actually it is success but an error was thrown. It has been fixed and check-in.		
Condition: While deleting policy with REST API, actually it is success but an error was thrown. It has been fixed and check-in.		

Defect ID:	DEFECT000593960	
Technical Severity: High		Probability: High
Product: Brocade Network OS		Technology Group: Management
Reported In Release: NOS7.0.1		Technology: SNMP - Simple Network Management Protocol
Symptom: With 3-tuple format configured for ifDescr and ifName, the linkUp/Down traps generated still contain ifDescr var-bind in 2-tuple format.		
Condition: This is related to ifDescr var-bind in the linkUp/Down trap only.		

Defect ID:	DEFECT000594223	
Technical Severity: Medium		Probability: Medium
Product: Brocade Network OS		Technology Group: Management
Reported In Release: NOS7.0.1		Technology: Software Installation & Upgrade
Symptom: TFTP server/service was enabled by default.		
Condition: Any device from outside can try to connect VDX using TFTP and VDX burn its resources unnecessary.		

Defect ID:	DEFECT000594682	
Technical Severity: Medium		Probability: Medium
Product: Brocade Network OS		Technology Group: Security
Reported In Release: NOS6.0.2		Technology: ACLs - Access Control Lists
Symptom: SNMP walk failure in some scenarios.		
Condition: Creating IP ACL with sequence id as 0 causes this issue.		
Workaround: Avoid using sequence id 0 while creating IP ACL.		

Defect ID:	DEFECT000594815	
Technical Severity: High		Probability: Low
Product: Brocade Network OS		Technology Group: Layer 2 Switching
Reported In Release: NOS6.0.1		Technology: VLAN - Virtual LAN
Symptom: The execution of command "show vlan brief" will cause the box to reboot.		
Condition: This issue may be seen when all the following conditions are met. 1. There are more than 40 nodes in a Logical Chassis. 2. VFAB is enabled on the cluster. 3. There are 10 VLAN's configured. 4. There are more than 1000 ports configured on each VLAN. 5. show-vlan-brief was executed.		
Workaround: Instead of "show vlan brief", the user can execute "show interface trunk" to check the vlan-port configurations.		

Defect ID:	DEFECT000594819	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Layer 2 Switching	
Reported In Release: NOS7.0.1	**Technology:** VXLAN - Virtual Extensible LAN	
Symptom: Switch can experience an unexpected reload with HSL kernel backtrace.		
Condition: When VXLAN tunnels are deleted and then added again.		

Defect ID:	DEFECT000594867	
Technical Severity: Medium	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Layer 2 Switching	
Reported In Release: NOS6.0.2	**Technology:** VXLAN - Virtual Extensible LAN	
Symptom: Ingress policers not limiting traffic on VDX6740.		
Condition: Ingress policers do not work correctly when traffic needs to be encapsulated for example heading into a VxLAN tunnel.		

Defect ID:	DEFECT000595049	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS6.0.1	**Technology:** Access Gateway	
Symptom: If Access Gateway (AG) configuration commands are executed through REST API interface, even though command is successfully executed, HTTP error will be reported.		
Condition: This is cosmetic error issue due to different return code used in access gateway.		
Recovery: This is not actual error. Command will be executed successfully. Check the running config to confirm the command.		

Defect ID:	DEFECT000595071	
Technical Severity: Medium	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Layer 2 Switching	
Reported In Release: NOS4.1.3	**Technology:** VLAN - Virtual LAN	
Symptom: 'show interface trunk' won't display proper VLAN information in output.		
Condition: If 'switchport trunk native-vlan' configured above 2047 and there is no VLAN configured below 2047.		
Workaround: Configure at least one VLAN below 2047 & associate with any physical interface.		

Defect ID:	DEFECT000595233	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** VPN	
Reported In Release: NOS7.0.1	**Technology:** EVPN - Ethernet VPN	
Symptom: In very rare scenarios after ISSU upgrade traffic drops may be observed for Tunnel terminated traffic		
Condition: ISSU upgrade is a necessary condition for this issue. But not all ISSU upgrades will results in this issue		
Workaround: Perform disruptive firmware upgrades that involve reboots		
Recovery: Rebooting the switch will recover the system.		

Defect ID:	DEFECT000595395	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS6.0.2	**Technology:** DHCP - Dynamic Host Configuration Protocol	
Symptom: IP DHCP Relay is not working properly when enabled on VRRP-E master interface		
Condition: Operating IP DHCP Relay together with VRRP-E		
Workaround: toggle the VE interface		

Defect ID:	DEFECT000595653	
Technical Severity: Medium	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS5.0.2	**Technology:** IP Addressing	
Symptom: IP Directed broadcast would not work after HA failover, but the CLI configuration may present.		
Condition: HA fail-over trigger the issue.		
Recovery: Reconfigure IP directed-broadcast		

Defect ID:	DEFECT000595709	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** VCS	
Reported In Release: NOS7.0.1	**Technology:** Logical Chassis	
Symptom: System reloads on VDX8770.		
Condition: This occurs with 512 or more VRRP sessions enabled and "debug vrrp packets" is turned on.		
Workaround: "debug vrrp packets" should not be turned on in a scaled environment.		

Defect ID:	DEFECT000595754	
Technical Severity: High	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS6.0.2	**Technology:** IPv6 Addressing	
Symptom: Disabling autoconfig (autonomous address-configuration flag) for an IPv6 prefix in NOS 6.0.2 has no impact on router-advertisement.		
Condition: Disabling autoconfig		

Defect ID:	DEFECT000595877	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS7.0.1	**Technology:** Multi-VRF	
Symptom: Unexpected reload of switch observed when removing a VRF configuration or removing ipv4/ipv6 address family configuration of a VRF.		
Condition: When a custom VRF is unconfigured or IPv4/IPv6 address family of a VRF is unconfigured, switch will be reloaded.		

Defect ID:	DEFECT000595980	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** VCS	
Reported In Release: NOS6.0.2	**Technology:** Logical Chassis	
Symptom: When tunnel tagged-ieee-bpdu is enabled on any of the interface, protocol spanning-tree is allowed to be configured.		
Condition: Tunnel tagged-ieee-bpdu configured before configuring protocol spanning tree.		

Defect ID:	DEFECT000596257	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS6.0.2	**Technology:** Software Installation & Upgrade	
Symptom: After reload, though the uplink interface is down, the downlink tracking interface is still up.		
Condition: All the downlinks interface are brought up , irrespective of the uplink interface state after reboot.		

Defect ID:	DEFECT000596280	
Technical Severity: Medium	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS5.0.2	**Technology:** IP Addressing	
Symptom: Unable to delete an ACL.		
Condition: When ACL is associated to the management interface of one or more switches in the VCS and the switch gets removed from VCS.		

Defect ID:	DEFECT000596480	
Technical Severity: High	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS7.0.1	**Technology:** Configuration Fundamentals	
Symptom: On execution of CLI "track remove all" complete Link State Tracking (LST) configuration should get removed from a port. In case of port-channel interface protocol daemon is not clearing the LST configuration hence it is displayed in output of show command.		
Condition: Execution of "track remove all" CLI for a port-channel interface for which Link State Tracking (LST) configuration is present.		
Workaround: As a workaround user can remove the configuration one by one by executing respective 'no' CLIs.		

Defect ID:	DEFECT000596496	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** VCS	
Reported In Release: NOS6.0.2	**Technology:** Logical Chassis	
Symptom: Protocol spanning-tree configuration will not be allowed even after removing the "spanning-tree ieee-bpdu limit-vlan-flood" and "tunnel tagged-ieee-bpdu" configuration.		
Condition: When all the switches in the VCS are configured with "spanning-tree ieee-bpdu limit-vlan-flood" and one or more switches are removed from VCS.		
Recovery: Copy running configuration to remote. Reload the switch with default configuration and copy back the running configuration.		

Defect ID:	DEFECT000596708	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS7.0.1	**Technology:** SNMP - Simple Network Management Protocol	
Symptom: Unicast frame counter maybe displayed incorrectly while there are Multicast and Broadcast traffic concurrently.		
Condition: This is due to HW implementation of the statistics counters. Counters are displayed correctly once traffic is idle.		

Defect ID:	DEFECT000596720	
Technical Severity: Medium	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS6.0.2	**Technology:** CLI - Command Line Interface	
Symptom: When IPv6 nd prefix is configured with a prefix flag(no-autoconfig/no-onlink/offlink) enabled and if the same prefix is updated later with different lifetime values, then the already configured prefix flag will not be present in the running configuration of that prefix.		
Condition: This issue happens when an IPv6 prefix configuration is updated with lifetime values provided a prefix flag(no-autoconfig/no-onlink/offlink) was already configured.		
Workaround: NA		

Defect ID:	DEFECT000596781	
Technical Severity: Medium	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS6.0.2	**Technology:** IPv6 Addressing	
Symptom: Lifetime configuration value of VE interface IPv6 nd prefix is reset to infinite.		
Condition: Doing "shutdown" and "no shutdown" configuration on the VE interface		

Defect ID:	DEFECT000596868	
Technical Severity: High	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS7.0.1	**Technology:** CLI - Command Line Interface	
Symptom: The global MTU value cannot be deleted through REST API.		
Condition: Issue happens when the user tries to delete the global mtu using the DELETE request through the REST interface.		
Workaround: Using the PATCH request with the default value as a work around. The effect of this is same as deleting the config.		

Defect ID:	DEFECT000596932	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Layer 2 Switching	
Reported In Release: NOS5.0.1	**Technology:** LAG - Link Aggregation Group	
Symptom: Interfaces may not join into Dynamic LAG.		
Condition: Static lag creation before dynamic LAG.		
Workaround: Configuring dynamic LAG first and then static		
Recovery: Delete the static LAGs and re-add the same.		

Defect ID:	DEFECT000597053	
Technical Severity: High	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Data Center Fabric	
Reported In Release: NOS5.0.1	**Technology:** VCS Fabric	
Symptom: In rare scenario, VDX can send packets with TTL=0. Which can cause the connectivity issues.		
Condition: VxLAN packets terminated on VDX6940 & BUM forwarder on other ISL partner.		
Recovery: Configure static MAC address for the specific IP address.		

Defect ID:	DEFECT000597104	
Technical Severity: Medium	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS6.0.2	**Technology:** OSPF - IPv4 Open Shortest Path First	
Symptom: Under rare scenarios of leaking routes between VRF's, the switch may get reloaded due to "termination of process ribmgr"		
Condition: When leaking routes from one VRF to another & presence of those same routes in target VRF as connected routes.		
Workaround: Reconfigure to avoid leaking routes between VRF's OR ensure that the leaked routes are not present in target VRF as local routes.		

Defect ID:	DEFECT000597782	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Layer 2 Switching	
Reported In Release: NOS6.0.2	**Technology:** VLAN - Virtual LAN	
Symptom: The management MAC and one of the VE MACs may conflict.		
Condition: This is a software defect that has affected the VDX6940-36Q and VDX6940-144S since their release.		

Defect ID:	DEFECT000597954	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS7.0.1	**Technology:** BGP4 - IPv4 Border Gateway Protocol	
Symptom: MAC routes are dampened at lesser number of moves than the max-moves threshold configured		
Condition: 1. 2-Node VCS leaf in the topology with a misconfiguration of having different AS numbers on the rbridges belonging to the same VCS. 2. Mac move happening between a 2 node VCS leaf and any other leaf		

Defect ID:	DEFECT000598328	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS7.0.1	**Technology:** BGP4 - IPv4 Border Gateway Protocol	
Symptom: when switch is warm recovered (failover state), there may be traffic impact on some tunnels. tunnel traffic may not get terminated, and there will be traffic loss.		
Condition: warm recovery may cause it under heavy load conditions. it doesn't happen always, but likelihood of happening is more under heavy loaded setups.		
Workaround: cold reboot is needed to recover,		
Recovery: powercycle the switch		

Defect ID:	DEFECT000598345	
Technical Severity: Medium	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Traffic Management	
Reported In Release: NOS5.0.0	**Technology:** Rate Limiting and Shaping	
Symptom: slow learning of hosts ARP entries in 6740 platform		
Condition: In rare scenarios when there is a sudden burst of routed traffic.		

Defect ID:	DEFECT000598508	
Technical Severity: Medium	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Layer 2 Switching	
Reported In Release: NOS5.0.2	**Technology:** VXLAN - Virtual Extensible LAN	
Symptom: VxLAN tunnel unexpectedly went down and did not recover resulting in a ping loss between end hosts even though tunnel was up on other participating RBs in the fabric.		
Condition: One of the VxLAN tunnel endpoint RBridge is rebooted.		

Defect ID:	DEFECT000598524	
Technical Severity: Medium	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Traffic Management	
Reported In Release: NOS6.0.2	**Technology:** Rate Limiting and Shaping	
Symptom: rte_cap_acl debug tool won't work for 6940 platforms		
Condition: Enable the rte_cap_acl tool support for 6940 platforms		

Defect ID:	DEFECT000598641	
Technical Severity: High	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Layer 2 Switching	
Reported In Release: NOS7.0.1	**Technology:** VXLAN - Virtual Extensible LAN	
Symptom: Customer might experience unexpected reload of the system.		
Condition: This is seen on updating certain set of configuration,		

Defect ID:	DEFECT000598657	
Technical Severity: Medium	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Security	
Reported In Release: NOS5.0.1	**Technology:** SSH - Secure Shell	
Symptom: Unexpected reload.		
Condition: Rare scenario where remote host IP becomes NULL.		

Defect ID:	DEFECT000598663	
Technical Severity: Medium	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Monitoring	
Reported In Release: NOS5.0.2	**Technology:** RAS - Reliability, Availability, and Serviceability	
Symptom: DCMd daemon terminated and sudden reload occurred.		
Condition: If customer has big cluster and actively executing CLI commands through script or monitoring tools [BNA] then Principal node receives too many message to handle and it hit this issue.		
Workaround: Please reduce any command execution frequency.		

Defect ID:	DEFECT000598878	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS7.0.1	**Technology:** Configuration Fundamentals	
Symptom: A stale default-route gets applied in the running configuration of the secondary nodes in cluster environment during configuration replay.		
Condition: The issue arises when secondary nodes disconnect and re-join the cluster provided DHCP is enabled.		

Defect ID:	DEFECT000598972	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS7.0.1	**Technology:** CLI - Command Line Interface	
Symptom: Switch might go for an unexpected reload when any configuration update is performed on a range of interfaces.		
Condition: On a large cluster with scaled up configurations, performing any configuration on a range of interfaces by entering into interface range sub-mode might cause switch to run out of memory and thereby causing it to reload.		
Workaround: Required configuration update can be made on individual interfaces one at a time instead of performing it on a range of interfaces. Configuration update on multiple interfaces can still be performed by using comma (,) as separators instead of hyphen (-) when specifying the range. For ex, to shutdown interfaces 1 to 5, use "interface te 1,2,3,4,5" instead of "interface te 1-5".		

Defect ID:	DEFECT000599289	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Security	
Reported In Release: NOS7.0.1	**Technology:** ACLs - Access Control Lists	
Symptom: Applying Access Control List (ACL's) with 12K rules on management interface takes more than 3 minutes to enforce it.		
Condition: When Access Control List (ACL's) is configured with 12K rules.		

Defect ID:	DEFECT000599306	
Technical Severity: Medium	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS7.0.1	**Technology:** CLI - Command Line Interface	
Symptom: Vrf information is missing for some interfaces while displaying output of "show ip interface brief" command.		
Condition: This issue is seen, then "show ip interface brief" is executed repeatedly in multiple terminals.		
Workaround: If "show ip interface brief" executed from multiple terminals, then it not should be executed too quickly. Let the command output display completed on one terminal before starting on other terminal.		

Defect ID:	DEFECT000599778	
Technical Severity: High	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Security	
Reported In Release: NOS7.0.1	**Technology:** TACACS & TACACS+	
Symptom: LDAP/RADIUS/TACACS+ server configurations are not displayed in the same order in which they were added.		
Condition: 1. Configure multiple TACACS+/RADIUS/LDAP servers(max 5) 2. Remove few server entries 3. Add those servers entries back		
Workaround: Remove all Server entries and configure those servers back in the desired order.		

Defect ID:	DEFECT000599835	
Technical Severity: Medium	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Security	
Reported In Release: NOS7.1.0	**Technology:** AAA - Authentication, Authorization, and Accounting	
Symptom: Switch with ACL policy that has 12K rules and is enforced to the management interface causes switch to reload		
Condition: Re-sequence the ACL policy which has 12K rules		

Defect ID:	DEFECT000599897	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Monitoring	
Reported In Release: NOS6.0.2	**Technology:** Port Mirroring	
Symptom: Control frame loss as the SPANed ARP frames trapping on intermediate node		
Condition: If we have huge ARP traffic coming on to a SPANed port which has SPAN destination in other RBridge		
Workaround: Make the SPAN session local to that RBridge and remove the SPAN in VCS session		
Recovery: Make the SPAN session local to that RBridge and remove the SPAN in VCS session		

Defect ID:	DEFECT000600002	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** VCS	
Reported In Release: NOS7.0.1	**Technology:** Metro VCS	
Symptom: When an optic is removed/ and inserted back too quickly, there is an VERIFY message on console that indicate due to media data reading failure.		
Condition: This VERIFY is not needed, since there is a retry to read media data. The media data will be successful after retry in this case.		

Defect ID:	DEFECT000600022	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** VCS	
Reported In Release: NOS7.0.1	**Technology:** Metro VCS	
Symptom: When VDX 8770 is in chassis-disabled state, the far-end 100 GbE link partners using QSFP28 optics may see intermittent link flaps. After VDX 8770 is chassis-enabled, there is a low probability that the 100 GbE port may not come online.		
Condition: When VDX 8770 is in chassis-disabled state, the far-end 100 GbE link partners using QSFP28 optics may see intermittent link flaps. After VDX 8770 is chassis-enabled, there is a low probability that the 100 GbE port may not come online.		
Recovery: Execute "shut" on 100 GbE link partner port connected to VDX 8770 to stop the port from flapping intermittently. After the VDX 8770 is chassis-enabled, execute "no shut" on the 100 GbE link partner to re-enable the port.		

Defect ID:	DEFECT000600023	
Technical Severity: Medium	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Security	
Reported In Release: NOS6.0.2	**Technology:** SSH - Secure Shell	
Symptom: Shutting SSH server on Standby partition fails		
Condition: After High Availability fail over, we may hit the issue.		

Defect ID:	DEFECT000600057
Technical Severity: High	**Probability:** Low
Product: Brocade Network OS	**Technology Group:** VCS
Reported In Release: NOS7.0.1	**Technology:** Logical Chassis
Symptom: Switch might not rejoin the cluster when reloaded using 'fastboot' command.	
Condition: Reloading switch using 'fastboot' command on VDX6940 and VDX6740 platforms when SW1 partition is active might lead to this issue.	
Workaround: Reload the switch using 'reload' command which is more graceful way of reloading.	
Recovery: Bring the switch which failed to join the cluster to default configuration using command 'copy default-config startup-config'. On reload, switch rejoins the cluster and regains older configuration.	

Defect ID:	DEFECT000600066
Technical Severity: High	**Probability:** High
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer
Reported In Release: NOS7.0.1	**Technology:** DHCP - Dynamic Host Configuration Protocol
Symptom: DHCP IPv4 Relay forwarded DISCOVER packet is not getting forwarded through remote leaf node in BGP-EVPN IP Fabric.	
Condition: While deploying DHCP Relay in BGP-EVPN IP Fabric.	
Recovery: Disable "conversational-arp".	

Defect ID:	DEFECT000600169
Technical Severity: High	**Probability:** High
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer
Reported In Release: NOS7.0.1	**Technology:** BGP4 - IPv4 Border Gateway Protocol
Symptom: IP MTU configuration is not working for VE interface when IP address or L3 VNI association is not present.	
Condition: When IP MTU is configured, it is not applied on the VE interface.	
Workaround: Configure IP MTU followed by the configuration of the IP address.	

