Korenix JetNet Industrial Managed Switch JetNet 5008G-P
SOFTWARE RELEASE Notes

Before Upgrade

Before you use the Switch firmware, please ensure that you know the product number and use the correct firmware version. By reading the file, you can know the new feature and changes, the fixed bugs and the restrictions. You can find the latest firmware in the Korenix web site, http://www.korenix.com or get the help from Korenix Customer Support, Korecare@korenix.com .

About This Software Version

The version number and the release date.

Firmware Version	Boot Loader Version	Release Date	Model
V1.0	V1.6.2.3	July. 12, 2007	Official release
V2.0	V1.6.2.9	Nov. 9, 2007	Official release
V2.1	V1.6.2.10	Apr. 14, 2008	Official release
V2.2	V1.6.2.11	June 24, 2008	Official release

CAUTION: *You can only update the correct firmware to the JetNet switches. Ensure the product model number before you start updating. If the version of Boot Loader is not match with JetNet 5008G-P then upgrade firmware first then Boot Loader, ensure the power state is stable during the upgrade. You can upgrade firmware and boot loader through JetView commander.*

Important!

Upgrade firmware shall follow the following sequence:

- First, upgrade firmware V2.2 by JetView v1.3 or above
- Second, upgrade Boot loader v1.6.2.11 by JetView v1.3 or above
- After Boot loader upgrade finished, it will auto restart system to enable the new functions.

New Changes and Improvement:

The Following changes apply to the version v 2.2 and Armboot loader v1.6.2.11:

- Supports Alarm Relay function on Hardware version 2.0.
- Add Alarm Relay hardware components and change switch MAC controller to support -25 ℃ operating temperature.
- Supports EON EN29LV640T flash for -25℃ operating temperature.
- Change ArmBoot version from V1.6.2.10 to V1.6.2.11 for commercial or industrial grade Flash ROM.
- Supports new Private MIB for Event Alarm Relay control.

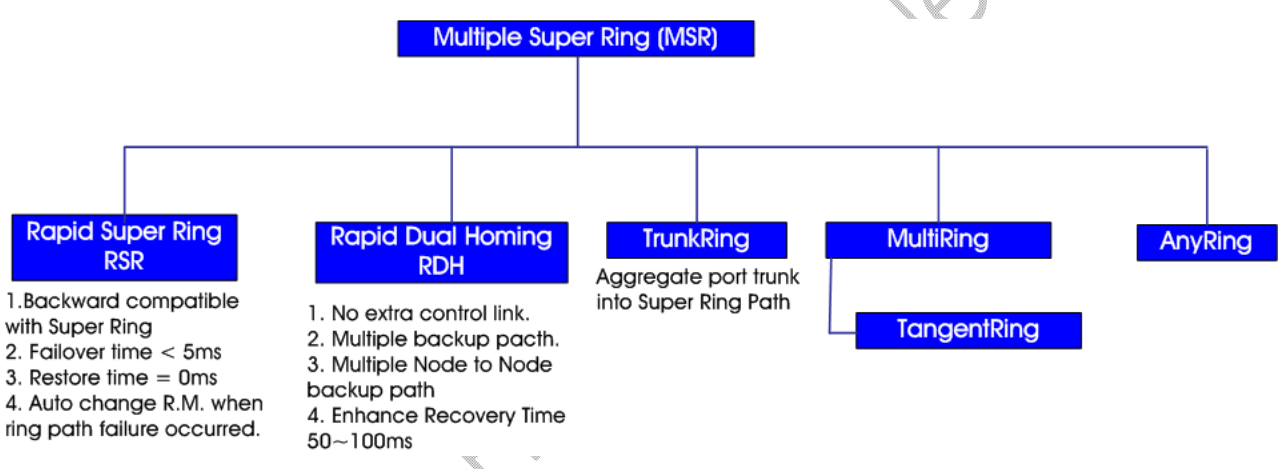
The following changes apply to the version v 2.1 and ArmBoot loader V1.6.2.10:

- Support more type of SFP fiber transceiver in JetView utility and Command Line Interface (CLI), the SFP fiber transceiver indicated as following table:

