N Series & NC8200-4TD Switches FSOS Software Release Notes

Models: N5860-48SC; N8560-48BC; N8560-64C; NC8200-4TD

RELEASE NOTES

Contents

1. Version Information

Basic Information

Version Number	N8560_FSOS11.0(5)B9P124
Products	N5860-48SC; N8560-48BC; N8560-64C; NC8200-4TD
Version Type	Official Version
Applicable Customers	Data Center Customers
Release Date	2022-05-20
Baseline Version	N8560_FSOS11.0(5)B9P101

Use the show version command to view the version number, an example is as follows:

```
FS#show version detail
System description          : FS Data Center Switch(N8560-48BC) By FS.COM Inc
System start time           : 2022-05-20 12:29:00
System uptime               : 0:01:03:15
System hardware version     : 2.70
System software version     : N8560_FSOS 11.0(5)B9P124
System patch number         : NA
System serial number        : G1RW33N000077
System boot version         : 1.3.12
System core version         : 2.6.32.c557c0167b79c0
Module information:
  Slot 0 : N8560-48BC
    Hardware version        : 2.70
    Boot version            : 1.3.12
    Software version        : N8560_FSOS 11.0(5)B9P124
    Serial number           : G1RW33N000077
FS#show ver detail
System description          : FS Data Center Switch(N8560-48BC) By FS.COM Inc
System start time           : 2022-05-20 12:29:00
System uptime               : 0:01:03:18
System hardware version     : 2.70
System software version     : N8560_FSOS 11.0(5)B9P124
System patch number         : NA
System software number      : M09074705202022
System serial number        : G1RW33N000077
System boot version         : 1.3.12.b847872(210513)
System core version         : 2.6.32.2de7dfb75ed511
System cpu partition        : 3
Module information:
  Slot 0 : N8560-48BC
    Hardware version        : 2.70
    Boot version            : 1.3.12.b847872(210513)
```

2. Bug Fixes

2.1 11.0(5)B9P124

Based on N8560-X86_FSOS11.0(5)B9P101 newly added to solve the following problems

1. Solve the problem that the enabling/disabling of the IP source routing feature is not linked with the configuration command, and the ip source-route command does not take effect.

2. The solution to the current behavior is that as long as the ip under the interface is deleted, all dynamic arps under the associated interface will be deleted. The deletion of secondary ip is not taken into account.

3. Solve the problem that the DM logic will trigger the reset of the management board and the line card at the same time, which needs to be optimized.

4. Solve the problem that sending asc characters (0x00-ff) to the serial port during the startup process of the device may cause the device flash not to be mounted.

5. Solve the 128 masked host address that SFLOW cannot set to 0 as the source IP.

6. Solve the ipv6 single-send scenario, the same network segment is not connected.

7. Solve the problem that sending special characters (such as sysrq + o, etc.) to the serial port will cause the device to hang.

8. After l3mapping is performed on the tenant's static vxlan, the evpn route after l3mapping carries the internal RT value of the tenant.

9. In NFPP-CREF clear nfpp define name hosts, in N18K the command is clear nfpp define hosts name.

10. Solve MIB, FSVlanPortAccessVlan node cannot be configured.

11. Solve lldp process coredump.

12. Solve the exception of batch hot patch -- caused by restart of DM process.

13. Solve the exception of grpc process.

14. Solve the problem that if the mgmt port is used as the keepalive of mlag, it does not perceive the change of vrf.

15. Solve the problem of slow routing convergence.

16. After configuring a large number of ACLs and PBRs, the status of the ports that reference PBRs changes, the installation performance is slow, and the CPU is high (over 85% of the whole machine).

17. Solve the problem that the vrf neighbor is configured with soft inbound, and the vrf is configured with rt attribute a. At this time, the route is configured, then the rt attribute b is configured, and then the bgp all soft in is cleared. The route from the vrf neighbor becomes attribute a.

18. Solve the problem that the SVI interface of the device does not support sampling statistics, and it is written in the SCG configuration manual to support.