Defect ID:	DEFECT000600185
Technical Severity: Medium	**Probability:** High
Product: Brocade Network OS	**Technology Group:** Network Automation and Orchestration
Reported In Release: NOS7.0.1	**Technology:** OpenStack Integration
Symptom: When VDX-8770 is in chassis-disable state, the "show media" command will not show 100 GbE ports.	
Condition: When VDX-8770 is in chassis-disable state, the "show media" command will not show 100 GbE ports.	
Workaround: After the chassis is enabled using "chassis enable" command, "show media" will show the 100 GbE ports.	
Recovery: After the chassis is enabled using "chassis enable" command, "show media" will show the 100 GbE ports.	

Defect ID:	DEFECT000600377	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS7.0.1	**Technology:** SNMP - Simple Network Management Protocol	
Symptom: The SNMP walk may fail and SNMPV3 trap may not be received for the user configured under RBridge.		
Condition: The SNMP walk may fail and SNMPV3 trap may not be received only for the SNMPV3 user configured under RBridge after upgrade from 7.0.0 to 7.0.1.		
Recovery: Reconfigure the user under RBridge after the successful upgrade from 7.0.0 to 7.0.1.		

Defect ID:	DEFECT000600579	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Layer 2 Switching	
Reported In Release: NOS7.0.1	**Technology:** VXLAN - Virtual Extensible LAN	
Symptom: Unexpected reload of switch on performing ISSU or ha-failover.		
Condition: With VxLAN tunnel and BFD configured, ISSU from any version prior to 7.0.1 may result in unexpected reload of switch.		
Workaround: Issue is fixed 7.0.1 and hence in 7.1.0 also. No workaround needed.		
Recovery: reload of switch		

Defect ID:	DEFECT000600591	
Technical Severity: Medium	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS7.0.1	**Technology:** CLI - Command Line Interface	
Symptom: Logs are dumped on the screen, when there is a read failure on SFPs connected to the port.		
Condition: Accessing information about the SFPs inserted in the ports.		
Recovery: Disable the port and re-enable it.		

Defect ID:	DEFECT000600696	
Technical Severity: High	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Monitoring	
Reported In Release: NOS6.0.2	**Technology:** Hardware Monitoring	
Symptom: Unable to run the RTE tool for CBR2 platform		
Condition: While executing the RTE tool on CBR2 platforms.		

Defect ID:	DEFECT000601145	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Data Center Fabric	
Reported In Release: NOS7.0.1	**Technology:** IP Fabric	
Symptom: If issuing fastboot on a chassis system some modules may crash on the MM that is about to reboot. This should have no impact on functionality.		
Condition: A change was made to the reboot procedures that was not propagated to fastboot on chassis systems.		

Defect ID:	DEFECT000601146	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** VCS	
Reported In Release: NOS7.0.1	**Technology:** Logical Chassis	
Symptom: When user does an upgrade we may see system go down and come up with the same old version.		
Condition: This could happen when the ISSU notification to the standby keeps failing.		

Defect ID:	DEFECT000601229	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** VCS	
Reported In Release: NOS7.0.1	**Technology:** Logical Chassis	
Symptom: Disk usage is full on VDX2746 after monitoring the switch with IP MAPS with custom policies and rules for some weeks. Yet to work on the defect.		
Condition: Disk usage is full on VDX2746 after monitoring the switch with IP MAPS with custom policies and rules for some weeks. Yet to work on the defect.		

Defect ID:	DEFECT000601715	
Technical Severity: High	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS7.0.0	**Technology:** CLI - Command Line Interface	
Symptom: When copying files to/from VDX switch to TFTP server we are seeing errors when 'use-vrf' option is specified.		
Condition: Copying files to/from VDX switch to TFTP server.		

Defect ID:	DEFECT000601917	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS7.0.1	**Technology:** Multi-VRF	
Symptom: Change of MAC address of a host connected to VCS is not updated across user defined VRF's in ARP table.		
Condition: Incorrect MAC address will be replied for an ARP request.		

Defect ID:	DEFECT000601985	
Technical Severity: Medium	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Layer 2 Switching	
Reported In Release: NOS7.0.0	**Technology:** xSTP - Spanning Tree Protocols	
Symptom: VDX switches running in a VCS cluster may encounter CIST Spanning-tree interoperability problem with certain Juniper switches where BPDU's sourced by the VDX may be dropped by the partner.		
Condition: When VDX running in VCS cluster running distributed CIST spanning-tree & VDX switches are configured as spanning-tree root.		
Workaround: Change the spanning-tree root to partner switch.		

Defect ID:	DEFECT000602062	
Technical Severity: Medium	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS5.0.2	**Technology:** Access Gateway	
Symptom: Console logs appear when snmpwalk is performed.		
Condition: When snmpwalk is performed for community/user associated with IPv6 ACL.		

Defect ID:	DEFECT000602227	
Technical Severity: Medium		**Probability:** Medium
Product: Brocade Network OS		**Technology Group:** Management
Reported In Release: NOS7.0.0		**Technology:** SNMP - Simple Network Management Protocol
Symptom: SNMP OID 1.3.6.1.2.1.17.1.3 displays 'No such instance' in output		
Condition: snmpwalk for SNMP OID 1.3.6.1.2.1.17.1.3		

Defect ID:	DEFECT000602239	
Technical Severity: Medium		**Probability:** Medium
Product: Brocade Network OS		**Technology Group:** Security
Reported In Release: NOS5.0.2		**Technology:** ACLs - Access Control Lists
Symptom: VDX experience unexpected reload after configuring permit statement on standard ACL applied to management interface.		
Condition: Configuration of permit statement on standard ACL applied to management interface.		
Workaround: NA		

Defect ID:	DEFECT000602579	
Technical Severity: Medium		**Probability:** Low
Product: Brocade Network OS		**Technology Group:** Management
Reported In Release: NOS6.0.1		**Technology:** High Availability
Symptom: ISSU may fail and result in standby GOS not booting up.		
Condition: This can happen in some corner case where bootenv can not be accessed during ISSU.		
Workaround: reboot the system		
Recovery: reboot the system		

Defect ID:	DEFECT000602722	
Technical Severity: High		**Probability:** High
Product: Brocade Network OS		**Technology Group:** Network Automation and Orchestration
Reported In Release: NOS7.1.0		**Technology:** OpenStack Integration
Symptom: VDX 8770 6x100 GbE port may show RX_SYM_ERR after link is administratively flapped due to excessive mac-move detection on the port. In this case, RX_SYM_ERR will not affect traffic after link is up.		
Condition: VDX 8770 6x100 GbE port may show RX_SYM_ERR after link is administratively flapped due to excessive mac-move detection on the port. In this case, RX_SYM_ERR will not affect traffic after link is up.		
Workaround: RX_SYM_ERR dashboard statistics can be cleared via NOSCLI.		
Recovery: RX_SYM_ERR dashboard statistics can be cleared via NOSCLI.		

Defect ID:	DEFECT000602751	
Technical Severity: Medium		**Probability:** High
Product: Brocade Network OS		**Technology Group:** Layer 2 Switching
Reported In Release: NOS7.0.0		**Technology:** xSTP - Spanning Tree Protocols
Symptom: User tries firmware downgrade and will hit error message as, User need to clean the config and then only downgrade can be done.		
Condition: When "system-oui" configuration is done under "protocol spanning-tree" configuration mode and subsequently, a downgrade is done.		
Workaround: User needs to remove the config with "no system-oui" command under "protocol spanning-tree" mode.		

Defect ID:	DEFECT000602764	
Technical Severity: High		**Probability:** High
Product: Brocade Network OS		**Technology Group:** Layer 2 Switching
Reported In Release: NOS7.0.0		**Technology:** xSTP - Spanning Tree Protocols
Symptom: After spanning tree system OUI feature enabled and then disabled, the firmware download is failed.		
Condition: Doing spanning tree system OUI enable and disable. Then performing the firmware download.		

Defect ID:	DEFECT000603443	
Technical Severity: Medium		**Probability:** Medium
Product: Brocade Network OS		**Technology Group:** Layer 2 Switching
Reported In Release: NOS6.0.1		**Technology:** LAG - Link Aggregation Group
Symptom: Changing LACP timeout option in VDX can cause LACP PDUs to be sent at short intervals when neighboring device is cisco Nexus 7k. Changing LACP timeout option from long to short and again to long in both the devices can cause this behavior.		
Condition: LACP timeout option in VDX internally remains as short though configuration is shown as long.		

Defect ID:	DEFECT000603778	
Technical Severity: Medium		**Probability:** Medium
Product: Brocade Network OS		**Technology Group:** Layer 3 Routing/Network Layer
Reported In Release: NOS6.0.2		**Technology:** IPv6 Addressing
Symptom: When both "IPv6 vrrp-suppress-interface-ra" and "IPv6 VRRP VIP" are configured the IPv6 RA response to the IPv6 RS contains link-local address instead of the VIP address.		
Condition: Configure both "IPv6 vrrp-suppress-interface-ra" and "IPv6 VRRP VIP"		

Defect ID:	DEFECT000604049	
Technical Severity: High		Probability: High
Product: Brocade Network OS		Technology Group: Data Center Fabric
Reported In Release: NOS7.0.1		Technology: VCS Fabric
Symptom: Potential for Name Server fail-over and recovery to the Standby Control Processor if the overall scale of the VCS cluster exceeds the limit described within the "Conditions for Publication" section.		
Condition: The maximum number of elements within a cluster cannot exceed 32,767 prior to having this modification to increase scale to 80,000. Entities that contribute to this count are: - RBridges - Ports (physical and virtual) - Devices that appear in the Name Server The maximum assignable port indexes are listed here by platform type: Chassis-based systems (Director class) : 1800 VDX 6740/VDX 6740T/VDX 6740T-1G : 1200 VDX 6940 : 1312 For example, one Director-class RBridge accounts for 1 (for the RBridge itself) + 1800 (maximum assignable port indexes) + <FC/FCoE device count>. Thus, if we have 500 devices, this would translate to 1 + 1800 + 500 = 2301 (of the total allowable 32767). Here are some sample combinations in terms of RBridge composition within a cluster, where a cluster-wide FC/FCoE device count is presumed to be 3000: • 16 Directors • 14 Directors + 3 VDX 6940/ 3 VDX 6740 • 12 Directors + 5 VDX 6940 / 6 VDX 6740 • 8 Directors + 11 VDX 6940		
Workaround: Limit cluster composition in a manner compliant with the maximum values described within the "Conditions for Publication" section.		
Recovery: Limit cluster composition in a manner compliant with the maximum values described within the "Conditions for Publication" section.		

Defect ID:	DEFECT000604054	
Technical Severity: Medium		Probability: High
Product: Brocade Network OS		Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NOS7.1.0		Technology: BGP4 - IPv4 Border Gateway Protocol
Symptom: Loopback interfaces are showing bogus IP MTU value, when global MTU is configured.		
Condition: Execution of "show ip interface lo <ID>" when global MTU is configured.		

Defect ID:	DEFECT000604131	
Technical Severity: Medium		Probability: Medium
Product: Brocade Network OS		Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NOS7.0.0		Technology: Multi-VRF
Symptom: If local route exists from a route source and a leaked route is added from the same route source for the prefix, the routing table is updated with the new leaked route.		
Condition: Issue is seen if dynamic route leak is configured with prefixes matching the local prefixes.		
Workaround: There should not be overlap between local and leaked prefixes		

Defect ID:	DEFECT000604714	
Technical Severity: High		**Probability:** Low
Product: Brocade Network OS		**Technology Group:** Management
Reported In Release: NOS7.1.0		**Technology:** SNMP - Simple Network Management Protocol
Symptom: In some rare case, SNMP v1/v2c query with specific community string may not respond.		
Condition: Configure more than one community and do reload or node rejoin.		
Recovery: Reconfigure community string		

Defect ID:	DEFECT000604743	
Technical Severity: Medium		**Probability:** High
Product: Brocade Network OS		**Technology Group:** Layer 3 Routing/Network Layer
Reported In Release: NOS7.0.0		**Technology:** BGP4 - IPv4 Border Gateway Protocol
Symptom: BGP static networks are not advertised to peers.		
Condition: static-network route is configured.		

Defect ID:	DEFECT000605042	
Technical Severity: Low		**Probability:** Medium
Product: Brocade Network OS		**Technology Group:** Management
Reported In Release: NOS7.0.1		**Technology:** CLI - Command Line Interface
Symptom: 'snmp-server' command doesn't update the values of 3 input parameters.		
Condition: Inputting all the 3 parameters contact, location and sys-descr on a single line of execution.		
Workaround: Configure each of the input parameter separately.		

Defect ID:	DEFECT000605230	
Technical Severity: High		**Probability:** Medium
Product: Brocade Network OS		**Technology Group:** Layer 3 Routing/Network Layer
Reported In Release: NOS6.0.2		**Technology:** IPv6 Addressing
Symptom: After ISSU upgrade the configuration "ipv6 nd prefix 2011::/64 2592000 86400 no-autoconfig" no longer works.		
Condition: Internal configuration data didn't sync properly.		

Defect ID:	DEFECT000605476	
Technical Severity: Low		**Probability:** High
Product: Brocade Network OS		**Technology Group:** Layer 3 Routing/Network Layer
Reported In Release: NOS7.0.1		**Technology:** BGP4 - IPv4 Border Gateway Protocol
Symptom: The route advertised by eBGP peer is not installed in the routing table.		
Condition: This issue occurs only in the self-referencing scenario i.e. when route prefix overlaps with the prefix of next hop from where the route is received.		
Workaround: Isolate the bgp peering in a different subnet so that their prefix does not overlap with the routes being advertised between them		

Defect ID:	DEFECT000605776	
Technical Severity: Low		**Probability:** Low
Product: Brocade Network OS		**Technology Group:** Management
Reported In Release: NOS6.0.2		**Technology:** CLI - Command Line Interface
Symptom: New script will help to clear all the counters with single command		
Condition: It is an enhancement		
Workaround: Use the individual commands to clear the counters		

Defect ID:	DEFECT000605899	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Data Center Fabric	
Reported In Release: NOS4.1.3	**Technology:** Logical Chassis	
Symptom: Radius Client connections via fabric to Radius Server failing.		
Condition: This is observed when VDX6740 receives the IP packets with DSCP 63 (0x3F) from the Radius Clients		

Defect ID:	DEFECT000605923	
Technical Severity: Medium	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Layer 2 Switching	
Reported In Release: NOS7.0.1	**Technology:** FCoE - Fibre Channel over Ethernet	
Symptom: FCoE VLAN creation and subsequent fabric map may fail.		
Condition: When more than 64 ports are configured with 'switchport trunk allowed vlan all' configuration and tried to create FCoE VLAN.		
Workaround: Do not configure more than 64 ports with 'swtchport trunk allowed vlan all' configuration while creating an FCoE VLAN.		
Recovery: Remove 'switchport trunk allowed vlan all' configuration if it is configured on more than 64 interfaces and try creating FCoE VLAN and fabric map.		

Defect ID:	DEFECT000605998	
Technical Severity: Medium	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS5.0.2	**Technology:** OSPF - IPv4 Open Shortest Path First	
Symptom: just once "clear ip ospf all" is done in RB01, a tremendous "LSA flush rcvd Type:5" message lasted to pop up forever and network got unstable.		
Condition: In huge scale OSPF setups when there are more than 10 neighbors and OSPF peer has to retransmit an LSA to all these neighbors this issue is seen as each neighbor is added to retransmit queue multiple times		
Workaround: Decrease the number of LSAs and neighbors		

Defect ID:	DEFECT000606064	
Technical Severity: Medium	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS7.1.0	**Technology:** Software Installation & Upgrade	
Symptom: "/bin/cat: /etc/time.conf: No such file or directory:" is seen during firmware download		
Condition: Firmware download		

Defect ID:	DEFECT000608321	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS7.1.0	**Technology:** Software Installation & Upgrade	
Symptom: Firmware upgrade is initiated on a node which has default-config configured		
Condition: Warning message is given when default config is configured and a non-default option is provided during firmware download		

Defect ID:	DEFECT000608446	
Technical Severity: High		**Probability:** High
Product: Brocade Network OS		**Technology Group:** VCS
Reported In Release: NOS7.0.1		**Technology:** Logical Chassis
Symptom: VDX generates FFDC core file and throws Software 'verify' error on console.		
Condition: Execution of copy default-config startup-config from VCS primary node.		
Workaround: NA		
Recovery: LC gets automatically recovered.		

Defect ID:	DEFECT000608811	
Technical Severity: High		**Probability:** High
Product: Brocade Network OS		**Technology Group:** VCS
Reported In Release: NOS7.1.0		**Technology:** Logical Chassis
Symptom: An unexpected reload of the switch can occur.		
Condition: If a NOSCLI show command is left paginated and not exited out or completed within a week's time frame, then an unexpected reload of the switch can occur.		
Workaround: Use "terminal length 0" to turn off show command pagination.		

Defect ID:	DEFECT000608838	
Technical Severity: Medium		**Probability:** High
Product: Brocade Network OS		**Technology Group:** Management
Reported In Release: NOS7.0.1		**Technology:** SNMP - Simple Network Management Protocol
Symptom: SFP Interface goes into administratively down state. Ex: [NSM-1028], 5673/2457, SW/0 | Active | DCE, ERROR, <hostname>, Incompatible SFP transceiver for interface TenGigabitEthernet 1/0/45 is detected		
Condition: Execution of "[no] snmp trap link-status" command on an un-tunable SFP interface.		
Workaround: Please do not disable "snmp trap link-status" which is enabled by default on all interface.		

Recovery: Enable tunable-optics configuration and then disable it on impacted interface as below:
 	
    tunable-optics sfpp channel 1
    no tunable-optics sfpp channel
 	
  Make interface up again:
 	
    no shutdown		

Defect ID:	DEFECT000608995	
Technical Severity: High		**Probability:** Medium
Product: Brocade Network OS		**Technology Group:** Layer 3 Routing/Network Layer
Reported In Release: NOS7.0.1		**Technology:** ARP - Address Resolution Protocol
Symptom: Traffic to/from DHCP host is not routed when the DHCP IP is assigned to a new host. The ARP for such host does not age out when age out timer expires.		
Condition: DHCP Server is sending ACK packets to relay agent even when the client address is known. Mostly seen with Windows DHCP server.		
Workaround: Modify DHCP server settings so that it will send reply directly to dhcp client when client IP is present in the received DHCP message.		

Defect ID:	DEFECT000610081	
Technical Severity: High		**Probability:** High
Product: Brocade Network OS		**Technology Group:** IP Multicast
Reported In Release: NOS7.1.0		**Technology:** IGMP - Internet Group Management Protocol
Symptom: Traffic leaks on one of the ports of vLAG (port-channel) when a Layer 2 Static IGMP group configuration on the specific vLAG is removed. The port is still showing in the Layer 3 PIM Mcache Outgoing interface list. The problem shows up in one of the remote nodes of VCS, which happens to be the DR.		
Condition: During the cleanup of IGMP static group configuration removal for vLAG interface on the VLAN the information is not getting conveyed to the PIM protocol.		
Workaround: Avoid IGMP static group configuration on a vLAG		
Recovery: Disable PIM and enabling it again on the VE.		

Defect ID:	DEFECT000610145	
Technical Severity: Medium		**Probability:** High
Product: Brocade Network OS		**Technology Group:** Management
Reported In Release: NOS6.0.2		**Technology:** Management GUI
Symptom: Controllers which rely on multipart-reply(flow-stats) to validate/mark the flow as installed/added may get confused and may try to delete the flow again and again		
Condition: Affects the flow-mods where reserved ports are part of action set		

Defect ID:	DEFECT000610510	
Technical Severity: High		**Probability:** High
Product: Brocade Network OS		**Technology Group:** Layer 3 Routing/Network Layer
Reported In Release: NOS5.0.1		**Technology:** OSPF - IPv4 Open Shortest Path First
Symptom: OSPF routes are uninstalled from one or more VRF's, causing traffic disruption. Router LSA's do not refresh.		
Condition: Occurs when there are many OSPF session across many VRF's, with total OSPF routes exceeding 1500.		
Recovery: Flap OSPF neighbor sessions.		