Korenix P/N	Description
SFP100MM	Multi-mode 100Mbps 2KM Fiber Transceiver
SFP100MM-w	Multi-mode 100Mbps 2KM Fiber Transceiver, Wide Opr. Temp.
SFP100SM30	Single mode 100Mbps 30KM Fiber Transceiver
SFP100SM30-w	Single mode 100Mbps 30Km Fiber Transceiver, Wide Opr. Temp.
SFP100SM60	Single mode 100Mbps 60Km Fiber Transceiver
SFP100SM60-w	Single mode 100Mbps 60Km Fiber Transceiver, Wide Opr. Temp.
SFP100SM80	Single mode 100Mbps 80Km Fiber Transceiver
SFP100SM80-w	Single mode 100Mbps 80Km Fiber Transceiver, Wide Opr. Temp.
SFP100SM100	Single mode 100Mbps 100KM Fiber Transceiver
SFP100SM100-w	Single mode 100Mbps 100KM Fiber Transceiver, Wide Opr. Temp.
SFP100SM120	Single mode 100Mbps 120KM Fiber Transceiver
SFP100SM120-w	Single mode 100Mbps 120KM Fiber Transceiver, Wide Opr. Temp.
SFPGSX	1000Base-SX multi-mode transceiver
SFPGSX-w	1000Base-SX multi-mode transceiver, Wide Opr. Temp.
SFPGSX2	1000Base-SX plus multi-mode transceiver
SFPGSX2-w	1000Base-SX plus multi-mode transceiver, Wide Opr. Temp.
SFPGLX10	1000Base-LX single-mode transceiver 10KM
SFPGLX10-w	1000Base-LX single-mode transceiver, 10KM, Wide Opr. Temp.
SFPGLHX30	1000Base-LHX single-mode transceiver, 30KM
SFPGLHX30-w	1000Base-LHX single-mode transceiver, 30KM, Wide Opr. Temp.
SFPGXD50	1000Base-XD single-mode transceiver, 50KM
SFPGXD50-w	1000Base-XD single-mode transceiver, 50KM, Wide Opr. Temp.
SFPGZX70	1000Base-ZX single-mode transceiver, 70KM

SFPGZX70-w	1000Base-ZX single-mode transceiver, 70KM, Wide Opr. Temp.
SFPGLX40B13	1000Base-LX single-mode Bi-directional transceiver, 40KM. Tx 1310nm, Rx 1550nm
SFPGLX40B13-w	1000Base-LX single-mode Bi-directional transceiver, 40KM,Tx 1310nm, Rx 1550nm, Wide Temp.
SFPGLX40B15	1000Base-LX single-mode Bi-directional transceiver, 40KM, Tx 1550nm, Rx 1310nm
SFPGLX40B15-w	1000Base-LX single-mode Bi-directional transceiver, 40KM, Tx 1550nm, Rx 1310nm, Wide Temp.

- Rename Super Ring plus (Rapid Super Ring) to Multiple Super Ring with various features as following diagram.



- Implement new ring algorithm, the restore time of Rapid Super Ring (R.S.R.) and Rapid Dual Homing (R.D.H.) reduced to zero second.
- Change SNMP Obejct ID (O.I.D) from 1.3.6.1.4.1.24062.2.1.3 to 1.3.6.1.4.1.24062.2.2.2
- Support system configuration file (JFFS2) recovery function in JetView utility (supported in JetView version 1.3 or above).

The following change apply to the firmware version V2.0 and Boot Loader V1.6.2.9

- Provides Enhance Ring Technology – Super Ring plus with following features:

a. V1 backward compatibility with JetNet 4000 Series (JetNet 4008, JetNet 4008f, JetNet 4005, JetNet 4005f, JetNet 4508 series).

b. Single Ring

c. Ring Coupling

d. Dual Homing

- Supports JetView v1.1
- New RSR Web UI and new RSR SNMP MIB

- Support IEEE802.1x port based user authentification.
- Support GVRP features
- Support IGMPv3 Snooping
- Support daylight saving function and getting time from PC
- Support force multicast filtering feature
- Display bootloader version in CLI

The following changes apply to the version v 1.0:

- Supports full functions of IGMPv1 & IGMPv2 (ex. Query Interval、Query Maximum Response Time).
- Support JetView v.0.10

The following changes apply to the version v 0.0.7:

- Support new time sync failure warning event.
- Use one MAC address per device
- Support "clock set" and "no clock set" in CONFIG_NODE.
- Support management utility - JetView version 0.6 with following features:
  a. Auto discovery
  b. Group IP Configuration
  c. Group Firmware upgrade
  d. Group Configuration file restore/backup
  e. Group load default configuration file
  f. Device Discovery can bind specific network interface or flood to all interfaces.

Fixes for Known Faults

The following fixes apply to version v 2.1

- Fix identification number issue of SFP Gigabit SX transceiver and correct system parameters for SFP transceiver. As this correction, JetNet 5008G-P can support SFP check function and deliver exactly result to JetView utility.
- Fix IEEE 802.1x port status table update issue.
- Fix RSTP port status change issue when it link to a share hub.
- Fix dynamic VLAN table display issue in command line interface (CLI).
- Fix SFP transceiver update behavior. The correction is for SFP transceiver plug-in and link up/down state change.
- Fix power-on ring recovery time over 500 ms issue (version V1.3e). The ring recovery time of system power-on is zero ms in firmware V2.1 by M.S.R. function.
- Fix TrunkRing function with zero recovery time.
- Fix Dual Homing issue when device power-up will cause Cisco switch port disable. The dual homing issue is fixed by 2.1 Rapid Dual Homing function.

- Fix RSTP inter-operability testing issue with Cisco 2950 switch, when JetNet 5010G multi-link with Cisco switch and change Root switch from JetNet 5010G to Cisco switch will cause uplink port change port stat from blocking to forwarding mode and start looping.
- Correct GVRP and RSTP can't co-work issue when port link up and down event occurred will cause GVRP does not work exactly.
- Correct Fiber port flow control issue.
- Fix ring port can't forward and receive data issue in version 2.1.
- Fix DHCP client issue when one of Ring entity enabled DHCP server, all of DHCP client will get same IP address.
- Update Web help information for misspelling issue.