19. Solve the problem that the mgmt port of the device is normally up, but the port indicator is off.

20. After the dm process is restarted, some interfaces in the dm library will fail to be called for the first time.

21. Solve the three-layer sub-interface, the sub-interface capacity is 512.

22. Solve the new support for IPV6_RCV_SRC_MAC (setting this option indicates that the source MAC of IPv6 packets needs to be received) and IPV6_SRC_MAC (when reading the packet, read the 6-byte source mac from the control message IPV6_SRC_MAC).

23. After the CPLD hot upgrade is completed, you need to pay attention to the completion notice, and update the module lighting and module in-position status once.

24. To solve distributed VXLAN, independent border networking, during PXE installation, configure ip dhcp relay discard overlay-tunnel, the reply packets from the tunnel are also discarded, resulting in the inability to obtain the address.

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26. Solve the DSC information record of the backplane startup (the DSC information collection of the first UP after the startup, regardless of the topology change after the startup).

27. Solve the problem that customer feedback box equipment MLAG Overlay environment, Peerlink port statistics drop packet loss.

28. Solve the problem that the CPU usage increases after plugging in the light to power.

29. Solve the problem that the ospf neighbor times out due to the vlantag error filled in the grce-lsa message sent during the vsu master restart and the standby machine takeover.

30. To solve the problem of creating about 220 ecmp group groups, and frequently flapping the ecmp exit of one of the physical links (multi-chip, all ecmp routing next hops include it), there will be a backlog of messages.

31. Solve the situation that the vrrp virtual gateway cannot be pinged.

32. Solve the GRPC ANYCAST service.

33. Solved the problem that due to the failure of the NMA device on the LAmgmt peer end, the mgmt ports of four LA devices went down first and then went up. During this period, the bfd of the LA device flapped.

34. Solve the SNMP TRAP device name is not updated

35. Addressing Unstacking IPv6 Neighbor Drift.

36. Solve the problem that the VAP port is up, but the underlying block and PI-bridge block are down.

37. To solve the problem of single-machine dual-pipe and enable BGP NSR, configure BGP-related configurations on the supervisor, delete the BGP configuration, and perform a hot backup switch. After the switch, the BGP configuration remains.

38. Solve the problem that the customer found that the disconnection time did not meet expectations when testing the failover use case of the M-LAG scenario [customer target within 1s].

39. When the upper and lower macs are inconsistent, flooding occurs after the PD mac ages before the consistency check time, resulting in service interruption.

40. Solve the packet loss of server single-line connection switch in m-lag environment (vxlan centralized, cross-peer-link packet loss).

41. Solve the problem of patch upgrade and upgrade copy machine, stop copy machine, and the memory of ssc_sflow_pthrd process abnormally increases.

42. Solve the patch uninstallation interval of 8 minutes, and then apply the patch, there is no sampling of the ipfix function.

43. Solve the S6250M-LAG+VXLAN scenario, when all peer-links go down and go up, and after waiting for all ports to go up, there is a route but the traffic does not transfer.

44. Solve S6520, S6250, S6510-4C import optical module intelligent speed regulation.

45. Solve the problem that the description of the generation path of the one-key acquisition function file is incorrect.

46. Solve the problem that the mirroring source port is an AP member port. After deleting the AP and adding the member port to the AP again, the mirroring function of the AP member port of the slave machine fails.

47. Solve the problem that the NSM default route preference timer fails to expire due to continuous route flapping.

48. Solve the problem of 64cq device directly connecting to v6.

49. Solve the problem that the client side to some customer cloud hosts cannot trigger nd to get through, and the traffic is blocked.

50. Solve the patch upgrade and upgrade copy machine test, the ipfix configuration under the interface is lost.

51. Solve the problem that the current ssh session supports 64 channels, and the sessions beyond 36 channels are not encrypted.

52. Solve the problem that after the TC publishes the mac-ip class 2 route, after changing the label attribute, the tunnel associated with the VXLAN remains.

53. Solve the problem that in multi-protocol vrf, after deleting the v4 address family and reactivating it, the v4 route corresponding to the vrf on the PE cannot be optimized.

54. Solve the failure of automatic synchronization of the patch package (DM does not issue a notification DP_LIB_MSG_LDP_PROXY_STATE when the chassis is offline).