Defect ID:	DEFECT000610816	
Technical Severity: High		**Probability:** High
Product: Brocade Network OS		**Technology Group:** Layer 2 Switching
Reported In Release: NOS5.0.2		**Technology:** LAG - Link Aggregation Group
Symptom: VDX throws FVCS-1005 RASLOG message followed by an unexpected reboot.		
Condition: The user may experience this issue when attempting to change or undo the active Port Channel in a Redundancy Group using the 'no port-channel <PortChannel ID> active' command.		
Workaround: When changing the active Port Channel in a Redundancy Group, it is best to avoid using the 'no port-channel <PortChannel ID> active' command. It is advisable to delete the Redundancy Group and recreate it when wanting to change the Active Port Channel in a Redundancy Group.		

Defect ID:	DEFECT000610937	
Technical Severity: Medium	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS5.0.1	**Technology:** DHCP - Dynamic Host Configuration Protocol	
Symptom: Gateway for default route obtained through DHCP remains in running configuration under mgmt-vrf even after deleting DHCP config and reloading the switch.		
Condition: Invalid gateway for default route may appear after reloading the switch.		

Defect ID:	DEFECT000611059	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** VCS	
Reported In Release: NOS7.1.0	**Technology:** Logical Chassis	
Symptom: VDX experience unexpected reload due to DCMd daemon termination.		
Condition: When Principal fail-over occurs, secondary nodes DB transaction cleanup fails on standby partition due to timing condition.		

Defect ID:	DEFECT000611400	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Traffic Management	
Reported In Release: NOS7.1.0	**Technology:** Rate Limiting and Shaping	
Symptom: Switch can go for a reboot when the slot values are provided well outside the permissible range in the 'bp-rate-limit command'. Permissible range for slot is '0-16'		
Condition: The issue is seen only when the command is executed by providing the slot values well outside the permissible range.		
Workaround: Ensure that slot values are provided only in the valid range '0-16'		
Recovery: Remove any of the slot values provided outside the permissible range of '0-16'		

Defect ID:	DEFECT000611576	
Technical Severity: High	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** VCS	
Reported In Release: NOS5.0.2	**Technology:** Logical Chassis	
Symptom: Getting "% Error: VLAN string length(1139) is more than maximum length 1023" on reboot.		
Condition: VDX with allowed vlan configuration string length more than 1023 can hit the issue at boot up & configuration replay time.		

Defect ID:	DEFECT000611680	
Technical Severity: High	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS4.1.3	**Technology:** OSPF - IPv4 Open Shortest Path First	
Symptom: Few OSPF LSA's are not removed from Database when they are withdrawn at the source.		
Condition: When the number of routes are highly scaled and large number of routes are redistributed from BGP and OSPF. VRRP -E has VIP configured same as physical interface IP's.		
Workaround: When these anomalies are removed, OSPF LSA's will be flushed properly.		

Defect ID:	DEFECT000611688	
Technical Severity: High		**Probability:** High
Product: Brocade Network OS		**Technology Group:** Monitoring
Reported In Release: NOS7.1.0		**Technology:** Hardware Monitoring
Symptom: VDX 6940 and 6940-144S may show CRC errors on ports cabled with QSFP 40 GbE active copper transceiver cables.		
Condition: VDX 6940 and 6940-144S may show CRC errors on ports cabled with QSFP 40 GbE active copper transceiver cables.		
Workaround: Replace QSFP 40 GbE active copper transceiver cables with optical QSFP transceivers. Then reboot the switch.		
Recovery: Replace QSFP 40 GbE active copper transceiver cables with optical QSFP transceivers. Then reboot the switch.		

Defect ID:	DEFECT000612673	
Technical Severity: Medium		**Probability:** Low
Product: Brocade Network OS		**Technology Group:** Layer 2 Switching
Reported In Release: NOS7.1.0		**Technology:** VLAN - Virtual LAN
Symptom: May see spurious "Too many interrupts" events.		
Condition: Other interrupts come in within a second and first one not cleared.		

Defect ID:	DEFECT000612821	
Technical Severity: Medium		**Probability:** Low
Product: Brocade Network OS		**Technology Group:** Layer 3 Routing/Network Layer
Reported In Release: NOS6.0.2		**Technology:** VRRPv2 - Virtual Router Redundancy Protocol Version 2
Symptom: VRRP-1002 raslog message is not displayed.		
Condition: When Master to backup change happens .		

Defect ID:	DEFECT000612967	
Technical Severity: High		**Probability:** High
Product: Brocade Network OS		**Technology Group:** Security
Reported In Release: NOS7.1.0		**Technology:** Security Vulnerability
Symptom: Shutting down SSH server does not close all existing SSH login sessions		
Condition: Shutdown SSH server		
Recovery: Close all existing login sessions using "clear sessions" command, please note this command will close telnet sessions as well.		

Defect ID:	DEFECT000613777	
Technical Severity: High		**Probability:** High
Product: Brocade Network OS		**Technology Group:** Layer 3 Routing/Network Layer
Reported In Release: NOS6.0.2		**Technology:** DHCP - Dynamic Host Configuration Protocol
Symptom: DHCP request packets are dropped on VDX, and are not relayed to DCHP server(s).		
Condition: This affects only DHCP request packets with option-82. For example, an intermediate layer 2 node may have inserted option 82 in the packet and then forwarded to the VDX.		
Workaround: A workaround script is available to disable option-82 check on VDX		
Recovery: A workaround script can be used to recover from this issue		

Defect ID:	DEFECT000614353	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Monitoring	
Reported In Release: NOS7.0.1	**Technology:** Hardware Monitoring	
Symptom: After inserting a media 'SFP transceiver for interface XYZ is inserted' RASLOG is missing.		
Condition: a media/SFP insertion		

Defect ID:	DEFECT000614390	
Technical Severity: Critical	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS5.0.1	**Technology:** ICMP - Internet Control Message Protocol	
Symptom: Very rarely we could see 5% of the ICMP replies are dropped in software and random interval.		
Condition: The issue can be happened when we have ARP requests from 1000 different hosts at the rate of 25 ARP's/sec, and at the same time pinging VE or VRRP IP on the same SVI at 1 ICMP/sec		

Defect ID:	DEFECT000614988	
Technical Severity: High	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS7.0.1	**Technology:** IPv6 Addressing	
Symptom: "ipv6 nd prefix" CLI command displays incorrect default value for lifetime and preferred lifetime parameter.		
Condition: Execution of "ipv6 nd prefix" CLI.		

Defect ID:	DEFECT000615075	
Technical Severity: Low	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS6.0.2	**Technology:** Licensing	
Symptom: LED on unlicensed and shutdown VDX 40G ports are slow blinking amber after boot. Expected behavior is off since it is unlicensed.		
Condition: After reload, the single QSFP amber LED should only blink slow amber when all the 4 internal links/ports are offline and the port has a 40G Port Upgrade license reservation; otherwise it should be turned off (ie, no color/black).		

Defect ID:	DEFECT000615165	
Technical Severity: High	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS7.0.1	**Technology:** IPv6 Addressing	
Symptom: "ipv6 nd prefix <IPv6> no-autoconfig" config can get lost.		
Condition: Config-replay from backup configuration file when "ipv6 nd prefix <IPv6> no-autoconfig" is configured with valid and preferred life time default values.		

Defect ID:	DEFECT000615176	
Technical Severity: Medium	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS5.0.2	**Technology:** CLI - Command Line Interface	
Symptom: CLI command "show support" will not show few core files from system daemon crash on usual place which is /core_files		
Condition: When there is crash by one of management daemon then core file doesn't get saved on regular system path /core_files		

Defect ID:	DEFECT000615242	
Technical Severity: Medium	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** VCS	
Reported In Release: NOS6.0.2	**Technology:** AMPP - Automatic Migration of Port Profiles	
Symptom: MACs on Linux Virtual Machines with VMWare Tools installed may not get programmed on VDX.		
Condition: When VMWare Tools are installed on Virtual Machines, Both IPV4 and IPV6 address gets reported from Vmware to VDX. VDX is unable to handle very long IP Strings and ignores such vnics(MACs)		
Workaround: Either disable IPV6 on the Virtual Machines or don't install VMware tools on the Virtual Machines		
Recovery: Disable IPV6 on Virtual Machines or remove VMware tools and re-run the discovery cycle		

Defect ID:	DEFECT000615380	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS5.0.2	**Technology:** DHCP - Dynamic Host Configuration Protocol	
Symptom: DHCP packets will be dropped in the box where DHCP Relay is configured.		
Condition: DHCP Relay listens on standard well-known BOOTPS and BOOTPC ports (i.e. 67 and 68). If any other ports are used for communication between DHCP Client and DHCP Server can cause the issue.		
Workaround: As a workaround, use standard BOOTPS and BOOTPC (i.e. 67 and 68) UDP ports for communication between DHCP Relay and DHCP Server.		
Recovery: Use of standard BOOTPS and BOOTPC (i.e. 67 and 68) UDP ports for communication between DHCP Relay and DHCP Server will recover the system.		

Defect ID:	DEFECT000615564	
Technical Severity: Medium	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Layer 2 Switching	
Reported In Release: NOS6.0.2	**Technology:** LAG - Link Aggregation Group	
Symptom: If a port channel interface is configured as tracking interface for an interface which exists before this port channel interface in output of "show running-config" then during replay of this configuration file will cause the issue. It throws the error that it can not find particular port channel interface.		
Condition: This issue can occur during configuration file replay in which a port channel can be configured as tracking interface.		

Defect ID:	DEFECT000615646	
Technical Severity: High	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS7.0.1	**Technology:** IPv6 Addressing	
Symptom: Prefix is advertised in the IPv6 RA messages even though it is configured with "no-advertise" option.		
Condition: Prefix is configured using "ipv6 nd prefix" with "no-advertise"		
Workaround: Do not configure prefix if it should not be present in IPv6 RA messages.		

Defect ID:	DEFECT000615651	
Technical Severity: High	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS7.0.1	**Technology:** IPv6 Addressing	
Symptom: ipv6 nd prefix <prefix> with "off-link" option does not work.		
Condition: execution of ipv6 nd prefix <prefix> CLI with "off-link" option		
Workaround: NA		

Defect ID:	DEFECT000616035	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS7.1.0	**Technology:** OSPF - IPv4 Open Shortest Path First	
Symptom: OSPF adjacency is stuck in ex-start state for some of the Ve interfaces.		
Condition: When OSPF is configured on a SAG enabled interface and the interface is reconfigured, during the re-convergence, some of the OSPF sessions could be stuck in ex-start state.		

Defect ID:	DEFECT000616334	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Data Center Fabric	
Reported In Release: NOS7.1.0	**Technology:** IP Fabric	
Symptom: L3 traffics are not forwarded correctly.		
Condition: The environment have lots of flows which generate more than 3K hash results and some hash values are shared by 2 or more flows.		
Workaround: Reduce the total flows or consider re-arrange the private subnet prefix if there are private subnet.		
Recovery: Clear the host table.		

Defect ID:	DEFECT000616345	
Technical Severity: High	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Monitoring	
Reported In Release: NOS6.0.2	**Technology:** RAS - Reliability, Availability, and Serviceability	
Symptom: In some cases, the problem manifests itself as kernel panic occurs due to "Out Of Memory" condition. In other cases, control plane traffic is unable to egress on some of the ports.		
Condition: The problem is known to happen only with 10G edge ports.		

Defect ID:	DEFECT000616987	
Technical Severity: Medium	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS7.0.1	**Technology:** BFD - BiDirectional Forwarding Detection	
Symptom: BFD session is not switched over to other available links if existing BFD session is deleted and added back.		
Condition: BFD session remains in INIT state thus causing registered protocols with BFD to converge in longer duration.		

Defect ID:	DEFECT000617049	
Technical Severity: Medium	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Layer 2 Switching	
Reported In Release: NOS6.0.2	**Technology:** VLAN - Virtual LAN	
Symptom: Static-MACfor multicast-mac address floods the packet after removing static-ARP and static-MAC entry and re-configuring.		
Condition: Static multicast MAC configured as static ARP.		

Defect ID:	DEFECT000617313	
Technical Severity: High	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** VCS	
Reported In Release: NOS7.0.1	**Technology:** TRILL - Transparent Interconnection of Lots of Links	
Symptom: RTE capture won't work for breakout interface		
Condition: when ingress/trill port is breakout mode		

Defect ID:	DEFECT000617646	
Technical Severity: Low	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Monitoring	
Reported In Release: NOS7.0.1	**Technology:** Syslog	
Symptom: Under certain conditions Syslog message giving source IP as MGMT-interface IP, when the reachability is via inband		
Condition: 1. When both inaband and OOB both IP's are present and active in MGMT-VRF 2. Syslog server is connected through inband		

Defect ID:	DEFECT000617886	
Technical Severity: Critical	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Layer 2 Switching	
Reported In Release: NOS6.0.1	**Technology:** VLAN - Virtual LAN	
Symptom: VDX experience unexpected reload due to Out-Of-Memory condition. Also some of the ports are unable to transmit.		
Condition: Known to happen with 10G ports that have copper-pigtail connector. And the link-partner is not a Brocade device.		

Defect ID:	DEFECT000617919	
Technical Severity: High	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS7.0.1	**Technology:** IPv6 Addressing	
Symptom: Unable to configure update-source for IPv6 interface, it throws syntax error: "xx/x/101" is an invalid value.		
Condition: Configure update-source for IPv6 interface which is greater than 99.		

Defect ID:	DEFECT000618317	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Monitoring	
Reported In Release: NOS7.1.0	**Technology:** RAS - Reliability, Availability, and Serviceability	
Symptom: Termination of raslogd process after upgrading from 7.0.1 to 7.1.0		
Condition: In cluster environment after updating firmware.		
Recovery: Raslogd will restart automatically.		

Defect ID:	DEFECT000618713	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Network Automation and Orchestration	
Reported In Release: NOS7.1.0	**Technology:** OpenStack Integration	
Symptom: The VDX6940-144S 10G passive cable (1m and 3m) interfaces do not display the interface "link down" RASLOG message when the corresponding 10G interface on the remote end is shut down		
Condition: Shutting down 10G interfaces when remote switch is a VDX6940-144S connected with 10G passive cables (1m and 3m)		
Workaround: Shut the 10G interface on the local interface		
Recovery: Shut the 10G interface on the local interface		

Defect ID:	DEFECT000619405	
Technical Severity: High	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Network Automation and Orchestration	
Reported In Release: NOS6.0.2	**Technology:** OpenStack Integration	
Symptom: CRC errors when using 40g DAC (direct attach copper) cable with VDX6940		
Condition: 40g DAC (direct attach copper) cable with VDX6940		

Defect ID:	DEFECT000619425	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Layer 2 Switching	
Reported In Release: NOS7.1.0	**Technology:** VXLAN - Virtual Extensible LAN	
Symptom: Traffic loss on Port-channel interface		
Condition: If Global MTU is smaller than Port-channel MTU or Global MTU is configured and un-configured, user may see traffic loss on port-channel interface.		
Workaround: Configure MTU same as port-channel on Port-channel member interfaces		

Defect ID:	DEFECT000619467	
Technical Severity: Low	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS7.0.1	**Technology:** Inband Management	
Symptom: ZR optics are undetected and shows data access errors when connected to edge ports other than xx/x/1		
Condition: ZR optic connected to edge ports other than xx/x/1		
Workaround: Connect ZR optic on first interface.		
Recovery: Connect ZR optic on first interface and reseat the other interface ZR optic.		

Defect ID:	DEFECT000619719	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Security	
Reported In Release: NOS7.0.1	**Technology:** SSH - Secure Shell	
Symptom: Telnet/ssh for default-vrf enables though user configured as disabled.		
Condition: If node disconnected and re-joined to the fabric after "no telnet server use-vrf default-vrf" OR "no ssh server use-vrf default-vrf"		
Workaround: Disable Telnet/ssh using "telnet server use-vrf default-vrf shutdown" or "ssh server use-vrf default-vrf shutdown".		
Recovery: After node rejoins the fabric, to disable the telnet/ssh, execute the CLIs "telnet server use-vrf default-vrf shutdown" or "no telnet server use-vrf default-vrf" for telnet and "ssh server use-vrf default-vrf shutdown" or "no ssh server use-vrf default-vrf".		

Closed With Code Changes for Network OS 7.1.0

Defect ID:	DEFECT000620197	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS7.0.1	**Technology:** OSPF - IPv4 Open Shortest Path First	
Symptom: Configuration of OSPF authentication key is not applied when done using config-replay.		

Condition: The issue is observed for below sequence of steps:
    1. Configure OSPF authentication key on interface using CLI.
    2. Save running configuration using command: copy running-config flash://<file-name>
    3. Remove configured OSPF authentication key using CLI.
    4. Replay saved configuration by using command: copy flash://<file-name> running-config
 	
It is observed that OSPF authentication key is not applied after step-4 though it was expected to be applied on the interface.		

Workaround: After config-replay fails to configure OSPF authentication key on the interface, it is possible to configure authentication key using CLI.		

Defect ID:	DEFECT000620617	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Layer 2 Switching	
Reported In Release: NOS7.0.1	**Technology:** xSTP - Spanning Tree Protocols	
Symptom: VDX6940 device may see traffic loss if HA failover or ISSU operation is performed from nos7.0.1 to nos7.0.1a release.		
Condition: 1) RSTP is configured 2) HA failover or ISSU is performed		
Recovery: Disable/enable spanning-tree protocol on the interface		

Defect ID:	DEFECT000620922	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS7.1.0	**Technology:** BGP4 - IPv4 Border Gateway Protocol	
Symptom: 'neighbor peer-group shutdown generate-rib-route' command doesn't generate rib-out for peers in the group.		
Condition: When peer-group is used to shut neighbors and generate rib-out, it doesn't generate rib-out.		
Workaround: Configure command per peer, for ribout generation as a work around		

Defect ID:	DEFECT000621212	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS7.0.1	**Technology:** BGP4 - IPv4 Border Gateway Protocol	
Symptom: Routes are advertised to peers with AS that's present in AS path segment of the route, though enable-peer-as-check is configured		
Condition: When 4 byte AS number support is enabled for the BGP sessions, the issue shall be seen		
Workaround: Disable 4 byte ASN support if possible		
Recovery: Upgrade to latest firmware or disable 4 byte ASN support to recover		

Defect ID:	DEFECT000622620	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:**	Network Automation and Orchestration
Reported In Release: NOS7.0.1	**Technology:** OpenStack Integration	
Symptom: 4 x 10 GbE breakout ports between VDX 6940-36Q and VDX 6740-1G may flap.		
Condition: 4 x 10 GbE breakout ports between VDX 6940-36Q and VDX 6740-1G may flap.		
Workaround: Perform shut / no shut on ports to stop the flapping.		
Recovery: Perform shut / no shut on ports to stop the flapping.		

Defect ID:	DEFECT000622750
Technical Severity: High	**Probability:** High
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer
Reported In Release: NOS7.1.0	**Technology:** IPv6 Addressing
Symptom: When the user updates an IPv6 prefix with preferred lifetime alone, valid lifetime changes to default value.	
Condition: The issue happens only when the user updates the preferred lifetime value to an already configured IPv6 prefix with valid and preferred lifetime.	

Defect ID:	DEFECT000623309	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:**	Network Automation and Orchestration
Reported In Release: NOS6.0.1	**Technology:** OpenStack Integration	
Symptom: CRCs occur on VDX 6940-36Q when DAC (direct attached copper) cable is used with DELL NIC server, and DELL NIC server is running traffic towards VDX 6940-36Q while the VDX switch is booting up.		
Condition: CRCs occur on VDX 6940-36Q when DAC (direct attached copper) cable is used with DELL NIC server, and DELL NIC server is running traffic towards VDX 6940-36Q while the VDX switch is booting up.		
Workaround: Reboot VDX switch, with DAC cabled ports administratively down state (save port configuration as "no shut", then reboot); or stop all traffic coming into DAC cabled ports from DELL NIC servers.		
Recovery: Reboot VDX switch, with DAC cabled ports administratively down state (save port configuration as "no shut", then reboot); or stop all traffic coming into DAC cabled ports from DELL NIC servers.		

Defect ID:	DEFECT000623711
Technical Severity: High	**Probability:** High
Product: Brocade Network OS	**Technology Group:** Data Center Fabric
Reported In Release: NOS7.1.0	**Technology:** VCS Fabric
Symptom: Any packet transmitted from CPU gets dropped on FC port.	
Condition: Can happen only on FC port.	