The following fixes apply to firmware V2.0 and boot loader V1.6.2.9

- Fix SNMP MIB issue for static MAC table.
- Fix IGMP snooping table is not clear issue when disable IGMP query and snooping functions.
- Fix authentication issue for SMTP E-mail server.
- Fix SNMP management issue for NTP server configuration.
- Fix SNMP PortTrunkAggregatorSettingTable. (OID：1.3.6.1.4.1.24062.2.1.3.3.4.1.1) issue which can aggregate port #10 into Trunk group.
- Fix port mirror issue when plugged out and insert it late will cause destination port receive double packet.
- Fix RSTP inter-operability testing with Cisco Switch 2950, when change root switch from JetNet 5008G to Cisco switch will cause wrong root port information with wrong RSTP port state.
- Fix Dual Homing II limitations.
- Fix R.S.R. restore time is not equal to zero issue when device executes device power-on.
- Enhance the precision of system time.
- Fix SFP100MM fiber transceiver recognized issue.
- Fix SNMP trap issue of link-down/up interface information that could not be recognized by SNMPc.
- Fix non-Ring Master node power-on will take 9 seconds to stable state.
- Fix RSR restore time too long problem.
- Fix Ring Master auto-election fail and looping issue when Ring Master power-on.
- Fix JetView can't work issue when enable DHCP server function.
- Fix IGMP issue that can't receive IGMP report message unless IGMP Query enabled first.
- Fix log function issue for link down, ring topology change.

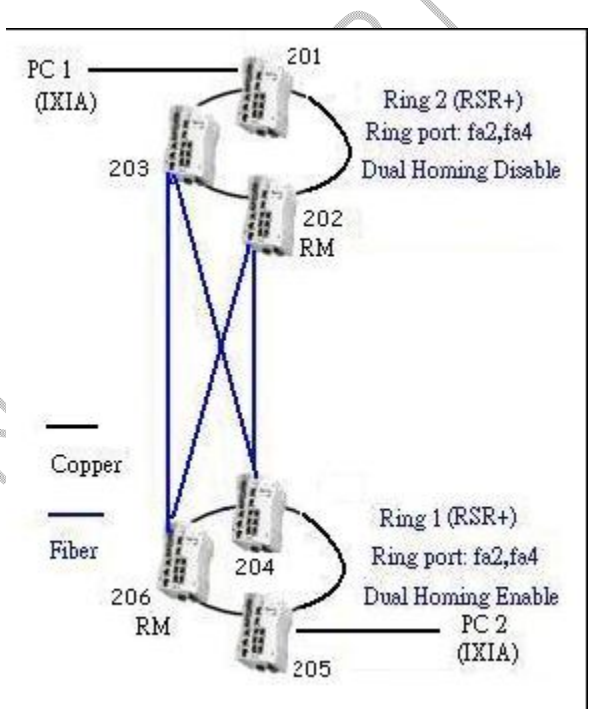
The following fixes apply to version v 1.0.

- Fix 10/100Mbps interface link fail issue.
- Fix Gigabit port #9 can not show transceiver information issue.
- Fix SFP transceiver's EEPROM will be overwrite problems.
- Fix SFP compatible issues with JetNet 3010G.
- Fix SFP single-mode 155M link problems, when rebooting device will cause SFP transceiver link fail.
- Fix Web interface display issue for IGMP query function that show wrong state when enable IGMP Query.
- Fix JetView firmware upgrades issue.

Known Restrictions or Limitation

- Important!

  The event alarm relay function only support in hardware version v2.0, hardware version 1.0 does not support v2.0 firmware for event alarm relay.
- Bootloader v1.6.2.10 should use firmware 2.1 or above.
- To apply GVRP function on Trunk group, the trunk port should not link together before apply GVRP function. If apply GVRP function before build the port connection will result GVRP unavailable.
- In dual homing architecture, only provide 7 uplink paths. If uplink path over 7 will cause JetNet 5008G-P working in abnormal.
- In following network architecture, if plug out the any path either device 203 and 206 or device 202 and 204 will result the connection break down. This testing result only present in one-way ping command testing.



- In the ring architecture, if power-on JetNet 5010G which truck ring function is enabled will

cause wrong traffic and the recovery time more than 1 sec.

- If change the IP address of Query server, the IP address of IGMP Query server which existed in IGMP member ship table will not be update in command line interface (CLI).
- It does not pop-up warning information when set rate liming or shaping on trunk port. Since, the trunk port should be full wire speed and could not be limited.
- In SNMP management interface, the JetNet 5008G-P does not restrict trunk setting apply to IEEE 802.1X port.
- In RSTP inter-operability testing, when link more than three links to Cisco switch, changing root by modifying the priority, it might cause loop and all non-edge port will change to forwarding state.
- The combo port does not support fiber link-up first function when transceiver is 100Mbps multi-mode type fiber.
- In some ring architecture, the recovery time of node down is over than 1 sec.