55. After configuring ND-to-host route aggregation, bgp redistribution fails.

56. Solve the phenomenon that the memory of the VSU standby device increases slowly.

57. Solve the OSPF exception and the neighbor cannot be established (caused by 4 types of lsa conflicts).

58. Solve etpy 0x0800 + TCP + l4sport 6426 Any traffic matching this rule will be sent to cpp of mlagv4, and passing packets will be sent to cpp.

59. Solve the problem of manually shutting down the SDNGW management port. The controller shows that the netconf is disconnected and then the management port is up. It takes about 8 minutes to re-establish the netconf connection between the controller and the device.

60. To solve the problem of ip dhcp smart-relay taking effect, it is normally required to send 3 discover packets and then poll to the second address.

61. Solved the problem that the VSU standby machine can independently learn the MAC of the flood flow on the VSL, resulting in inconsistent MAC entries of the VSU active and standby machines.

62. Solve the problem that the configuration of ip access-group xxx under the management port is lost when upgrading from a lower version to a higher version.

63. The solution is to configure the next hop of the static route to be two ac ports, and the ac port is connected to the ap port. Shut down one of the ap ports, and the traffic cannot be switched to the other ap port, resulting in 50% packet loss.

64. Solve vrf import evpn, delete the vni instance, and then delete the vrf instance immediately, the bgp coredump appears.

2.2 11.0(5)B9P101

Based on B9P66S2 newly added to solve the following problems

1. Solve the problem of the VSU host interruption failure after the upgrade.

2. Solve the problem that packet capture does not open the AP port to capture packets.

3. Solve the problem of high fan speed caused by module compatibility.

4. Solve the problem that the main test and auxiliary test are configured with three-layer sub-interfaces, and the direct connection cannot be connected.

5. Solve the problem of two cap timeouts caused by restarting the copy machine 100 times.

6. Solve the problem that border disconnects all VSL links, BGP is disconnected, and VSU cannot converge quickly after splitting, resulting in disconnection

7. Solve the problem of [vsl link restriction] box-type equipment needs to limit the vsl link to less than 20.

Notice: After the revision, because the old version does not have the limitation of 20 VSL ports, if more than 20 VSL ports are configured before upgrading to the new version, after upgrading the new version, according to the order of the configuration files, the configuration of the VSL ports after 20 will be changed. Was lost. May cause loops and topology splits

8. Solve the problem that the OR port learns 1000 arps incremented by the first 24 high-bit macs, and then modify the arp's mac (the first 24 high-bit macs are different from the 1000 previously learned), and the subsequent equipment learns that the arp can only be sent to the ALPM table , The problem that affects the capacity of the next hop.

9. Solve the problem of ssa coredump when the OR port learns the 256 arps of the first 24 high-bit mac increments, and then modifies one of the arp macs (the first 24 high-bit macs are different from the 256 previously learned), the device will have an ssa coredump problem.

10. Solve the problem that the nsm process restarts and coredump occurs when the active and standby static routes are deleted after the frr is installed.

11. Solve the problem that BGP write warn file to limit the file size does not take effect, resulting in more and more flash occupancy.

12. Solve the problem of opening vxlan tunnel traffic statistics, the total number of tunnels is 154, after the tunnel oscillates, there is a problem that 6 tunnels cannot count the traffic.

13. To solve the overlay+mlag scenario, the device receives the arp unicast request packet of the anycast-gateway-mac configured for the machine with the destination mac, and forwards the packet, the arp unicast flooding problem.

14. Solve the problem that VRF static routing may fail to be configured and prompt "% Invalid nexthop address. (It's this router).".

15. Solve the problem that the configuration of ip route vrf vrf1 20.1.10.0 255.255.255.0 60.1.1.1 points to a static tunnel, and the Layer 3 traffic with dip of 20.1.10.1-100 sent from the ac port cannot be forwarded.

16. Solve the problem of ECMP-FRR scenario, residual ibgp routing at the bottom layer, and inconsistency between the upper and lower layers.

17. Solve the problem of configuring the layer 2 sub-interface of the peerlink port to enable the address learning capability of the peerlink port (theoretically, the peerlink port has no address learning capability).