Defect ID:	DEFECT000624394
Technical Severity: High	**Probability:** Low
Product: Brocade Network OS	**Technology Group:** Layer 2 Switching
Reported In Release: NOS7.1.0	**Technology:** VLAN - Virtual LAN
Symptom: Continuous ASIC errors causes chip fault.	
Condition: Heavy ASIC activity can cause the issue.	

Defect ID:	DEFECT000624701	
Technical Severity: High		**Probability:** Medium
Product: Brocade Network OS		**Technology Group:** Security
Reported In Release: NOS6.0.0		**Technology:** Security Vulnerability
Symptom: NOS/SLX kernel (NOS/Host/TPVM) are all vulnerable. User can overwrite the etc/password with root access.		
Condition: CVE-2016-5195 - kernel > 2.6.22 can hit this Dirty COW issue.		

Defect ID:	DEFECT000625527	
Technical Severity: High		**Probability:** High
Product: Brocade Network OS		**Technology Group:** IP Multicast
Reported In Release: NOS7.1.0		**Technology:** PIM - Protocol-Independent Multicast
Symptom: Multicast functionality daemon "PIMd" goes down with memory leak.		
Condition: On enabling PIM, for every 60 seconds there is a memory leak of 5K bytes.		
Workaround: Do not enable PIM on router.		
Recovery: Disable PIM on router and reboot the router. Do not enable PIM after reboot.		

Closed without code changes for Network OS v7.1.0b

This section lists software defects with Critical, High, and Medium Technical Severity closed without a code change as of October 16, 2017 in Network OS v7.1.0b.

None

Closed without code changes for Network OS v7.1.0a

This section lists software defects with Critical, High, and Medium Technical Severity closed without a code change as of April 17, 2017 in Network OS v7.1.0a.

None

Closed without code changes for Network OS v7.1.0

This section lists software defects with Critical, High, and Medium Technical Severity closed without a code change as of November 22, 2016 in Network OS v7.1.0.

Defect ID: DEFECT000386298	Technical Severity: High
Reason Code: Already Fixed in Release	Probability: Medium
Product: Brocade Network OS	Technology Group: Management
Reported In Release: NOS2.1.1_sp	Technology: NTP - Network Time Protocol
Symptom: Unexpected reload when SYN flood attack is exercised on the switch	
Condition: SYN flood attack on switch	
Workaround: Set the threshold for the burst rate of TCP traffic by using "tcp burstrate" command	

Defect ID: DEFECT000408109	Technical Severity: Low
Reason Code: Will Not Fix	Probability: Low
Product: Brocade Network OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NOS3.0.0	Technology: VRRPv2 - Virtual Router Redundancy Protocol Version 2
Symptom: On VRRP session for ISL interface track command should not be allowed as this affects priority	
Condition: VRRP Track command for VRRP session on ISL port.	
Workaround: Dont enable VRRP track on ISL port.	

Defect ID: DEFECT000420768	Technical Severity: Medium
Reason Code: Not Reproducible	Probability: Low
Product: Brocade Network OS	Technology Group: Network Automation and Orchestration
Reported In Release: NOS3.0.0	Technology: OpenStack Integration
Symptom: User may not be able to see the current session privileges when he is authenticated through AAA using "Show users".	
Condition: Show users command didn't display user's role when user is authenticated via RADIUS authentication.	

Defect ID: DEFECT000431087	Technical Severity: Medium

Reason Code: Will Not Fix	**Probability:** High
Product: Brocade Network OS	**Technology Group:** Network Automation and Orchestration
Reported In Release: NOS3.0.0	**Technology:** OpenStack Integration
Symptom: set "deny any" to telnet connection of ACL. By this setting, VDX denied all telnet connection. But the VDX didn't record raslog message of telnet-violation even if I connected to the VDX from denied PC over 2 times. NOS 3.0.0a	
Condition: none	

Defect ID: DEFECT000451282		**Technical Severity:** Low	
Reason Code: Will Not Fix		**Probability:** Low	
Product: Brocade Network OS		**Technology Group:** Security	
Reported In Release: NOS4.0.0		**Technology:** User Accounts & Passwords	
Symptom: Changing the encryption level of a given username to level 7 with `no service password-encryption' shows success RASLOG, but does not take effect in the config.			
Condition: When service password encryption is turned off, try to change existing users encryption level to 7.			

Defect ID: DEFECT000456601		**Technical Severity:** Medium	
Reason Code: Will Not Fix		**Probability:** Medium	
Product: Brocade Network OS		**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS4.0.0		**Technology:** OSPF - IPv4 Open Shortest Path First	
Symptom: "max-metric" config is cleared and not retained after some add/delete operations.			
Condition: On max metric configuration, if clear OSPF is executed and OSPF networks are removed and added again, max-metric config is cleared and is not retained.			
Workaround: Reconfigure max-metric after clear operation.			

Defect ID: DEFECT000458128		**Technical Severity:** Low	
Reason Code: Will Not Fix		**Probability:** Medium	
Product: Brocade Network OS		**Technology Group:** Monitoring	
Reported In Release: NOS4.0.0		**Technology:** Syslog	
Symptom: Netconf login information not available in auditlog			
Condition: Applications logging into the switch using Netconf.			

Defect ID: DEFECT000519785		**Technical Severity:** High	
Reason Code: Will Not Fix		**Probability:** Low	
Product: Brocade Network OS		**Technology Group:** Security	
Reported In Release: NOS5.0.0		**Technology:** AAA - Authentication, Authorization, and Accounting	
Symptom: When "aaa authentication" command is tried with atleast one parameter same as previous command(example:aaa authentication radius local --> aaa authentication tacacs+ local), Customer may not be able to set the correct aaa mode.			
Condition: The authentication mode with primary & secondary sources of authentication cannot be updated to a configuration containing only the primary source and configuration with primary & secondary sources of authentication, the primary mode alone cannot be modified.			
Workaround: When "aaa authentication" command is tried with at least one parameter same as previous command(example: aaa authentication radius local --> aaa authentication tacacs+ local). Need to remove existing configuration and then configure the required configuration. example : (config)# do show running-config aaa authentication aaa authentication login radius local (config)# no aaa authentication login (config)# aaa authentication login tacacs+ local (config)# do show running-config aaa authentication aaa authentication login tacacs+ local			

Defect ID: DEFECT000521573	Technical Severity: Medium
Reason Code: Will Not Fix	Probability: Low
Product: Brocade Network OS	Technology Group: Security
Reported In Release: NOS5.0.0	Technology: ACLs - Access Control Lists
Symptom: When copying a file to the running config that contains MAC ACL or IPv4 ACL commands, if some of the keywords are abbreviated, the commands may be treated as invalid, or the commands may execute more slowly than if they were not abbreviated.	
Condition: Abbreviating any of the keywords "mac access-list", "ip access-list", "seq", or, if "seq" is not present, "permit", "deny", or "hard-drop", would result in the slowness issue rather than the invalid command issue. The slowness issue would become more pronounced if the file being copied contains a large number of MAC ACL or IPv4 ACL commands.	
Workaround: Avoid using abbreviated keywords in files being copied to the running config.	

Defect ID: DEFECT000523640	Technical Severity: High
Reason Code: Will Not Fix	Probability: High
Product: Brocade Network OS	Technology Group: Management
Reported In Release: NOS5.0.0	Technology: VMWare
Symptom: Traffic is not working through ports connected to servers after doing chassis disable/enable on the VDX.	
Condition: The issue is seen only after chassis disable followed by enable.	
Recovery: After chassis enable, Do a "shut" followed by "no shut" on the Port-Channels/Physical Interface connected to servers or do a "no port-profile-port" followed by "profile-port" on the Port-Channels/Physical interface.	

Defect ID: DEFECT000524630	Technical Severity: Low
Reason Code: Will Not Fix	Probability: Low
Product: Brocade Network OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NOS5.0.0	Technology: BGP4 - IPv4 Border Gateway Protocol
Symptom: During connection collision, switch is not closing the recent connection request if previous connection in established state.	
Condition: Second connection attempt is made after BGP peer is established.	
Recovery: The second connection request will get established automatically in case of collision.	

Defect ID: DEFECT000526209	Technical Severity: High
Reason Code: Will Not Fix	Probability: High
Product: Brocade Network OS	Technology Group: Management
Reported In Release: NOS4.1.3	Technology: VMWare
Symptom: Series of De-Association failure messages may appear when a chassis disable followed by a chassis enable command is executed on the cluster.	
Condition: On a live vCenter connection, chassis disable followed by chassis enable is the condition under which this error messages may be observed.	
Workaround: Delete the vCenter entry before performing the chassis disable and add back the vCenter entry after performing the chassis enable command.	
Recovery: No recovery required, as there is no effect in the functionality of port-profile application.	

Defect ID: DEFECT000528408	Technical Severity: Low
Reason Code: Will Not Fix	Probability: High
Product: Brocade Network OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NOS5.0.1	Technology: BGP4 - IPv4 Border Gateway Protocol
Symptom: New BGP connection is not accepted under following conditions.	
Condition: When the remote BGP identifier is greater than the local BGP identifier and there is a connection collision.	

Defect ID: DEFECT000529345	Technical Severity: Medium
Reason Code: Will Not Fix	Probability: Low
Product: Brocade Network OS	Technology Group: Management
Reported In Release: NOS6.0.0	Technology: Configuration Fundamentals
Symptom: User cannot see all the ISL port information in the port connectivity tab.	
Condition: Attempt to view ISL connection details from port connectivity tab.	

Defect ID: DEFECT000529743	Technical Severity: High
Reason Code: Will Not Fix	Probability: Low
Product: Brocade Network OS	Technology Group: Management
Reported In Release: NOS4.1.3	Technology: Software Installation & Upgrade
Symptom: LC may take longer to boot up if system is under heavy load. It will result in LC reboot timeout and FFDC.	
Condition: It happens during ISSU.	
Recovery: The user can run "power-off" and "power-on" to recover the LC.	

Defect ID: DEFECT000530965	Technical Severity: Low
Reason Code: Will Not Fix	Probability: High
Product: Brocade Network OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NOS5.0.2	Technology: OSPF - IPv4 Open Shortest Path First
Symptom: When the Helper Router exits helper mode on a given network segment, it should re-originate its LSAs based on the current state of its adjacency to the restarting router over the segment which is not happening.	
Condition: The helper router, on the GR mode exit, is supposed to originate the router/network LSAs based on the current adjacency state. This behavior is not yet implemented.	

Defect ID: DEFECT000533582	Technical Severity: Low
Reason Code: Will Not Fix	Probability: Medium
Product: Brocade Network OS	Technology Group: Security
Reported In Release: NOS6.0.0	Technology: AAA - Authentication, Authorization, and Accounting
Symptom: No uniformity in alignment and display format in the output of show access-list IP across interfaces	
Condition: Customers using the show access-list and expecting same display format across different interfaces.	

Defect ID:	DEFECT000533953	Technical Severity:	High
Reason Code:	Will Not Fix	Probability:	High
Product:	Brocade Network OS	Technology Group:	Management
Reported In Release:	NOS5.0.1	Technology:	SNMP - Simple Network Management Protocol
Symptom:	When a SNMP Set request is attempted on the object ospfVirtIfRtrDeadInterval, this object can be set to a value greater than 65535.		
Condition:	This issue is seen only on doing a SNMP Set request on the MIB object ospfVirtIfRtrDeadInterval.		

Defect ID:	DEFECT000536442	Technical Severity:	Medium
Reason Code:	Will Not Fix	Probability:	Medium
Product:	Brocade Network OS	Technology Group:	Management
Reported In Release:	NOS6.0.0	Technology:	Configuration Fundamentals
Symptom:	Management IP access list with large number of rules takes around 1 min to enforce the policy on management interface.		
Condition:	Management IP access list with large number of rules.		

Defect ID:	DEFECT000538887	Technical Severity:	Medium
Reason Code:	Will Not Fix	Probability:	Low
Product:	Brocade Network OS	Technology Group:	Monitoring
Reported In Release:	NOS4.1.2	Technology:	Syslog
Symptom:	Under normal operations, following false-positive raslog message may be seen: "[FW-3120], ...,, WARNING, ... Interface<>,IFGViolation Errors, is above high boundary(High=100, Low=5). Current value is <> Error(s)/minute." There is no functional impact.		
Condition:	When there are no interface errors incrementing in the output of "show interface".		

Defect ID:	DEFECT000540858	Technical Severity:	Medium
Reason Code:	Will Not Fix	Probability:	High
Product:	Brocade Network OS	Technology Group:	Network Automation and Orchestration
Reported In Release:	NOS4.1.0	Technology:	NETCONF - Network Configuration Protocol
Symptom:	Configuration and get config via NetConf are slow compared to CLI and sometime show high percentage of CPU utilization.		
Condition:	Applicable for all netconf commands.		

Defect ID:	DEFECT000541060	Technical Severity:	High
Reason Code:	Will Not Fix	Probability:	Low
Product:	Brocade Network OS	Technology Group:	Layer 3 Routing/Network Layer
Reported In Release:	NOS6.0.0	Technology:	BGP4 - IPv4 Border Gateway Protocol
Symptom:	With conditional default-origination, default route should be generated only when the route-map matching prefix is present in the IP routing table. When irrespective of whether route-map matching prefix is present in the IP routing table or not, default route is originated to the neighbor.		
Condition:	On configuring 'default-originate' with route-map in neighbor command		

Defect ID: DEFECT000541202	Technical Severity: High
Reason Code: Will Not Fix	Probability: Medium
Product: Brocade Network OS	Technology Group: Management
Reported In Release: NOS6.0.0	Technology: Configuration Fundamentals
Symptom: When customer configures high and low threshold values and the actual value is below the low threshold, a fabric watch raslog is displayed showing in between high and low threshold instead of below threshold.	
Condition: While using fabric watch module to monitor memory usage.	

Defect ID: DEFECT000545603	Technical Severity: Medium
Reason Code: Will Not Fix	Probability: Low
Product: Brocade Network OS	Technology Group: Management
Reported In Release: NOS6.0.0	Technology: Configuration Fundamentals
Symptom: Extended ACL with permit TCP rule does not block ICMP frames.	
Condition: Extended ACL with permit TCP rule does not block ICMP frames.	
Workaround: Add another rule to deny ICMP frames.	
Recovery: Add another rule to deny ICMP frames.	

Defect ID: DEFECT000547747	Technical Severity: Low
Reason Code: Will Not Fix	Probability: High
Product: Brocade Network OS	Technology Group: Management
Reported In Release: NOS6.0.0	Technology: VMWare
Symptom: Event notification is not received when port-groups with special characters are created on a vSwitch . As a result , the corresponding port-profile will not be applied to that interface.	
Condition: Use of special characters for port-groups on a vSwitch.	

Defect ID: DEFECT000548727	Technical Severity: Medium
Reason Code: Will Not Fix	Probability: Medium
Product: Brocade Network OS	Technology Group: Management
Reported In Release: NOS5.0.1	Technology: VMWare
Symptom: Port-Groups having the same name (regular , VMKernel , Distributed Port Groups) can get deleted when the vCenter user/administrator deletes any of the above port-groups sharing the same name,	
Condition: This scenario can happen when Port-groups belonging to different class(regular , VMKernel, Distributed Port Groups) use the same name within a data-center.	
Workaround: Avoid using the same name for different class of port-groups. vCenter's recommended names with prefixes like dvpg_, pg_ , VMKernel_ is good to follow.	
Recovery: Rename the port-groups from different class to use different names.	

Defect ID: DEFECT000548981	Technical Severity: High
Reason Code: Will Not Fix	Probability: Medium
Product: Brocade Network OS	Technology Group: Management
Reported In Release: NOS5.0.1	Technology: Configuration Fundamentals
Symptom: Access to the switch via management port (out of band) for all IPv6 protocols fails	
Condition: This issue is observed when a IPv6 ACL is configured on the management interface. For example "ipv6 permit any any"	
Workaround: Configure another matching entry in the ACL for permit based on protocol. Example "permit tcp any any"	

Defect ID: DEFECT000550658		**Technical Severity:**	Medium
Reason Code: Will Not Fix		**Probability:** Low	
Product: Brocade Network OS		**Technology Group:**	Layer 2 Switching
Reported In Release: NOS6.0.1		**Technology:** VXLAN - Virtual Extensible LAN	
Symptom: Momentary traffic loss is observed on NSX controller managed tunnels during VCS cluster formation.			
Condition: VCS has an overlay-gateway configuration with two or more RBridges attached and tunnel configurations are discovered by connecting to NSX controller. One of the RBridges attached to overlay-gateway is rebooted or upgraded via ISSU protocol. Traffic loss is observed on tunnels when such rebooted or upgraded RBridge rejoins VCS cluster.			

Defect ID: DEFECT000552520		**Technical Severity:**	High
Reason Code: Will Not Fix		**Probability:** High	
Product: Brocade Network OS		**Technology Group:**	Layer 3 Routing/Network Layer
Reported In Release: NOS6.0.1		**Technology:** Static Routing (IPv4)	
Symptom: Memory leak observed with repeated addition/deletion of VRFs using an automated script			
Condition: Adding and deleting VRFs repetitively			
Workaround: Remove routes before deleting the VRF			

Defect ID: DEFECT000553066		**Technical Severity:**	Medium
Reason Code: Will Not Fix		**Probability:** High	
Product: Brocade Network OS		**Technology Group:**	VCS
Reported In Release: NOS6.0.1		**Technology:** Logical Chassis	
Symptom: Under certain condition, multiple "Invalid InterfaceId." log messages will be seen on the console.			
Condition: The symptom will be seen when a node joins the fabric and the fabric starts to rebuild.			

Defect ID: DEFECT000553426		**Technical Severity:**	Low
Reason Code: Will Not Fix		**Probability:** Medium	
Product: Brocade Network OS		**Technology Group:**	VCS
Reported In Release: NOS6.0.1		**Technology:** Logical Chassis	
Symptom: "This command is not supported on this product." message displayed			
Condition: When trying to execute a dpod command on a VDX 8770 (principal node in VCS cluster) for a non-existent rbridge-id.			

Defect ID: DEFECT000554319		**Technical Severity:**	Medium
Reason Code: Will Not Fix		**Probability:** High	
Product: Brocade Network OS		**Technology Group:**	Management
Reported In Release: NOS5.0.1		**Technology:** SNMP - Simple Network Management Protocol	
Symptom: Switch does not generate a ColdStart trap on the VE interface configured in mgmt-vrf.			
Condition: When switch is configured with VE interface in mgmt-vrf, then we will observe this issue.			

Defect ID:	DEFECT000554351	Technical Severity:	Medium
Reason Code:	Will Not Fix	Probability:	Medium
Product:	Brocade Network OS	Technology Group:	Layer 2 Switching
Reported In Release:	NOS6.0.1	Technology:	xSTP - Spanning Tree Protocols

Symptom: On the VDX8770 , executing certain Spanning Tree show commands may display the following warning message:

"% Warning: Output Incomplete, VCS is in transient state"

Condition: 1) Configure MSTP
2) Issue "show spanning-tree brief" or "show spanning-tree mst detail" CLI command

Workaround: This is a cosmetic issue and these messages can be safely ignored. There is no impact to functionality.

Defect ID:	DEFECT000554472	Technical Severity:	Medium
Reason Code:	Will Not Fix	Probability:	Low
Product:	Brocade Network OS	Technology Group:	Management
Reported In Release:	NOS5.0.1	Technology:	Configuration Fundamentals

Symptom: When booting logical chassis with its default config, the principal Rbridge ends up with "system-monitor MM threshold" "down-threshold 0" while non-principal Rbridges end up with "system-monitor MM threshold" "down-threshold 2".

Condition: This issue can be observed when using multiple VDX6740 switches in a logical chassis and booting from the default config.

Recovery: Reconfigure the "system-monitor MM threshold" to make it sync.

Defect ID:	DEFECT000555059	Technical Severity:	Low
Reason Code:	Will Not Fix	Probability:	Low
Product:	Brocade Network OS	Technology Group:	Management
Reported In Release:	NOS5.0.2	Technology:	SNMP - Simple Network Management Protocol

Symptom: SNMP walk should display Interfaces even when linecard is powered-off.

Condition: When a linecard is powered off, the SNMP walk does not display and reference the interface. Fixed it as part of this defect.

Defect ID:	DEFECT000556025	Technical Severity:	Low
Reason Code:	Will Not Fix	Probability:	High
Product:	Brocade Network OS	Technology Group:	Management
Reported In Release:	NOS6.0.1	Technology:	Configuration Fundamentals

Symptom: On port channel, Fabric Watch provides incorrect message SFP is absent when link is shut and SFP is not removed.

Condition: On Chassis VDX switches, SFP info from Fabric Watch may mislead when port is shut.

Defect ID:	DEFECT000556553	Technical Severity:	Medium
Reason Code:	Will Not Fix	Probability:	High
Product:	Brocade Network OS	Technology Group:	VCS
Reported In Release:	NOS6.0.1	Technology:	Logical Chassis

Symptom: The specific CLI command "no openflow" without specifying further parameters used to execute with default value instead of rejecting it.

Condition: When "no openflow" was executed on CLI then it was getting accepted with first default value "enable".

Defect ID: DEFECT000558082	Technical Severity: Medium
Reason Code: Will Not Fix	Probability: Medium
Product: Brocade Network OS	Technology Group: Monitoring
Reported In Release: NOS6.0.1	Technology: RMON - Remote Network Monitoring
Symptom: when MAPS rules are triggered and MAPS is configured to generate e-mails, they are not generated	
Condition: MAPS has to be enabled with one of the default policies and e-mail action has to be enabled on the switch. Switch IP address needs to be configured as an IPv6 address.	
Workaround: Use IPv4 address for Switch IP if MAPs email action is desired	

Defect ID: DEFECT000558216	Technical Severity: High
Reason Code: Design Limitation	Probability: Low
Product: Brocade Network OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NOS6.0.1	Technology: VRRPv2 - Virtual Router Redundancy Protocol Version 2
Symptom: Attaching VE interface to another RBridge is taking more time.	
Condition: With more than 2K VE interfaces created, attaching a VE interface to another RBridge takes more 1 sec for each VE interface.	

Defect ID: DEFECT000558937	Technical Severity: Medium
Reason Code: Will Not Fix	Probability: High
Product: Brocade Network OS	Technology Group: Data Center Fabric
Reported In Release: NOS6.0.1	Technology: AMPP - Automatic Migration of Port Profiles
Symptom: Sometimes, MAC addresses are shown twice in the output of 'show mac port-profile' command.	
Condition: 'show mac port-profile' command is issued	
Workaround: Re-issue to command to see a refreshed display	

Defect ID: DEFECT000559023	Technical Severity: Medium
Reason Code: Will Not Fix	Probability: High
Product: Brocade Network OS	Technology Group: VCS
Reported In Release: NOS6.0.1	Technology: Logical Chassis
Symptom: The negation of command may be accepted without value if single value is present for the command	
Condition: "no" command will be accepted for single value command. For example - "no ip address" can remove existing IP address without specifying it on CLI.	

Defect ID: DEFECT000560092	Technical Severity: High
Reason Code: Will Not Fix	Probability: Low
Product: Brocade Network OS	Technology Group: Network Automation and Orchestration
Reported In Release: NOS6.0.1	Technology: OpenStack Integration
Symptom: Unable to execute connector command due to config in error state.	
Condition: User did "copy default-config startup-config" on part of the cluster while the rest of the cluster is segmented. When cluster joined, it dynamically replayed back the connector config received from new principal at rejoin. This caused its connector configuration being partially saved to database on the local switch.	
Recovery: Recovery steps: 1. From principal switch, remove this secondary node from cluster by using "no vcs logical-chassis enable rbridge-id XX default-config" with XX being the secondary node RBridgeid. 2. On the secondary node, do "write erase" to clean up its config. 3. Restore the secondary switch vcs mode, vcsid and RBridgeId and the necessary ISL and see it rejoin the cluster.	

Defect ID:	DEFECT000561651	Technical Severity:	Low
Reason Code:	Will Not Fix	Probability:	Low
Product:	Brocade Network OS	Technology Group:	Monitoring
Reported In Release:	NOS6.0.0	Technology:	RAS - Reliability, Availability, and Serviceability
Symptom:	Spelling of the word 'display' in 'rasman' command' help text should be corrected.		
Condition:	Help text when 'rasman' command is executed.		

Defect ID:	DEFECT000562427	Technical Severity:	High
Reason Code:	Will Not Fix	Probability:	Low
Product:	Brocade Network OS	Technology Group:	VCS
Reported In Release:	NOS5.0.2	Technology:	Logical Chassis
Symptom:	When ISSU upgrade from 5.0.1b->5.0.2 with sflow collector config, does not allow to modify the existing configs.		
Condition:	ISSU upgrade with sflow configs.		
Workaround:	Remove the sflow config before the ISSU upgrade and the reconfig again.		

Defect ID:	DEFECT000562672	Technical Severity:	Medium
Reason Code:	Will Not Fix	Probability:	Low
Product:	Brocade Network OS	Technology Group:	Management
Reported In Release:	NOS5.0.2	Technology:	SNMP - Simple Network Management Protocol
Symptom:	When we try to associate 6th unique IPv4/IPv6 ACL to SNMP community/v3 user, we observe DB sync issue between front and backend. And also we observe unexpected reload of SNMP daemon when we try to associate 6th unique IPv4/IPv6 ACL to SNMP community/user.		
Condition:	When we associate 6th unique IPv4/IPv6 ACL to SNMP community/user.		

Defect ID:	DEFECT000563295	Technical Severity:	Medium
Reason Code:	Not Reproducible	Probability:	Low
Product:	Brocade Network OS	Technology Group:	Layer 3 Routing/Network Layer
Reported In Release:	NOS5.0.1	Technology:	ARP - Address Resolution Protocol
Symptom:	With certain 3rd party devices, VDX learns ARP entries from a host belonging to a different subnet due to their GARP replies. This can potentially impact the traffic towards that source.		
Condition:	When the device sends out GARP reply packet with source IP on different subnet than L3 interface IP.		

Defect ID:	DEFECT000564701	Technical Severity:	Medium
Reason Code:	Will Not Fix	Probability:	Medium
Product:	Brocade Network OS	Technology Group:	Monitoring
Reported In Release:	NOS6.0.1	Technology:	Syslog
Symptom:	Syslog-server secure port option can not be used without using the use-vrf option.		
Condition:	CLI usability issue where it shows use-vrf and secure options for syslog-server, where as secure option can be used along with use-vrf option only. Secure port can not be set alone for syslog server.		

Defect ID:	DEFECT000565277	Technical Severity:	High
Reason Code:	Will Not Fix	Probability:	Low
Product:	Brocade Network OS	Technology Group:	Management
Reported In Release:	NOS5.0.2	Technology:	Configuration Fundamentals
Symptom:	Under rare condition, when ACL is applied under management interface, it may not take effect and may display "Generic Error" when trying to remove the access-list.		
Condition:	When applied under management interface		

Defect ID: DEFECT000565590	Technical Severity: High
Reason Code: Will Not Fix	Probability: Low
Product: Brocade Network OS	Technology Group: Layer 2 Switching
Reported In Release: NOS6.0.1	Technology: xSTP - Spanning Tree Protocols
Symptom: Kernel panic results in switch reload after PVST configuration	
Condition: This memory corruption has only been observed in SWAT test with -ve test scenarios.	
Recovery: Node will automatically reboot.	

Defect ID: DEFECT000565913	Technical Severity: High
Reason Code: Will Not Fix	Probability: Low
Product: Brocade Network OS	Technology Group: Management
Reported In Release: NOS6.0.1	Technology: Software Installation & Upgrade
Symptom: Nodes of same cluster after reboot of all the nodes form cluster islands.	
Condition: This can happen when some nodes of a topology come up first and form their own cluster, and do not join the cluster formed by the rest of the nodes.	

Defect ID: DEFECT000567346	Technical Severity: Medium
Reason Code: Will Not Fix	Probability: Low
Product: Brocade Network OS	Technology Group: Management
Reported In Release: NOS5.0.2	Technology: SNMP - Simple Network Management Protocol
Symptom: dot1qTpFdbTable of Q-BRIDGE-MIB does not give any output when queried using a SNMP Get/Get-Next or Get-Bulk request.	
Condition: This issue is specific to dot1qTpFdbTable of Q-BRIDGE-MIB.	

Defect ID: DEFECT000568362	Technical Severity: High
Reason Code: Already Fixed in Release	Probability: High
Product: Brocade Network OS	Technology Group: Security
Reported In Release: NOS5.0.2	Technology: ACLs - Access Control Lists
Symptom: VDX running with NOS5.0.2a experience unexpected reload due to pdm termination.	
Condition: Execution of the script (37 iterations) while config/unconfig the snmp community with ipv4 ACL and ipv6 ACL configured.	

Defect ID: DEFECT000568380	Technical Severity: High
Reason Code: Already Fixed in Release	Probability: High
Product: Brocade Network OS	Technology Group: Layer 2 Switching
Reported In Release: NOS5.0.2	Technology: VLAN - Virtual LAN
Symptom: VDX running NOS5.0.2x, [Pvlan]-Mac learning is not happening on community port when configured over port-channel.	
Condition: Mac learning.	

Defect ID: DEFECT000568854	Technical Severity: High
Reason Code: Not Reproducible	Probability: Low
Product: Brocade Network OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NOS6.0.1	Technology: Static Routing (IPv4)
Symptom: Routing Information component (ribmgr) went through an unexpected restart	
Condition: Running soak tests with routing loop	

Defect ID: DEFECT000569319	Technical Severity: High
Reason Code: Will Not Fix	Probability: High
Product: Brocade Network OS	Technology Group: Layer 2 Switching
Reported In Release: NOS6.0.1	Technology: VLAN - Virtual LAN
Symptom: The MAC's gets learned on native VLAN for the shortest duration during RSTP root RBridge toggle. There will be loop during RSTP root RBridge toggle and the macs are getting classified to native VLAN causing the issue. The macs will be aged out after age time.	
Condition: The MAC's will be learned on native VLAN during RSTP toggle. There will be loop during RSTP root RBridge toggle and the macs are getting classified to native VLAN causing the issue. The MAC's will be aged out after age time.	
Workaround: Clearing FDB table will recover the mac tables.	

Defect ID: DEFECT000570086	Technical Severity: High
Reason Code: Not Reproducible	Probability: High
Product: Brocade Network OS	Technology Group: Management
Reported In Release: NOS7.0.0	Technology: NTP - Network Time Protocol
Symptom: Removal of NTP server is failing in the cluster.	
Condition: In rare conditions when multiple NTP servers are configured, removal of NTP server is failing.	
Workaround: Delete the NTP server second time if it failed on first time.	

Defect ID: DEFECT000570230	Technical Severity: Medium
Reason Code: Already Fixed in Release	Probability: High
Product: Brocade Network OS	Technology Group: Layer 2 Switching
Reported In Release: NOS5.0.2	Technology: VLAN - Virtual LAN
Symptom: VDX running with NOS5.x throws error messages of N O T A K N O W N R e s o u r c e I d	
Condition: Execution of "switchport private-vlan trunk native vlan <ID>"	

Defect ID: DEFECT000570284	Technical Severity: High
Reason Code: Will Not Fix	Probability: Medium
Product: Brocade Network OS	Technology Group: Layer 2 Switching
Reported In Release: NOS6.0.1	Technology: xSTP - Spanning Tree Protocols
Symptom: Root port of MSTP Instances will become Master port after adding a VLAN to an existing instances after MSTP-I convergence	
Condition: Addition of VLAN to an already converged MSTP Instances.	
Workaround: Shutdown/no shutdown of MSTP	

Defect ID: DEFECT000577094	Technical Severity: High
Reason Code: Will Not Fix	Probability: Low
Product: Brocade Network OS	Technology Group: IP Multicast
Reported In Release: NOS5.0.2	Technology: IPv4 Multicast Routing
Symptom: When a secondary IP is not configured, VDX sends option 24 in PIMV2 hello header which results in PIM adjacency failing to form on other switch.	
Condition: Happens with secondary IP address not configured.	

Defect ID: DEFECT000578640	Technical Severity: High
Reason Code: Not Reproducible	Probability: Low
Product: Brocade Network OS	Technology Group: Monitoring
Reported In Release: NOS7.0.0	Technology: RAS - Reliability, Availability, and Serviceability
Symptom: Few millisecond packet loss observed while collecting supportsave when multiple data stream with high line rate is running.	
Condition: Collecting supportsave when multiple stream of very high rate data is running.	

Defect ID:	DEFECT000579288	Technical Severity:	High
Reason Code:	Will Not Fix	Probability:	Low
Product:	Brocade Network OS	Technology Group:	Management
Reported In Release:	NOS6.0.1	Technology:	High Availability
Symptom:	A Functional switch hardware faces an abrupt reboot		
Condition:	Multiple Chassis Disable/Enable, repeated reboots of switch		

Defect ID:	DEFECT000580044	Technical Severity:	Low
Reason Code:	Will Not Fix	Probability:	High
Product:	Brocade Network OS	Technology Group:	Management
Reported In Release:	NOS6.0.1	Technology:	Configuration Fundamentals
Symptom:	After installing a new POD license and reserving the port using DPOD commands, show interface output indicates "no 10-G Port Upgrade License" erroneously.		
Condition:	When the user has not yet bounced the link (ie, "no shut") and recovered back to an active state after adding the license, the "No 10G Port Upgrade license" detail will remain displayed.		

Defect ID:	DEFECT000581124	Technical Severity:	High
Reason Code:	Design Limitation	Probability:	Low
Product:	Brocade Network OS	Technology Group:	Network Automation and Orchestration
Reported In Release:	NOS7.0.0	Technology:	OpenStack Integration
Symptom:	40G Interface is either protocol down (or) administratively down after "no shut" operation.		
Condition:	Breakout Config operation performed on 40G Interface connected to a 40G Interface		

Defect ID:	DEFECT000581852	Technical Severity:	High
Reason Code:	Already Fixed in Release	Probability:	High
Product:	Brocade Network OS	Technology Group:	Management
Reported In Release:	NOS6.0.2	Technology:	SNMP - Simple Network Management Protocol
Symptom:	SNMP query ifDescr output will be partial. This is specific to VDX6940-144S platform.		
Condition:	SNMP walk for ifDescr & Ifname table.		

Defect ID:	DEFECT000583151	Technical Severity:	High
Reason Code:	Not Reproducible	Probability:	High
Product:	Brocade Network OS	Technology Group:	Monitoring
Reported In Release:	NOS7.0.0	Technology:	RAS - Reliability, Availability, and Serviceability
Symptom:	panic will be observed when SS is initiated on a chassis with SFM(with HW issue which still has to be identified)		
Condition:	issue will occur when SFM (with HW issue) is used		

Defect ID:	DEFECT000583208	Technical Severity:	High
Reason Code:	Will Not Fix	Probability:	High
Product:	Brocade Network OS	Technology Group:	Management
Reported In Release:	NOS7.0.0	Technology:	Management GUI
Symptom:	Incorrect vendor name and model number will be shown in NOS Element Manager for VDX2746.		
Condition:	Launching Element Manager for VDX2746.		

Defect ID: DEFECT000583324		**Technical Severity:** High	
Reason Code: Not Reproducible		**Probability:** Medium	
Product: Brocade Network OS		**Technology Group:** Layer 2 Switching	
Reported In Release: NOS7.0.0		**Technology:** FCoE - Fibre Channel over Ethernet	
Symptom: ISL fails to come up due to Trunking Error			
Condition: When port is enabled between VDX8770 LC48x10G and VDX 6940 4x10G breakout interfaces			
Recovery: Issue shut followed by no shut on the port.			

Defect ID: DEFECT000583859		**Technical Severity:** High	
Reason Code: Already Fixed in Release		**Probability:** High	
Product: Brocade Network OS		**Technology Group:** Layer 2 Switching	
Reported In Release: NOS5.0.2		**Technology:** xSTP - Spanning Tree Protocols	
Symptom: L2 Loop can occur in VDX running with NOS5.0.2x			
Condition: "tunnel tagged-ieee-bpdu" is not working after removing "bpdu-drop" from the interface.			

Defect ID: DEFECT000585015		**Technical Severity:** High	
Reason Code: Not Reproducible		**Probability:** Low	
Product: Brocade Network OS		**Technology Group:** VCS	
Reported In Release: NOS7.0.0		**Technology:** AMPP - Automatic Migration of Port Profiles	
Symptom: traffic may flood for the non-profiled macs even if the global knob is disabled.			
Condition: 'no allow non-profiled-macs' is configured.			
Workaround: configure and remove 'allow non-profiled-macs' again.			

Defect ID: DEFECT000585352		**Technical Severity:** Medium	
Reason Code: Design Limitation		**Probability:** Low	
Product: Brocade Network OS		**Technology Group:** Layer 2 Switching	
Reported In Release: NOS5.0.2		**Technology:** VXLAN - Virtual Extensible LAN	
Symptom: The VxLAN traffic drops when the underlay VLAG interface links go through the state change. It is further observed that VTEP is not learning the MAC addresses of hosts located across the VXLAN tunnel.			
Condition: The problem occurs when VLAG is VXLAN underlay network AND Loopback IP is configured as VTEP IP.			
Workaround: VLAG as undelay and Loopback IP as VTEP IP is not supported. Hence, please use VRRP(-E) IP as VTEP IP when underlay network is comprised of VLAG(s).			

Defect ID: DEFECT000585934		**Technical Severity:** High	
Reason Code: Not Reproducible		**Probability:** Low	
Product: Brocade Network OS		**Technology Group:** VCS	
Reported In Release: NOS7.0.0		**Technology:** Logical Chassis	
Symptom: Newly joined VRRP-E session preempts current Master in the group.			
Condition: Configure VRRP-E sessions over GVLAN VE with preempt mode disabled. Perform chassis disable on Master router. After other router becomes Master, perform chassis enable on earlier Master router. This router, which was Master initially, again becomes Master.			

Defect ID: DEFECT000586338	Technical Severity: High
Reason Code: Not Reproducible	Probability: Medium
Product: Brocade Network OS	Technology Group: Data Center Fabric
Reported In Release: NOS7.0.0	Technology: Logical Chassis
Symptom: IN VDX 6940-144S, link flap occurs on 40 G ISL ports if breakout configuration mis-matched with any adjacent ports.	
Condition: In VDX 6940-144S, a 40 G Port with breakout QSFP is not configured as breakout may cause adjacent 40 G port to flap, whereas its peer port is configured as 40G breakout.	
Workaround: In VDX 6940-144S, configure 40 G port as breakout if the peer port is configured as 40G breakout. After that, the link flap on the port will stop.	

Defect ID: DEFECT000586556	Technical Severity: High
Reason Code: Not Reproducible	Probability: Low
Product: Brocade Network OS	Technology Group: VCS
Reported In Release: NOS7.0.0	Technology: Logical Chassis
Symptom: Switch may panic after enabling maintenance-mode on M4 because of memory corruption.	
Condition: This can happen randomly and inconsistently	
Recovery: None. Switch will reboot and recover automatically.	

Defect ID: DEFECT000587120	Technical Severity: High
Reason Code: Already Fixed in Release	Probability: Low
Product: Brocade Network OS	Technology Group: Security
Reported In Release: NOS7.0.0	Technology: ACLs - Access Control Lists
Symptom: When a permit rule is added for a specific IP(range), it may not block the other unspecified IP(ranges)	
Condition: This might occur for rules having source IP and gateway values.	
Workaround: Adding an additional rule to deny all other IP will block all other unspecified IP(ranges)	

Defect ID: DEFECT000587135	Technical Severity: High
Reason Code: Will Not Fix	Probability: High
Product: Brocade Network OS	Technology Group: VCS
Reported In Release: NOS5.0.2	Technology: TRILL - Transparent Interconnection of Lots of Links
Symptom: Unexpected reload on standby MM in rare scenario.	
Condition: While changing VCS.	

Defect ID: DEFECT000587566	Technical Severity: High
Reason Code: Not Reproducible	Probability: Medium
Product: Brocade Network OS	Technology Group: Layer 2 Switching
Reported In Release: NOS7.0.0	Technology: VXLAN - Virtual Extensible LAN
Symptom: Some VLANs that the user is expecting to be provisioned in a BGP EVPN instance get unprovisioned.	
Condition: The issue is seen when the user uses some common VNIs between BGP EVPN instance and some physical ports and then the user removed the last port from all the VLANs.	
Workaround: The user should avoid configuring common VNIs between BGP EVPN and physical ports.	
Recovery: Deleting those VLANs and configuring them back again, will fix the issue.	