18. Solve the problem that the function commands that are not supported by the Layer 2 sub-interface need to be shielded.

19. Solve the problem of MLAG VXLAN scenario where vni is greater than 4094 and vxlan mac cannot be synchronized to the remote end of mlag.

20. Solve the problem of LACP docking with friends, causing the M56 LC02 to experience abnormal packet sending and receiving on the slot3 port, resulting in a 15-minute interruption problem.

21. Solve the problem of DCN3.0 SSH remote probabilistic timeout.

22. Solve the problem that device SNMP-trap messages do not meet expectations.

23. Solve the problem that the traffic statistics of the device sub-interfaces may have an excessively large value.

24. Solve the problem of configuration loss when the master-slave switchover occurs when the agg port is configured with speed, duplex, flowctrl, and nego mode when the member ports of the agg port are all independent ports.

25. Solve the problem of the centralized VXLAN scenario where the TOR device abnormally learns the local MAC table entry as the gateway device MAC, which causes the bridge device network to be abnormal.

26. Solve the problem of the centralized VXLAN scenario where the TOR device abnormally learns the local MAC table entry as the gateway device MAC, which causes the bridge device network to be abnormal.

27. Solve the problem that after the mac-address is configured on the layer 3 interface, the VSU cannot be pinged through the direct connection after the master-slave switch.

28. Solve the problem of multiple CLI commands (show cpu-pro, show int trans) stuck in the URPF+RATE-LIMIT overlay scenario after the device is turned on.

29. Solve the problem that show power shows that the power status is still ok when there is no current in the power supply.

30. Solve the problem of LACP oscillation on multiple ports of WC equipment, causing service traffic interruption for about 5 minutes.

31. Solve the problem of abnormal reset during operation and the stack display as NMI.

32. Solve the problem that the memory utilization rate of CUF equipment periodically increases from 20% to about 90% and then drops back to 20%.

33. Solve the problem of configuring acl under vty, returning to the global after the execution fails, configuring acl in the global, it needs to be modified, and not returning to the previous configuration.

34. Solve the problem of stand-alone access to the AOC module. The device at_cli is displayed as a copper problem.

35. Solve the problem of multi-protocol vrf ipv6 routing in the global routing table after the MGMT port is first bound to single-protocol vrf and then multi-protocol vrf is configured.

36. Solve the problem that the mac cannot be learned, the mapping relationship between the underlying vlan and vxlan is lost, and the subinterface is replaced.

37. Solve the problem that the CPLD register that controls the port TX enable and port lighting is rewritten.

Notice:It is not enabled by default, and the command is enabled: cpld repair enable

38. Solve the problem that the device system name displayed by the show lldp nei command needs to be displayed in one line, and a space needs to be reserved between the device system name and the interface name.

39. Solve the problem that the dut3-TC7 host modifies the mac, the dut4 remote bgp l2vpn evpn entry has been updated, and the dut4 arp pickup entry is not updated. The mac is still old, causing the remote tester to learn the old mac forwarding abnormally.

40. Solve the vxlan host migration conflict, and the problem of EFMP coredump appears after copying the machine for 12 hours.

41. Solve the problem of repairing the abnormal memory problem of the bridge process.

42. Solve the problem that the port vxlan mode access under the second layer sub-interface issued by netconf returns OK, and the actual cli is not only supported.

43. Solve the problem of tacacs original address priority.

44. Solve the problem that the device keeps restarting and reporting coredump errors.

45. Solve the problem that BGP memory is occupied by too much memory and is killed by the LMk module after triggering the system memory waterline.

46. Solve the problem that the DSCP value of the BGP ipv6 protocol packet is inconsistent with the ipv4 protocol packet.

3. Upgrade Instructions

Upgrade File

To upgrade the device to this version or downgrade to this version, you need to use the following upgrade file.

Applicable Products	Upgrade File	
N5860-48SC、N8560-48BC、N8560-64C、NC8200-4TD	[Upgrade File]	N8560_FSOS11.0(5)B9P124_install.bin
	[File Description]	installation package
	[File Size]	212280403 bytes
	[MD5 Value]	44468f44aa23ec8da50ed8c7e5de5801

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