Defect ID: DEFECT000587880	Technical Severity: High
Reason Code: Not Reproducible	Probability: High
Product: Brocade Network OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NOS7.0.0	Technology: IPv6 Addressing
Symptom: IPv6 DHCP relay SOLICIT packets are not getting intercepted after coldbooot upgrade.	
Condition: Running DHCP relay in a IP Fabric EVPN environment sometimes.	
Workaround: Delete and re-configure the same L3 interface where relay config is present.	

Defect ID: DEFECT000588078	Technical Severity: High
Reason Code: Not Reproducible	Probability: Low
Product: Brocade Network OS	Technology Group: Management
Reported In Release: NOS7.0.0	Technology: Virtual Fabrics
Symptom: The switch may get rebooted when performing copy scp command	
Condition: This can occur after powercycle of the switch.	

Defect ID: DEFECT000588346	Technical Severity: High
Reason Code: Design Limitation	Probability: Low
Product: Brocade Network OS	Technology Group: Layer 2 Switching
Reported In Release: NOS7.0.0	Technology: VXLAN - Virtual Extensible LAN
Symptom: All tunnels go operationally down when VRF associated with overlay-gateway is deleted.	
Condition: The "ip interface loopback X" or "ip interface ve X vrrp-extended-group Y" is configured for the overlay-gateway and corresponding ve/loopback interface is bound to a non-default vrf.	
Recovery: Configure the IP address for the Ve/loopback interface associated with overlay-gateway and then configure "no activate" & "activate" for overlay-gateway.	

Defect ID: DEFECT000588355	Technical Severity: High
Reason Code: Not Reproducible	Probability: Low
Product: Brocade Network OS	Technology Group: Layer 2 Switching
Reported In Release: NOS7.0.0	Technology: FCoE - Fibre Channel over Ethernet
Symptom: Dcmd may not go through the graceful shutdown process when switch is rebooted.	
Condition: Under some rare condition, Dcmd cannot shut down its database and thus fails to go through the graceful shutdown process.	
Workaround: None, the system will be recovered automatically	

Defect ID: DEFECT000588682	Technical Severity: High
Reason Code: Not Reproducible	Probability: Low
Product: Brocade Network OS	Technology Group: VCS
Reported In Release: NOS7.0.0	Technology: TRILL - Transparent Interconnection of Lots of Links
Symptom: In a two node cluster after shut of the ISL port on VDX6740 side the other node in the 2 node VCS goes down; this issue is rarely seen.	
Condition: 2 nodes must be part of same VCS.	

Defect ID: DEFECT000589040	**Technical Severity:**	High
Reason Code: Already Fixed in Release	**Probability:** High	
Product: Brocade Network OS	**Technology Group:**	Security
Reported In Release: NOS7.0.0	**Technology:** ACLs - Access Control Lists	
Symptom: When a permit/deny rule is added for a specific IP(range), it may not block the other unspecified IP(ranges)		
Condition: This might occur for rules having source IP and gateway values.		
Workaround: Adding an additional deny rule with same source IP and current switch IP as destination for IP protocol will block all other unspecified IP(ranges)		

Defect ID: DEFECT000589259	**Technical Severity:**	High
Reason Code: Already Fixed in Release	**Probability:** High	
Product: Brocade Network OS	**Technology Group:**	Security
Reported In Release: NOS7.0.0	**Technology:** ACLs - Access Control Lists	
Symptom: Applying a policy having rule with DSCP option will fail internally. Hence no IP ACL rule will be enforced.		
Condition: Applying a policy having rule with DSCP option will fail with internally with a script error.		
Workaround: Remove/Avoid adding the rule having DSCP value/option		

Defect ID: DEFECT000589297	**Technical Severity:**	High
Reason Code: Already Fixed in Release	**Probability:** High	
Product: Brocade Network OS	**Technology Group:**	Layer 2 Switching
Reported In Release: NOS5.0.2	**Technology:** xSTP - Spanning Tree Protocols	
Symptom: VDX running NOS5.0.2 displays issue in STP output, root bridge is wrongly displayed.		
Condition: Execution of "spanning-tree ieee-bpdu limit-vlan-flood" command		

Defect ID: DEFECT000590114	**Technical Severity:**	Medium
Reason Code: Will Not Fix	**Probability:** High	
Product: Brocade Network OS	**Technology Group:**	VCS
Reported In Release: NOS7.0.1	**Technology:** AMPP - Automatic Migration of Port Profiles	
Symptom: If user configures two AMPP port-profiles, one of them configured with access VLAN x and other configured with trunk VLAN x, Then ,In that case , It will not be shown as conflicting in "show port-profile name <pp1-name> name <pp2-name> validate" command output.		
Condition: When user creates 2 port-profiles, one port-profile with access VLAN x and other port-profile with trunk VLAN x and executes "show port-profile name <pp1-name> name <pp2-name> validate" CLI.		

Defect ID: DEFECT000590771	**Technical Severity:**	Medium
Reason Code: Already Fixed in Release	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:**	Management
Reported In Release: NOS6.0.1	**Technology:** High Availability	
Symptom: The standby MM on 8770-8 went to faulty state. This caused switch HA failover not to work. Also seen on primary MM was DCMD daemon termination, causing primary MM to reboot.		
Condition: The primary MM was booted with wrong Model ID, resulting in communication failure with secondary MM and database corruption.		

Defect ID:	DEFECT000591172	Technical Severity:	Medium
Reason Code:	Not Reproducible	Probability:	Low
Product:	Brocade Network OS	Technology Group:	Layer 3 Routing/Network Layer
Reported In Release:	NOS6.0.1	Technology:	IP Addressing
Symptom:	It is seen that configuration of global VE interface is missing in output of" show running-config". Configuration of same global VE was already present in protocol daemon, hence configuration of global VE again is not allowed.		
Condition:	In a rare scenario during global VE configuration.		

Defect ID:	DEFECT000594276	Technical Severity:	High
Reason Code:	Will Not Fix	Probability:	Low
Product:	Brocade Network OS	Technology Group:	VCS
Reported In Release:	NOS6.0.1	Technology:	Logical Chassis
Symptom:	Under a high scale of VCS nodes, the configuration applied for a range of interfaces across the VDX nodes may cause principal node to encounter an unexpected reload.		
Condition:	When issuing a configuration command under an interface range in a large cluster (32+ nodes)		
Workaround:	Avoid using interface range option in large clusters (32+ nodes) & instead configure the interfaces individually.		

Defect ID:	DEFECT000595226	Technical Severity:	High
Reason Code:	Already Fixed in Release	Probability:	High
Product:	Brocade Network OS	Technology Group:	Monitoring
Reported In Release:	NOS7.0.1	Technology:	Syslog
Symptom:	IPv4 and IPv6 syslog servers were not working when configured together as default/non-default VRF.		
Condition:	Defect exists in 7.0.0 also.		

Defect ID:	DEFECT000595610	Technical Severity:	Medium
Reason Code:	Will Not Fix	Probability:	Low
Product:	Brocade Network OS	Technology Group:	Traffic Management
Reported In Release:	NOS4.1.3	Technology:	Rate Limiting and Shaping
Symptom:	Customer could not enable the multicast rate-limit CLI as it gives error indicating it is not supported for VDX6746 platform.		
Condition:	multicast rate-limit CLI throws error.		

Defect ID:	DEFECT000597786	Technical Severity:	High
Reason Code:	Not Reproducible	Probability:	Low
Product:	Brocade Network OS	Technology Group:	VCS
Reported In Release:	NOS7.0.1	Technology:	Logical Chassis
Symptom:	After ISSU: IP Fabric VXLAN tunnels can start flapping continuously.		
Condition:	When there exist BGP-EVPN based IP Fabric VXLAN tunnels in the system and an ISSU is performed.		
Workaround:	Disabling the "vtep-discovery" defined under "address-family l2vpn evpn" submode of "router bgp" mode, before ISSU. or Deletion of the "overlay-gateway" config, before ISSU.		
Recovery:	Deletion and recreation of the "overlay-gateway" config.		

Defect ID: DEFECT000598965	Technical Severity: Medium
Reason Code: Design Limitation	Probability: Medium
Product: Brocade Network OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NOS7.0.1	Technology: BGP4 - IPv4 Border Gateway Protocol
Symptom: Local configuration related to global configuration may not restore on "config snapshot restore".	
Condition: Customer using snapshot feature may see issues when running "attached rbridge-id add 1" missing from running-config after "vcs config snapshot restore rbridge-id <rb-id> snapshot-id <snapshot-id> .	
Workaround: Customer should configure the missing configurations again.	

Defect ID: DEFECT000599203	Technical Severity: High
Reason Code: Not Reproducible	Probability: Medium
Product: Brocade Network OS	Technology Group: Management
Reported In Release: NOS7.0.1	Technology: SNMP - Simple Network Management Protocol
Symptom: The SNMP IPV4 traps may not be received through in-band interface.	
Condition: The SNMP traps may not be received through in-band interface after upgrade from 6.0.1 to 7.0.1.	
Workaround: Configure source-interface in the SNMP host / v3host recipients.	

Defect ID: DEFECT000599993	Technical Severity: High
Reason Code: Not Reproducible	Probability: Low
Product: Brocade Network OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NOS7.0.1	Technology: BGP4 - IPv4 Border Gateway Protocol
Symptom: Performing back-to-back reload of VDX may result in some of the OSPF sessions getting stuck in Exchange state	
Condition: This is observed with a high number of L3 routes of the magnitude ~20K and performing back-to-back reload of VDX	
Recovery: Clear the sessions that are in stuck in exchange state	

Defect ID: DEFECT000600197	Technical Severity: Medium
Reason Code: Design Limitation	Probability: High
Product: Brocade Network OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NOS7.0.1	Technology: BGP4 - IPv4 Border Gateway Protocol
Symptom: "show running-config overlay-gateway <name> vlan <vlan number>" throws error "% No entries found " even when VLAN is present.	
Condition: This happens only when a filter is specified after "overlay-gateway <name>". Otherwise command works fine when no filter is specified.	
Workaround: Instead of using the filter, use the " | include <string>" for filters like following: "show running-config overlay-gateway <name> | include "vlan <vlan-number>"	

Defect ID: DEFECT000600482	Technical Severity: High
Reason Code: Already Fixed in Release	Probability: Low
Product: Brocade Network OS	Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NOS6.0.2	Technology: ARP - Address Resolution Protocol
Symptom: Inter-VLAN traffic that is routed on VDX is failing for specific end hosts.	
Condition: Frequent ARP addition/deletion, topology changes, high CPU bound ARP/L3 traffic	
Recovery: 'clear arp no-refresh' command	

Defect ID:	DEFECT000601318	Technical Severity:	High
Reason Code:	Will Not Fix	Probability:	Medium
Product:	Brocade Network OS	Technology Group:	Layer 3 Routing/Network Layer
Reported In Release:	NOS7.0.1	Technology:	OSPF - IPv4 Open Shortest Path First
Symptom: Blade may become faulty with error code 97 during firmware upgrade with the coldboot option.			
Condition: That can happen due to a rare MI/ISC issue during the blade initialization process.			
Workaround: None is required			
Recovery: The blade will be reset and will be recovered automatically.			

Defect ID:	DEFECT000601398	Technical Severity:	High
Reason Code:	Not Reproducible	Probability:	High
Product:	Brocade Network OS	Technology Group:	Network Automation and Orchestration
Reported In Release:	NOS7.0.1	Technology:	OpenStack Integration
Symptom: VDX 8770 6x100 GbE port, when shut, no shut, may cause link partner VDX 6940-144S 100 GbE port to go administratively down, and stay administratively down.			
Condition: VDX 8770 6x100 GbE port, when shut, no shut, may cause link partner VDX 6940-144S 100 GbE port to go administratively down, and stay administratively down.			
Workaround: Perform no shut on VDX 6940-144S 100 GbE port			
Recovery: Perform no shut on VDX 6940-144S 100 GbE port			

Defect ID:	DEFECT000602153	Technical Severity:	Medium
Reason Code:	Will Not Fix	Probability:	Low
Product:	Brocade Network OS	Technology Group:	Management
Reported In Release:	NOS6.0.2	Technology:	Inband Management
Symptom: No response for SNMP query from loopback IP address.			
Condition: If ingress and egress interfaces are different.			
Workaround: configure route to take ingress and egress path from same interface.			
Recovery: Use the same interface for ingress and egress side.			

Defect ID:	DEFECT000602861	Technical Severity:	Medium
Reason Code:	Will Not Fix	Probability:	Medium
Product:	Brocade Network OS	Technology Group:	VCS
Reported In Release:	NOS5.0.1	Technology:	Logical Chassis
Symptom: High disk usage that ended up out of space.			
Condition: Postgres log file(Dcmd.Linux.powerpc.pg_ctl.log) unconditionally growing			
Recovery: Delete Dcmd.Linux.powerpc.pg_ctl.log file.			

Defect ID:	DEFECT000604917	Technical Severity:	High
Reason Code:	Already Fixed in Release	Probability:	High
Product:	Brocade Network OS	Technology Group:	VCS
Reported In Release:	NOS5.0.2	Technology:	TRILL - Transparent Interconnection of Lots of Links
Symptom: VDX throws Application communication failure error.			
Condition: Execution of VCS ID change CLI.			

Defect ID: DEFECT000613594	**Technical Severity:** Low
Reason Code: Will Not Fix	**Probability:** Low
Product: Brocade Network OS	**Technology Group:** VCS
Reported In Release: NOS5.0.2	**Technology:** Logical Chassis
Symptom: show commands couldn't be accepted due to "application communication failure".	
Condition: Deletion of snmp-community config after ISSU upgrade from NOS 502a to NOS 502b1, can cause the issue of show command.	
Workaround: Remove the snmp community config before the upgrades and apply it back	

Defect ID: DEFECT000615168	**Technical Severity:** Medium
Reason Code: Will Not Fix	**Probability:** High
Product: Brocade Network OS	**Technology Group:** Management
Reported In Release: NOS7.0.1	**Technology:** CLI - Command Line Interface
Symptom: User may not be able to login to VDX switch after ISSU upgrade from NOS7.0.0 to NOS7.0.1 with no activation option. Existing telnet sessions will not be impacted. Cold boot upgrades are not impacted	
Condition: ISSU upgrade from NOS7.0.0 to NOS7.0.1 with no activation option	
Workaround: Perform ISSU firmware Install with auto activation. (Don't install firmware on a single node VDX running NOS7.0.0 to NOS7.0.1 with "noactivate" option. In case "logical-chassis" keyword used, don't install firmware on single or multiple nodes in cluster running NOS7.0.0 to NOS7.0.1 without "auto-activate" option.) Existing open telnet sessions will not be impacted. Thus if you really want to perform ISSU firmware install without activation, then keep principal node telnet/ssh/console session open with infinite terminal time out using "terminal timeout 0". This will allow to perform "firmware activate" to recover from the impacted state	
Recovery: The user may login using another node in the VCS that is not yet upgraded and carry out principal switchover to make that VDX a Principal switch. Once done, execute "firmware activate". Alternatively, add a new switch to VCS cluster, make it principal and run command "firmware activate" which would recover all switches in VCS cluster	

Defect ID: DEFECT000625386	**Technical Severity:** High
Reason Code: Already Fixed in Release	**Probability:** High
Product: Brocade Network OS	**Technology Group:** VCS
Reported In Release: NOS6.0.2	**Technology:** Logical Chassis
Symptom: Unable to login to the device and customer should do netinstall to bring up the device	
Condition: After upgrading the firmware form version nos6.0.2 to nos7.0.0, user unable to login the switch.	
Workaround: Upgrade the firmware version from nos6.0.2 to nos6.0.2c before upgrading it to nos7.0.0 or higher version.	
Recovery: Netinstall is required to recover the switch state.	

Known Issues for Network OS v7.1.0b

This section lists open software defects with Critical, High, and Medium Technical Severity as of October 16[h], 2017 in Network OS v7.1.0b.

Known Issues for Network OS v7.1.0a

This section lists open software defects with Critical, High, and Medium Technical Severity as of April 17[h], 2017 in Network OS v7.1.0a.

Defect ID: DEFECT000637587	
Technical Severity: High	Probabilitty: High
Product: Brocade Network OS	Technology Group: Security
Reported in Release: NOS7.1.0	Technology: User Accounts & Passwords
Symptoms: Username configured with more than 20 character password is lost during configuration replay from external server	
Condition: When password configured is more than 20 character in length	

Defect ID: DEFECT000634260	
Technical Severity: High	Probabilitty: Medium
Product: Brocade Network OS	Technology Group: Security
Reported in Release: NOS7.1.0	Technology: Security Vulnerability
Symptoms: Switch allows Non-admin user to execute certain show commands even though its denied by RBAC Rule.	
Condition: when user is moved from Admin role to Non-admin role after Ha Failover.	

Defect ID: DEFECT000634013	
Technical Severity: High	Probabilitty: High
Product: Brocade Network OS	Technology Group: IP Multicast
Reported in Release: NOS7.1.0	Technology: PIM - Protocol-Independent Multicast
Symptoms: Switch may crash with PIMD termination after executing "clear ip pim mcache" or "config/unconfig rp-address".	
Condition: With L3 multicast traffic running	
Workaround: execute "clear ip pim mcache" or "config/unconfig rp-address" in loop via script for more than 30 mins.	

Defect ID: DEFECT000637104	
Technical Severity: High	Probabilitty: High
Product: Brocade Network OS	Technology Group: Layer 2 Switching
Reported in Release: NOS7.1.0	Technology: VLAN - Virtual LAN

Symptoms: Switch does not allow user to configure L2 configuration on physical interface after config and unconfig of "ip directed broadcast" cli.
Condition: After config and unconfig of "ip directed broadcast" cli

Defect ID: DEFECT000637145	
Technical Severity: High	Probabilitty: High
Product: Brocade Network OS	Technology Group: Data Center Fabric
Reported in Release: NOS7.1.0	Technology: IP Fabric
Symptoms: Debug IPF script	
Condition: ingress RT check against EVPN route is not matching in the script	
Workaround: When debug IPF script is run on border leaf for L3 routed interface.	

Defect ID: DEFECT000634629	
Technical Severity: High	Probabilitty: High
Product: Brocade Network OS	Technology Group: IP Multicast
Reported in Release: NOS7.1.0	Technology: PIM - Protocol-Independent Multicast
Symptoms: "BSR-candidate interface" and "RP-candidate interface" configuration is lost during configuration replay from external server.	
Condition: Configuration replay from external serve	

Defect ID: DEFECT000638862	
Technical Severity: High	Probabilitty: High
Product: Brocade Network OS	Technology Group: Management
Reported in Release: NOS7.1.0	Technology: CLI - Command Line Interface
Symptoms: 100mb speed cli configured on physical interface in VDX6940-144S platform is not removed when downgraded to 7.1.0	
Condition: 100mb speed configuration on VDX6940-144S platform	

Defect ID: DEFECT000638715	
Technical Severity: High	Probabilitty: High
Product: Brocade Network OS	Technology Group: Layer 3 Routing/Network Layer
Reported in Release: NOS7.1.0	Technology: BGP4 - IPv4 Border Gateway Protocol
Symptoms: Peer-group configured without defining peer-group results in config discrepancy between front end and backend during configuration replay scenario	
Condition: When Peer-group is configured without defining peer-group	

Defect ID: DEFECT000638782	
Technical Severity: High	Probabilitty: High

Product: Brocade Network OS	Technology Group: Network Automation and Orchestration
Reported in Release: NOS7.1.0	Technology: NETCONF - Network Configuration Protocol
Symptoms: Switch does not allow the user to configure Evpn instance after sending a netconf query to configure "RD Auto" to non-configured Evpn instance.	
Condition: When Netconf query is sent to configure "RD-AUTO" without configuring the Evpn instance first.	

Defect ID: DEFECT000638872	
Technical Severity: Medium	Probabilitty: High
Product: Brocade Network OS	Technology Group: Management
Reported in Release: NOS7.1.0	Technology: CLI - Command Line Interface
Symptoms: Switch throws false alarm	
Condition: "Configuration not allowed when link speed set to 100Mbps" during configuration replay from external server	
Workaround: when port-channel is configured on 100mb speed configured port	

Defect ID: DEFECT000634766	
Technical Severity: High	Probabilitty: High
Product: Brocade Network OS	Technology Group: Management
Reported in Release: NOS7.0.0	Technology: Software Installation & Upgrade
Symptoms: "no system-mode maintenance" CLI fails with operation failed.	
Condition: "no system-mode maintenance" CLI execution.	

Known Issues for Network OS v7.1.0

This section lists open software defects with Critical, High, and Medium Technical Severity as of November 22, 2016 in Network OS v7.1.0.

Defect ID: DEFECT000472972	
Technical Severity: Medium	**Probability:** Low
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer
Reported In Release: NOS3.0.1	**Technology:** ARP - Address Resolution Protocol
Symptom: ARP Packet capture gets enabled for all VE interfaces even when the user has enabled it on a single VE interface.	
Condition: This issue is seen while enabling ARP PCAP on a single VE interface.	

Defect ID: DEFECT000510114	
Technical Severity: Medium	**Probability:** High
Product: Brocade Network OS	**Technology Group:** Layer 2 Switching
Reported In Release: NOS4.1.2	**Technology:** VLAN - Virtual LAN
Symptom: In VDX 6740, when we have different load balancing scheme configured on the port channel, we see unexpected results with respect to load balance.	
Condition: If we have different load balancing schemes applied on VDX 6740, the latest configured value will take effect on the switch.	
Workaround: Use the same LB scheme for all PO in VDX 6740.	
Recovery: Re-configure the same LB scheme wherever required.	

Defect ID: DEFECT000517329	
Technical Severity: Medium	**Probability:** High
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer
Reported In Release: NOS5.0.0	**Technology:** BGP4 - IPv4 Border Gateway Protocol
Symptom: Nexthop change using outbound route-map is not allowed for EBGP neighbor connection.	
Condition: When Route-map with set-nexthop is used as outbound policy for BGP neighbor.	

Defect ID: DEFECT000541449	
Technical Severity: Medium	**Probability:** High
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer
Reported In Release: NOS6.0.0	**Technology:** BGP4+ - IPv6 Border Gateway Protocol
Symptom: Peer group configuration is not accepting update-source of IPv6 address	
Condition: Peer group configuration with update-source of IPv6 address	

Defect ID: DEFECT000543579	
Technical Severity: High	**Probability:** Medium
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer
Reported In Release: NOS5.0.1	**Technology:** IP Addressing
Symptom: Switch may reload due to low on memory when DHCP relay address and DHCP gateway CLIs are repeatedly used to configure and unconfigure.	
Condition: Repeated configure/un-configure of DHCP relay address and DHCP gateway CLI may lead to unexpected switch reload due to increased memory consumption.	

Defect ID:	DEFECT000546702	
Technical Severity: Low	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Security	
Reported In Release: NOS5.0.1	**Technology:** ACLs - Access Control Lists	
Symptom: When user tries to login with wrong credentials using default-vrf, debug messages are seen on console.		
Condition: When user tries to login with wrong credentials using default-vrf, debug messages are seen on console.		

Defect ID:	DEFECT000550982	
Technical Severity: Medium	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS5.0.1	**Technology:** SNMP - Simple Network Management Protocol	
Symptom: Switch management port does not generate a ColdStart trap if a Management port is configured to acquire the IP address via DHCP.		
Condition: when switch is configured to acquire IP address via DHCP, then we will observe this issue.		
Workaround: If IP is configured statically, the issue will not happen.		

Defect ID:	DEFECT000562214	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Layer 2 Switching	
Reported In Release: NOS4.1.3	**Technology:** VLAN - Virtual LAN	
Symptom: Source MAC may not get learnt on port channel configured with primary VLAN		
Condition: When Secondary VLANs, which are associated with other Primary VLAN are deleted		

Defect ID:	DEFECT000568674	
Technical Severity: Medium	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Network Automation and Orchestration	
Reported In Release: NOS5.0.2	**Technology:** OpenStack Integration	
Symptom: Customer would see references to IPv4 address when running the "ping ipv6" command. This is a cosmetic issue and won't affect the ping functionality.		
Condition: That would happen when running the "ping ipv6" command.		

Defect ID:	DEFECT000577571	
Technical Severity: High	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** IP Multicast	
Reported In Release: NOS5.0.2	**Technology:** IPv4 Multicast Routing	
Symptom: Configuration: L3 PIM protocol enabled in a scaled topology with 760 sources and are learnt on an interfaces. In addition VRRPE is also enabled. Symptom: When the specific interface is disabled and enabled back, high CPU utilization is seen for PIM, MCASTSS daemons on the system. In addition, learning of new forwarding entries is delayed by 5 minutes.		
Condition: The PIM protocol is busy after the interface is re-enabled. The protocol is busy in processing the route updates within the system.		
Workaround: Do not disable the interface.		
Recovery: The system is stable 5 minutes after the interface is enabled.		

Defect ID: DEFECT000577800	
Technical Severity: Medium	**Probability:** Low
Product: Brocade Network OS	**Technology Group:** Monitoring
Reported In Release: NOS7.0.0	**Technology:** MAPS - Monitoring and Alerting Policy Suite
Symptom: device connectivity config should be consistent on all the links in the port-channel	
Condition: port-channel members configured as different type NAS, iSCSI	
Workaround: Configure all members to be in same type.	

Defect ID: DEFECT000580922	
Technical Severity: High	**Probability:** Low
Product: Brocade Network OS	**Technology Group:** Monitoring
Reported In Release: NOS5.0.2	**Technology:** sFlow
Symptom: sFlow samples goes out of switch with SRC-IP as management IP instead of Inband IP configured.	
Condition: When 2 sFlow collectors are configured with same IP and different VRFs	

Defect ID: DEFECT000581284	
Technical Severity: Low	**Probability:** High
Product: Brocade Network OS	**Technology Group:** VCS
Reported In Release: NOS7.0.0	**Technology:** Logical Chassis
Symptom: Introducing a check to verify every time if port-channel count has exceeded 4K or not will bring down the performance. It is already documented that 4K VLAG's are supported.	
Condition: User is allowed to configure more than 4K port-channels.	

Defect ID: DEFECT000584172	
Technical Severity: Low	**Probability:** Low
Product: Brocade Network OS	**Technology Group:** Management
Reported In Release: NOS5.0.2	**Technology:** CLI - Command Line Interface
Symptom: When using special characters in password with the 'certutil import ssh' command, error message are thrown and it fails to configure.	
Condition: Special characters in password can cause the issue.	
Workaround: Please use back slash (\) when use special character in password.	

Defect ID: DEFECT000584534	
Technical Severity: High	**Probability:** Low
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer
Reported In Release: NOS7.0.0	**Technology:** BGP4+ - IPv6 Border Gateway Protocol
Symptom: A transport-vlan has been configured with multiple ctags on a port, however only a single ctag is seen in the command, "show vlan brief"	
Condition: This issue is seen when the following configuration is done in the following order. 1. configuring a vni of a vlan in the evpn-instance. 2. configuring the corresponding vlan as a transport-vlan (TVlan). To avoid the issue, do the configuration in the order #2 & #1.	

Defect ID:	DEFECT000584634	
Technical Severity: Medium	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Data Center Fabric	
Reported In Release: NOS6.0.2	**Technology:** VCS Fabric	
Symptom: 40G port will notice frequent online and offline events if one side is configured as breakout and the other side is not		
Condition: Failure to issue breakout on a QSFP 40G port, which is supposed to work in 4X10G mode.		

Defect ID:	DEFECT000585008	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS7.0.0	**Technology:** BGP4+ - IPv6 Border Gateway Protocol	
Symptom: When config apply error happens, user doesn't know which line of the config had the issue.		
Condition: Upon config replay on VDX devices.		

Defect ID:	DEFECT000586790	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS7.0.0	**Technology:** BGP4+ - IPv6 Border Gateway Protocol	
Symptom: Using RBridge range configuration command, even after BGP VRF instance is deleted, configuration under BGP VRF instance is allowed and can cause BGP daemon termination, HA failover, and or reboot of the switch.		
Condition: Using RBridge range configuration command, BGP VRF instance is removed using "no address-family vrf .." command. And immediately after, without exiting from the configuration mode, another command applicable under (obsolete) BGP VRF instance configuration mode is issued.		
Workaround: After removing the BGP VRF instance while using RBridge range command, exit the obsolete configuration mode using "top" , "end", or "exit" commands.		

Defect ID:	DEFECT000588886	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** IP Multicast	
Reported In Release: NOS7.0.0	**Technology:** PIM - Protocol-Independent Multicast	
Symptom: Excess amount of traffic seen momentarily, during the HA failover of one of the VCS node, which is acting as FHR + LHR for one of the multicast stream.		
Condition: If a router is FHR and LHR both, and there happens to be only one path between RP and this router. Assert scenario is hit with duplicate traffic from Source and RP.		

Defect ID:	DEFECT000589210	
Technical Severity: High	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS5.0.2	**Technology:** SNMP - Simple Network Management Protocol	
Symptom: SNMP traps may not be received for SNMP-v1/v2/v3 hosts configured with IPv6 address.		
Condition: This issue is observed when IPv6 address is configured as trap recipient and VCS virtual IPv6 address is removed in the switch.		
Workaround: VCS virtual IPv6 should be configured to receive IPv6 traps.		
Recovery: VCS virtual IPv6 should be configured to receive IPv6 traps.		

Defect ID:	DEFECT000591398	
Technical Severity: Low	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS5.0.2	**Technology:** IPv6 Addressing	
Symptom: IPv6 ping timeout option did not work properly.		
Condition: Execution of IPv6 ping.		

Defect ID:	DEFECT000592597	
Technical Severity: Medium	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS7.0.0	**Technology:** Software Installation & Upgrade	
Symptom: Allowing for N+2 version upgrade with default config.		
Condition: It's a RFE to allow upgrade of N+2 version.		

Defect ID:	DEFECT000592879	
Technical Severity: High	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS7.0.1	**Technology:** Configuration Fundamentals	
Symptom: After LC power on/off in VDX8770, uplink interfaces from the LC are missing on show track summary output.		
Condition: When Link State Tracking (LST) configuration is present on a linecard, after slot power off/on the uplink configuration will be lost.		
Workaround: Uplinks need to be reconfigured again after slot power on.		

Defect ID:	DEFECT000593537	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS6.0.2	**Technology:** IP Addressing	
Symptom: Host ARP is learnt even when host IP subnet does not match to VE IP subnet.		
Condition: Host is connected to a VLAN where the Ve IP subnet is different than the host IP subnet.		
Workaround: Disable proxy ARP on VE		

Defect ID:	DEFECT000594793	
Technical Severity: Medium	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS7.0.1	**Technology:** Software Installation & Upgrade	
Symptom: System may display: "qman_recovery_exit_local: DEBUG: the FQID 516 has dest_wq as chaqman_recovery_exit_local: DEBUG: the WQ lengths for pool channel of portal 1 on cpu1 are: 0:0:0:0:0:0:0:0"		
Condition: This bug appears when partitions are switched with heavy traffic.		
Recovery: Reboot the system.		

Defect ID:	DEFECT000595199	
Technical Severity: High	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Monitoring	
Reported In Release: NOS6.0.2	**Technology:** RAS - Reliability, Availability, and Serviceability	
Symptom: Chassis disable may fail, when same is tried with scale configuration.		
Condition: When the scale configuration is present and chassis enable did not complete, subsequent chassis disable command may fail due to processing of time consuming events.		

Defect ID:	DEFECT000596415	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS7.1.0	**Technology:** ICMP - Internet Control Message Protocol	
Symptom: VDX does not update its own CurHopLimit.		
Condition: when the device has been configured to advertise a different AdvCurHopLimit value.		

Workaround: Currently 2 separate commands exist to achieve needed functionality
      ipv6 nd reachable-time <millisec> and ipv6 nd cache expire time <secs>
      ipv6 nd hoplimit <hlimit> and set proc entry.		

Defect ID:	DEFECT000596658	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** VCS	
Reported In Release: NOS7.0.1	**Technology:** Logical Chassis	
Symptom: Traffic getting dropped indefinitely after reload.		
Condition: Due to /32 route functionality the packets are getting trapped twice (on local and remote leaf).		

Defect ID:	DEFECT000596774	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS5.0.2	**Technology:** IP Addressing	
Symptom: Switch reloads with termination of ribmgr daemon		
Condition: Static route is leaked to multiple VRF's		
Workaround: Do not configure a static route more than once with the next-hop belonging to different VRF's		

Defect ID:	DEFECT000596775	
Technical Severity: Medium	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS6.0.2	**Technology:** CLI - Command Line Interface	
Symptom: When the user configures IPv6 RA interval with the default value 600, the running-config shows the default RA value without suppressing it.		
Condition: The issue is seen by the user every time the RA interval is configured with the default value.		

Defect ID:	DEFECT000596930	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** VCS	
Reported In Release: NOS6.0.2	**Technology:** TRILL - Transparent Interconnection of Lots of Links	
Symptom: ELD fails to work as expected with speeds lower than 1G when ports from same VCS cluster (different switches and same switch) are connected.		
Condition: Loop is detected on ELD enabled links when speed on link changed from 10G or 1G to 100Mbps. Note: ELD is not supported on 100MB.		

Defect ID:	DEFECT000598248	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Monitoring	
Reported In Release: NOS7.0.1	**Technology:** Port Mirroring	
Symptom: Span on tunnel is not working after ha failover.		
Condition: Span on tunnel after ha failover		
Recovery: Unconfigure and configure back monitor session will resolve the issue.		

Defect ID:	DEFECT000600230	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Data Center Fabric	
Reported In Release: NOS7.0.1	**Technology:** IP Fabric	
Symptom: "show running-config rbridge-id evpn-instance <vni -name> vni add <vni-range>" throws an error message.		
Condition: Customer doing show running configuration with VNI range in EVPN instance.		
Workaround: Use the following command: "show running-config rbridge-id evpn-instance vni add" .		

Defect ID:	DEFECT000600233	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Traffic Management	
Reported In Release: NOS7.1.0	**Technology:** QoS - Quality of Service	
Symptom: A red profile and a non-conflicting policy doesn't co-exists		
Condition: red profile and non-conflicting policy are tried to apply to same interface.		

Defect ID:	DEFECT000600385	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Layer 2 Switching	
Reported In Release: NOS7.0.0	**Technology:** VLAN - Virtual LAN	
Symptom: Duplicate ARP entries are observed.		
Condition: This can happen after an ISSU upgrade and a new IP address is allocated via DHCP for a connected host.		
Workaround: Execute "clear arp ip <IP address>" for the old IP address of host.		
Recovery: Execute "clear arp ip <IP address>" for the old IP address of host.		

Defect ID:	DEFECT000601293	
Technical Severity: Medium	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Layer 2 Switching	
Reported In Release: NOS7.0.0	**Technology:** VXLAN - Virtual Extensible LAN	
Symptom: COS Priority tag frames egressed as Untagged frames		
Condition: Over VxLAN tunnel COS Priority tag frames are egressed as untagged frames.		

Defect ID:	DEFECT000602319	
Technical Severity: Medium	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Layer 2 Switching	
Reported In Release: NOS5.0.2	**Technology:** LAG - Link Aggregation Group	
Symptom: BPDU packets creates loop in network and the network can become unstable.		
Condition: NOS5.x with Protected vLAG BPDU received on Backup PO were flooded out from Active PO.		

Defect ID:	DEFECT000606036	
Technical Severity: Medium	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS6.0.2	**Technology:** Software Installation & Upgrade	
Symptom: System reload happen occasionally(very rare occurrence) at the time of firmware upgrade		
Condition: system reload could happen at the time of firmware upgrade in a switch having more no of user names and roles.		

Defect ID:	DEFECT000607522	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS7.1.0	**Technology:** Access Gateway	
Symptom: FFDC level log may be seen when loading config.		
Condition: This issue can been seen when a port is being monitored while the configuration is changing.		

Defect ID:	DEFECT000609410	
Technical Severity: High	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Network Automation and Orchestration	
Reported In Release: NOS7.1.0	**Technology:** OpenStack Integration	
Symptom: When using 10 GbE CAT-5 twisted-pair SFP cabled between VDX 8770 and 6940 switches, the link may exhibit CRC errors and/or not form ISL link if the SFP is removed, then inserted repeatedly in quick succession.		
Condition: When using 10 GbE CAT-5 twisted-pair SFP cabled between VDX 8770 and 6940 switches, the link may exhibit CRC errors and/or not form ISL link if the SFP is removed, then inserted repeatedly in quick succession.		
Workaround: When inserting 10 GbE CAT-5 twisted-pair SFP into either side of VDX 8770 or 6940, please wait 20 seconds before removing and re-inserting the module. 10 GbE CAT-5 twisted-pair SFP links, in general, require more time to stabilize the link than other 10 GbE media. Re-insert the module if needed to recover from CRCs or failed ISL linkup.		
Recovery: When inserting 10 GbE CAT-5 twisted-pair SFP into either side of VDX 8770 or 6940, please wait 20 seconds before removing and re-inserting the module. 10 GbE CAT-5 twisted-pair SFP links, in general, require more time to stabilize the link than other 10 GbE media. Re-insert the module if needed to recover from CRCs or failed ISL linkup.		

Defect ID:	DEFECT000609676		
Technical Severity: High		**Probability:** High	
Product: Brocade Network OS		**Technology Group:** Management	
Reported In Release: NOS7.1.0		**Technology:** Management GUI	
Symptom: Raslog for thermal shutdown cancellation may indicate an incorrect temperature.			
Condition: Extensive changes were made to the thermal policy in this release.			
Workaround: This is cosmetic only.			

Defect ID:	DEFECT000610251		
Technical Severity: Medium		**Probability:** Low	
Product: Brocade Network OS		**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS4.1.3		**Technology:** ICMP - Internet Control Message Protocol	
Symptom: Dcmd process termination can occur.			
Condition: A script which launches multiple simultaneous "copy running-config <file>" operations can trigger the Dcmd process to terminate. Manually invoking simultaneous operations will not hit the small time window achievable by a script.			
Workaround: Ensure that the script does not invoke multiple simultaneous "copy running-config <file>" operations to a given switch.			

Defect ID:	DEFECT000611303		
Technical Severity: Medium		**Probability:** Low	
Product: Brocade Network OS		**Technology Group:** Data Center Fabric	
Reported In Release: NOS5.0.1		**Technology:** AMPP - Automatic Migration of Port Profiles	
Symptom: Unexpected reload.			
Condition: After configuring vCenter and enabling CDP on ESXi vSwitch, due to very mild memory leak.			

Defect ID:	DEFECT000611625		
Technical Severity: High		**Probability:** Medium	
Product: Brocade Network OS		**Technology Group:** Network Automation and Orchestration	
Reported In Release: NOS7.1.0		**Technology:** OpenStack Integration	
Symptom: VDX 6740 4x10 GbE port may go offline after firmware upgrade to NOS Release 7.1.0 due to unstable 4x10 GbE link. User may see FFDC excessive interrupts on the problem port resulting in the port going offline.			
Condition: VDX 6740 4x10 GbE port may go offline after firmware upgrade to NOS Release 7.1.0 due to unstable 4x10 GbE link. User may see FFDC excessive interrupts on the problem port resulting in the port going offline.			
Workaround: Perform shut / no shut to bring the port back online.			
Recovery: Perform shut / no shut to bring the port back online.			

Defect ID:	DEFECT000612521		
Technical Severity: High		**Probability:** High	
Product: Brocade Network OS		**Technology Group:** VCS	
Reported In Release: NOS7.1.0		**Technology:** Logical Chassis	
Symptom: Unexpected reload of switch			
Condition: Unexpected reload of switch while taking supportsave when ismd and ssmd core files present.			

Defect ID:	DEFECT000612542	
Technical Severity: High		**Probability:** Low
Product: Brocade Network OS		**Technology Group:** Monitoring
Reported In Release: NOS7.0.1		**Technology:** sFlow
Symptom: When IPv6 address is not configured on management port, sFlow sampled packets are sent OOB management interface with inband Ve interface IP as source IP.		
Condition: IPv6 address is not configured on management port.		

Defect ID:	DEFECT000612933	
Technical Severity: High		**Probability:** Low
Product: Brocade Network OS		**Technology Group:** Management
Reported In Release: NOS7.1.0		**Technology:** CLI - Command Line Interface
Symptom: Audit log is not updated with the user login/logout information		
Condition: This applicable only when the user accesses the device through the REST interface.		

Defect ID:	DEFECT000615424	
Technical Severity: High		**Probability:** High
Product: Brocade Network OS		**Technology Group:** Security
Reported In Release: NOS7.1.0		**Technology:** MAC Port-based Authentication
Symptom: Interface does not come up after admin shut and no shut operation		
Condition: Interface is enabled with MAC-authentication-bypass and host is not directly connected to switch.		
Workaround: Remove the mac authentication configuration		

Defect ID:	DEFECT000616434	
Technical Severity: High		**Probability:** Low
Product: Brocade Network OS		**Technology Group:** VCS
Reported In Release: NOS7.1.0		**Technology:** Logical Chassis
Symptom: In Cluster, during firmware upgrade, Principal Node may experience an unexpected reload.		
Condition: Principal and secondary nodes in the cluster are running different firmware versions. One the node is rebooted as a result of firmware upgrade. On the other node, at the same time user issued "vcs vcsid \<id\> rbridge-id \<id\> " command. This sequence of events may cause this issue.		

Defect ID:	DEFECT000616966	
Technical Severity: High		**Probability:** Low
Product: Brocade Network OS		**Technology Group:** Layer 2 Switching
Reported In Release: NOS7.0.1		**Technology:** VLAN - Virtual LAN
Symptom: In extremely rare case, Kernel panic can be seen when VDX6940 is in idle state.		
Condition: This has been seen only once and has not been reproducible. The following config was running: - L2/L3 node with virtual-fabric turned on. - 200 vlans with ipv4 vrrp-e & 100 with v6. - In total box had 200 vlans.		
Recovery: Reboot the box.		

Defect ID:	DEFECT000616985	
Technical Severity: High	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Monitoring	
Reported In Release: NOS7.1.0	**Technology:** MAPS - Monitoring and Alerting Policy Suite	
Symptom: MAPS raslog/email is not generated when rule is triggered when CRC counters got incremented after an unexpected system reload.		
Condition: Issue is seen after unexpected reload of switch.		

Defect ID:	DEFECT000617058	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Monitoring	
Reported In Release: NOS7.1.0	**Technology:** Sysmon	
Symptom: Sometimes hardware will reboot during firmware upgrade, Downgrade or HA failover		
Condition: So far seen only on one hardware. Mostly seen during firmware upgrade, Downgrade or HA failover		
Recovery: Will recover after reboot		

Defect ID:	DEFECT000617197	
Technical Severity: High	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** VCS	
Reported In Release: NOS7.1.0	**Technology:** Logical Chassis	
Symptom: Warning logs with tag 'FFDC' is displayed during cluster wide reload.		
Condition: Cluster reload.		

Defect ID:	DEFECT000617251	
Technical Severity: High	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS6.0.2	**Technology:** BFD - BiDirectional Forwarding Detection	
Symptom: Some of the BFD session over Ve interface will be seen as Down state.		
Condition: One of the system for the BFD session is dropping the packet, resulting in DOWN state.		

Workaround: Workaround is to do one of the following:
    - shut / no shut of the interface
    - un-config/ config of OSPF BFD.		

Recovery: Recovery is to do one of the following
    - shut / no shut of the interface
    - un-config/ config of OSPF BFD.		

Defect ID:	DEFECT000617284	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS6.0.2	**Technology:** BFD - BiDirectional Forwarding Detection	
Symptom: Unassociated BFD session for the IP address change operation may result in BFD session Down.		
Condition: BFD packet not reaching the system, resulting in BFD Session going Down.		
Workaround: BFD packet reception is affected on the system when the IP address on an unrelated interface is removed. Not definitive on the workaround for this problem.		
Recovery: BFD session recovers itself after going down and comes back to UP state.		

Defect ID:	DEFECT000617700	
Technical Severity: High		**Probability:** High
Product: Brocade Network OS		**Technology Group:** Security
Reported In Release: NOS7.0.1		**Technology:** ACLs - Access Control Lists
Symptom: "show access-list ip" CLI will list only local node access-list configuration.		
Condition: Different access-lists are configured on the management interfaces across the cluster.		
Workaround: "show access-list rbridge-id" or "show access-list interface" CLI can be used to display the access list of desired RBridge/interface.		
Recovery: This is a cosmetic issue; no functional impact.		

Defect ID:	DEFECT000617830	
Technical Severity: High		**Probability:** Low
Product: Brocade Network OS		**Technology Group:** Management
Reported In Release: NOS7.1.0		**Technology:** CLI - Command Line Interface
Symptom: VDX6940 takes longer to come up after a reload operation.		
Condition: This can happen when there are loads of configuration done on the switch.		

Defect ID:	DEFECT000617887	
Technical Severity: High		**Probability:** High
Product: Brocade Network OS		**Technology Group:** Data Center Fabric
Reported In Release: NOS7.0.1		**Technology:** IP Fabric
Symptom: On upgrade from 6.x to 7.x, one of the python CLI libraries may not be carried forward with all the changes & might impact some of the python scripts.		
Condition: Under certain unknown condition, when upgrading from 6.x to 7.x.		

Recovery: Copy CLI.py file manually to restore the script function.
 	
After restoration, test using below CLI & it should appear as below with "splitlines()" instead of "split()":
 	
sw0:FID128:root> grep -A 2 get_output /etc/fabos/Dcmd/python/CLI.py
  def get_output(self):
    return (self.output.splitlines())		

Defect ID:	DEFECT000618052	
Technical Severity: High		**Probability:** Medium
Product: Brocade Network OS		**Technology Group:** Monitoring
Reported In Release: NOS7.0.1		**Technology:** Hardware Monitoring
Symptom: Incorrect units displayed in the o/p of the command, "show media" for Lumentum SFP.		
Condition: In the o/p of "show media" for Lumentum SFP, the units for Wavelength field should be displayed as "units 0.025nm" instead of "units nm".		

Defect ID:	DEFECT000618553	
Technical Severity: High		**Probability:** Low
Product: Brocade Network OS		**Technology Group:** Layer 2 Switching
Reported In Release: NOS7.1.0		**Technology:** VLAN - Virtual LAN
Symptom: SPAN configuration is not successful with the error ""% Error: Destination port cannot have 802.1x configuration on it."		
Condition: Dot1x is configured and removed on an interface and now this interface is made as SPAN destination		

Defect ID:	DEFECT000619578	
Technical Severity: High	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Security	
Reported In Release: NOS7.1.0	**Technology:** ACLs - Access Control Lists	
Symptom: Unexpected reload.		
Condition: When below command is used for viewing the enforced IP ACL's: "show access-list interface Management <interface id> in " Example: "show access-list interface Management 1/0 in"		
Workaround: Use below commands to view the enforced policy ' show running config ip(v6) access-list' 'show running-config interface management'		

Defect ID:	DEFECT000620205	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS5.0.2	**Technology:** Management GUI	
Symptom: VDX-6740T Interface doesn't linkup as 1G by default and it comes up as 100Mb.		
Condition: VDX-6740T Interface linkup as 100Mb by default when other device has SEMI-CROSS LINK.		
Workaround: Configuration of speed 1000 on both side can make link 1G.		

Defect ID:	DEFECT000620577	
Technical Severity: Low	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** VCS	
Reported In Release: NOS6.0.2	**Technology:** Logical Chassis	
Symptom: The output of "show interface description" command for port channel is not displayed in sorted order as per port channel interface number.		
Condition: The issue is seen in case of multi node cluster.		

Defect ID:	DEFECT000620878	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Layer 2 Switching	
Reported In Release: NOS7.1.0	**Technology:** VXLAN - Virtual Extensible LAN	
Symptom: If disk is full due to too many core files, firmware download may not be successful on Draco-T device.		
Condition: Draco-T device already has limited disk space due to too many core files.		
Workaround: Delete old core files to free up space and fwdnld will be fine.		
Recovery: Delete old core files to free up space and fwdnld will be fine.		

Defect ID:	DEFECT000621191	
Technical Severity: High	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS7.0.1	**Technology:** Software Installation & Upgrade	
Symptom: The standby GOS is unable to boot up during ISSU.		
Condition: It is due to a rare QMAN initialization issue during the GOS boot up process.		
Recovery: The switch will need to be rebooted for recovery.		

Defect ID:	DEFECT000621402	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS7.0.1	**Technology:** Inband Management	
Symptom: Telnet access to VDX is blocked via default-VRF and user defined VRF.		
Condition: Firmware install with "no-activate" option.		
Workaround: Activate the firmware which was installed with "no-activate" option.		

Defect ID:	DEFECT000621408	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Security	
Reported In Release: NOS7.0.1	**Technology:** Security Vulnerability	
Symptom: Though telnet service on MGMT-VRF is shutdown, telnet access to VDX is allowed via MGMT-VRF.		
Condition: 1. Shutdown telnet service on MGMT-VRF 2. Firmware install with "no-activate" option 3. Recover the firmware using "firmware recover"		
Recovery: Activate the partially installed firmware.		

Defect ID:	DEFECT000621633	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS7.0.1	**Technology:** OSPFv3 - IPv6 Open Shortest Path First	
Symptom: Not able to change the IPv6 OSPF cost to 1 when auto-cost reference bandwidth is configured.		
Condition: The issue is observed for below sequence of steps: 1. Configure auto-cost for IPv6 OSPF using CLI: "auto-cost reference-bandwidth 100000" 2. Go to config-rbridge-Ve-<id> interface mode and configure OSPF cost using CLI: "ipv6 ospf cost 1" 3. Run show command to display interface OSPF parameters using CLI: "show ipv6 ospf in ve <id> rb <id>" It is observed that cost field is not changed.		
Workaround: Change the cost value to any non default-value and then back to default-value.		

Defect ID:	DEFECT000621696	
Technical Severity: High	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS7.0.1	**Technology:** Software Installation & Upgrade	
Symptom: Firmware download fails on standby GOS with error code 26.		
Condition: It can happen due to a rare network connectivity issue between the active and standby GOS partitions.		
Recovery: Firmware download will be aborted and filesystems will be recovered automatically.		

Defect ID:	DEFECT000622093	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** VCS	
Reported In Release: NOS7.1.0	**Technology:** Logical Chassis	
Symptom: Line card goes into fault state. one of the line card go to faulty state.		
Condition: After firmware download from 6.0.2c to 7.1.0 one of the line cards go to faulty state with reason code 119. What should the customer do now?		

Defect ID:	DEFECT000622356	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Layer 3 Routing/Network Layer	
Reported In Release: NOS7.1.0	**Technology:** IPv6 Addressing	
Symptom: The running-configuration of port-channel interfaces have IPv6 nd cache expire time configured to 240 on an upgrade from 7.0.1 to 7.1.0, even though the user hasn't explicitly configured it.		
Condition: This issue is seen by the user whenever he upgrades the firmware from 7.0.1 to 7.1.0		

Defect ID:	DEFECT000622864	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS7.1.0	**Technology:** Configuration Fundamentals	
Symptom: Unexpected reload of switch while taking support save		
Condition: After diag test, chassis enable command will fail, switch may go through unexpected reload while taking supportsave		
Workaround: Reboot the switch after diag test before trying any other command		
Recovery: reboot the switch		

Defect ID:	DEFECT000623446	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Data Center Fabric	
Reported In Release: NOS7.1.0	**Technology:** IP Fabric	
Symptom: Some MAC addresses learnt via BGP are not seen in mac-address-table		
Condition: When "mac-learning protocol bgp" for sites are frequently toggled, some MAC addresses are not seen in the BGP EVPN table.		

Defect ID:	DEFECT000623579	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** Layer 2 Switching	
Reported In Release: NOS7.1.0	**Technology:** VXLAN - Virtual Extensible LAN	
Symptom: OVSDB Physical_Switch table incorrectly shows "mac_table_exhaustion" fault status after reboot or ISSU or failover.		
Condition: Switch is rebooted or fails over after it learns around 16000 macs from NSX controller.		
Recovery: Remove the NSX controller configuration via "no nsx-controller <name>" command and configure it back.		

Defect ID:	DEFECT000624075	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** VCS	
Reported In Release: NOS6.0.2	**Technology:** Logical Chassis	
Symptom: Disruptive firmware upgrade (coldboot) will fail.		
Condition: Number of SNMP communities associated with IPv4/IPv6 ACL configurations is greater than 20.		
Workaround: Limit the number of SNMP communities associated with IPv4/IPv6 ACL configurations to less than 20.		

Defect ID:	DEFECT000624561	
Technical Severity: High		**Probability:** High
Product: Brocade Network OS		**Technology Group:** Network Automation and Orchestration
Reported In Release: NOS7.1.0		**Technology:** OpenStack Integration
Symptom: Rebooting host connected to VDX 6940 4x10 GbE breakout port may cause one or more 4x10 GbE ports to become unstable, which could result in port faulting with FFDC excessive interrupts on the port(s).		
Condition: Rebooting host connected to VDX 6940 4x10 GbE breakout port may cause one or more 4x10 GbE ports to become unstable, which could result in port faulting with FFDC excessive interrupts on the port(s).		
Workaround: Perform shut / no shut on the port to bring it back online.		
Recovery: Perform shut / no shut on the port to bring it back online.		

Defect ID:	DEFECT000624566	
Technical Severity: High		**Probability:** Low
Product: Brocade Network OS		**Technology Group:** Data Center Fabric
Reported In Release: NOS7.1.0		**Technology:** IP Fabric
Symptom: Switch experience Out Of Memory (OOM) condition and reboots		
Condition: Using Scaled Configurations		

Defect ID:	DEFECT000624714	
Technical Severity: High		**Probability:** Medium
Product: Brocade Network OS		**Technology Group:** Layer 3 Routing/Network Layer
Reported In Release: NOS7.1.0		**Technology:** BGP4 - IPv4 Border Gateway Protocol
Symptom: Exceedingly rare (not reproduced so far) error during failover that will cause the system to become faulted.		
Condition: Exceedingly rare error during failover.		
Recovery: Reboot faulted system.		

Defect ID:	DEFECT000624729	
Technical Severity: High		**Probability:** Low
Product: Brocade Network OS		**Technology Group:** Network Automation and Orchestration
Reported In Release: NOS7.1.0		**Technology:** OpenStack Integration
Symptom: VDX 6940 40 GbE port may go offline after upgrade from NOS Release 7.0.0x to 7.1.0.		
Condition: VDX 6940 40 GbE port may go offline after firmware upgrade from NOS Release 7.0.0x to 7.1.0.		
Workaround: Perform shut / no shut on the problem 40 GbE port to bring the port back online.		
Recovery: Perform shut / no shut on the problem 40 GbE port to bring the port back online.		

Defect ID:	DEFECT000624805	
Technical Severity: High		**Probability:** Low
Product: Brocade Network OS		**Technology Group:** Layer 3 Routing/Network Layer
Reported In Release: NOS7.1.0		**Technology:** IP Addressing
Symptom: Show command is not showing "ip icmp unreachable" under physical interface.		
Condition: After configuring the "ip icmp unreachable" under physical interface.		
Workaround: This is a cosmetic issue and can be ignored.		

Defect ID:	DEFECT000624872	
Technical Severity:	High	Probability: Medium
Product: Brocade Network OS		Technology Group: Security
Reported In Release: NOS7.1.0		Technology: Zoning
Symptom:	In certain cases when joining RBridges together, if one of the RBridges has an empty zone configuration with a default zone mode set to All Access and the other RBridge being joined has an effective zone configuration but a default zone mode set to No Access, this will result in a zone conflict and the cluster will not form.	
Condition:	This issue can be seen when joining RBridges together that have mismatched default zoning policies.	
Recovery:	Once in this state, to recover, the customer will need to change the default zone policies so that they match across the RBridges that are being joined and then reattempt joining them together.	

Defect ID:	DEFECT000624921	
Technical Severity:	High	Probability: High
Product: Brocade Network OS		Technology Group: Security
Reported In Release: NOS7.1.0		Technology: MAC Port-based Authentication
Symptom:	After executing "no switchport" on a physical interface with "dot1x mac-auth-enable", dot1x mac-auth-bypass cannot be configured.	
Condition:	This scenario occurs only if "dot1x mac-auth-enable" is configured while executing "no swithport"	
Workaround:	Remove "dot1x mac-auth-enable" configuration before doing "no switchport"	

Defect ID:	DEFECT000625263	
Technical Severity:	High	Probability: High
Product: Brocade Network OS		Technology Group: Layer 2 Switching
Reported In Release: NOS7.1.0		Technology: VLAN - Virtual LAN
Symptom:	system may go for unexpected reload	
Condition:	mac-authentication is enabled with more than 1500 source streams getting authenticated with layer 2 loop existing in the network. Here also loop detection is disabled.	

Defect ID:	DEFECT000625402	
Technical Severity:	High	Probability: High
Product: Brocade Network OS		Technology Group: Layer 3 Routing/Network Layer
Reported In Release: NOS7.1.0		Technology: OSPF - IPv4 Open Shortest Path First
Symptom:	OSPF authentication key configured on interface is getting lost after config-replay from backup configuration.	
Condition:	The issue is observed if configurations are done in below order for RBridge sub-mode: 1. Configure router OSPF and create area 2. Create VE interface and go to its sub-mode 3. Configure authentication-key using CLI: "ip ospf authentication-key 2 <password>" 4. Save configuration using copy command 5. Delete VE interface 6. Run config-replay command using CLI: "copy flash://<file_name> running-config" Admin can verify that configured authentication-key is lost by using command show running-config for the Ve interface.	
Workaround:	Configure the OSPF authentication key on the interface using CLI after config-replay is done.	

Defect ID:	DEFECT000625616	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** VCS	
Reported In Release: NOS7.1.0	**Technology:** Metro VCS	
Symptom: 10G ISL using tunable ZR optics (57-1000266-01) does not form between VDX6740-144s after performing a single "shut/no shut"		
Condition: Performing "shut/no shut" on 10G ISL using tunable ZR optics (57-1000266-01) between VDX6740 and VDX6940-144s		

Defect ID:	DEFECT000625670	
Technical Severity: High	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** Management	
Reported In Release: NOS7.1.0	**Technology:** Software Installation & Upgrade	
Symptom: On rare occasions a SW error may be seen during HA synchronization.		
Condition: Rare occurrence that is not linked to a specific change.		

Defect ID:	DEFECT000625831	
Technical Severity: High	**Probability:** Low	
Product: Brocade Network OS	**Technology Group:** IP Multicast	
Reported In Release: NOS7.1.0	**Technology:** IGMP - Internet Group Management Protocol	
Symptom: IGMPv2 report will be sent back on same VxLAN tunnel where the report was received from if the tunnel is terminated on TRILL ports.		
Condition: VxLAN is terminated on TRILL port on VDX6940.		
Workaround: VxLAN tunnel is terminated on edge ports that are non-TRILL Ports.		

Defect ID:	DEFECT000625956	
Technical Severity: Medium	**Probability:** High	
Product: Brocade Network OS	**Technology Group:** VCS	
Reported In Release: NOS7.1.0	**Technology:** Logical Chassis	
Symptom: When the "show ip int brief" CLI is executed on a VDX8770 switch, the output under the column "Protocol" does not contain the reason for a particular interface to be in state "down".		
Condition: When the "show ip int brief" CLI is executed on a VDX8770 switch.		

Defect ID:	DEFECT000626825	
Technical Severity: High	**Probability:** Medium	
Product: Brocade Network OS	**Technology Group:** Network Automation and Orchestration	
Reported In Release: NOS7.1.0	**Technology:** OpenStack Integration	
Symptom: VDX 6740 and 6940 may have linkup issues and/or CRCs after dynamically configuring 4x10GbE breakout mode.		
Condition: VDX 6740 and 6940 may have linkup issues and/or CRCs after dynamically configuring 4x10GbE breakout mode. Probability is increased if transceiver is changed from optical to copper or vice versa.		
Workaround: Reload switch to recover the links.		
Recovery: Reload switch to recover the links.		