

## Korenix JetNet Industrial Managed Switch 5010G 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](mailto:Korecare@korenix.com).

### About This Software Version

The version number and the release date.

Firmware Version	Boot Loader Version	Release Date	Model
V1.1	V1.6.2.1	Apr-27. 2007	JetNet5010G
V1.2	V1.6.2.3	Jun-20. 2007	JetNet5010G
V1.3	V1.6.2.6	Aug-21. 2007	JetNet5010G
V1.3b	V1.6.2.6	Aug-30. 2007	JetNet5010G
V1.3c	V1.6.2.6	Sep-4, 2007	JetNet5010G
V1.3d	V1.6.2.6	Not Release version	JetNet5010G
V1.3e	V1.6.2.7	Sep-11,2007	JetNet5010G
V1.3.3	V1.6.2.7	Temporary version for testing only.	JetNet5010G
V2.0	V1.6.2.9	Oct-26, 2007	JetNet5010G
V2.1	V1.6.2.10	Apr-16,2008	JetNet 5010G
V2.2	V1.6.2.12	Jun 29,2009	JetNet 5010G
V2.2b	v1.6.2.12	July 24, 2009	JetNet 5010G

**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 JetNet5010G 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
- Secondary, upgrade Boot loader v1.6.2.12 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 version 2.2b:

- Fix the firmware upgrade issue for the JetNet 5010G with production date code before Oct 2008.

Ex:JN2008080090

JN: JetNet product line

200810: Year and Month of production. Production Date is Aug, 2008.

0090: batch serial number of this device.

The following changes apply to the version v 2.2:

- Supports Digital Diagnostic Monitoring (DDM) type of SFP transceiver and provides the number of TX/RX power and temperature.
  - Only supports Korenix certified DDM SFP.
  - Add DDM SFP Warning-event function.
  - The DDM SFP information will be show in the Web, Telnet and console interface.
- Update SNMP private MIB to v2.2.
- Add DI warning event
- Enabled the CPU port rate control to 2 Mbps except PDU type packet.
- Change administrator password length from 8 to 32 characters. {Username length is the same. (20 characters) }
- add relay function that the failure of Power 1 or 2 cause alarm in CLI mode
- Change \$PROMPT to 'switch#'

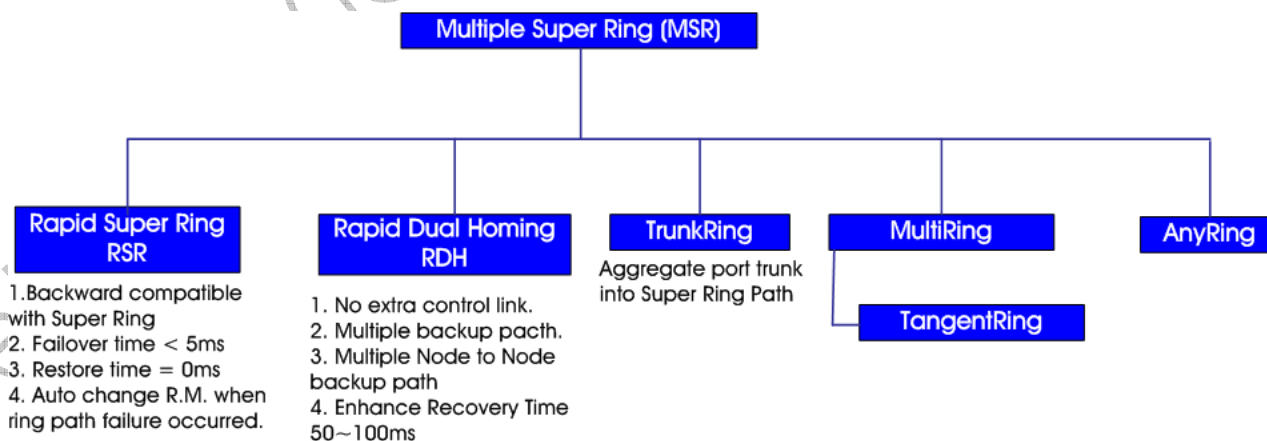
The following changes apply to the version v 2.1:

- 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
<b>SFP100MM</b>	Multi-mode 100Mbps 2KM Fiber Transceiver
<b>SFP100MM-w</b>	Multi-mode 100Mbps 2KM Fiber Transceiver, Wide Opr. Temp.
<b>SFP100SM30</b>	Single mode 100Mbps 30KM Fiber Transceiver
<b>SFP100SM30-w</b>	Single mode 100Mbps 30Km Fiber Transceiver, Wide Opr. Temp.
<b>SFP100SM60</b>	Single mode 100Mbps 60Km Fiber Transceiver
<b>SFP100SM60-w</b>	Single mode 100Mbps 60Km Fiber Transceiver, Wide Opr. Temp.
<b>SFP100SM80</b>	Single mode 100Mbps 80Km Fiber Transceiver
<b>SFP100SM80-w</b>	Single mode 100Mbps 80Km Fiber Transceiver, Wide Opr. Temp.
<b>SFP100SM100</b>	Single mode 100Mbps 100KM Fiber Transceiver
<b>SFP100SM100-w</b>	Single mode 100Mbps 100KM Fiber Transceiver, Wide Opr. Temp.
<b>SFP100SM120</b>	Single mode 100Mbps 120KM Fiber Transceiver

<b>SFP100SM120-w</b>	Single mode 100Mbps 120KM Fiber Transceiver, Wide Opr. Temp.
<b>SFPGSX</b>	1000Base-SX multi-mode transceiver
<b>SFPGSX-w</b>	1000Base-SX multi-mode transceiver, Wide Opr. Temp.
<b>SFPGSX2</b>	1000Base-SX plus multi-mode transceiver
<b>SFPGSX2-w</b>	1000Base-SX plus multi-mode transceiver, Wide Opr. Temp.
<b>SFPGLX10</b>	1000Base-LX single-mode transceiver 10KM
<b>SFPGLX10-w</b>	1000Base-LX single-mode transceiver, 10KM, Wide Opr. Temp.
<b>SFPGLHX30</b>	1000Base-LHX single-mode transceiver, 30KM
<b>SFPGLHX30-w</b>	1000Base-LHX single-mode transceiver, 30KM, Wide Opr. Temp.
<b>SFPGXD50</b>	1000Base-XD single-mode transceiver, 50KM
<b>SFPGXD50-w</b>	1000Base-XD single-mode transceiver, 50KM, Wide Opr. Temp.
<b>SFPGZX70</b>	1000Base-ZX single-mode transceiver, 70KM
<b>SFPGZX70-w</b>	1000Base-ZX single-mode transceiver, 70KM, Wide Opr. Temp.
<b>SFPGLX40B13</b>	1000Base-LX single-mode Bi-directional transceiver, 40KM. Tx 1310nm, Rx 1550nm
<b>SFPGLX40B13-w</b>	1000Base-LX single-mode Bi-directional transceiver, 40KM, Tx 1310nm, Rx 1550nm, Wide Temp.
<b>SFPGLX40B15</b>	1000Base-LX single-mode Bi-directional transceiver, 40KM, Tx 1550nm, Rx 1310nm
<b>SFPGLX40B15-w</b>	1000Base-LX single-mode Bi-directional transceiver, 40KM, Tx 1550nm, Rx 1310nm, Wide Temp.

- Rename 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 1.3.6.1.4.1.24062.2.2.1

- 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**

- Rapid Super Ring II and back ward compatible with JetNet 4000 series.
- Ring Coupling II
- Dual Homing III
- Link Aggregation Integration (Trunk Ring)
- Multiple Rings (Tangent Ring)
- Any Ring
- Supports new R.S.R. Web user interface and SNMP private MIB.
- Support IEEE802.1x private MIB.
- Support GVRP features.
- Display boot loader version in CLI mode.

**The following change apply to the firmware version V1.3.3 and Boot Loader V1.6.2.7**

- Add Multiple Ring feature.

**The following changes apply to the firmware version V1.3e and Boot Loader V1.6.2.7**

- Add WEB Force Filtering Panel.

**The following changes apply to the firmware version V 1.3 and Boot Loader V1.6.2.6**

- Support JetView V1.1
  - Signal features
  - Batch FW upgrade queuing mechanisms
  - Boot Loader upgrade
- Add Daylight saving time function
- SFP back door retrieve mechanism
- Support IGMP V3 Snooping
- Support IEEE802.1x Support

**The following changes apply to the version V1.2**

- Support JetView, Window Utility
  - Auto discovery
  - Group IP Configuration
  - Group Firmware upgrade
  - Group Configuration file restore/backup
  - Group load default configuration file

Device Discovery can bind specific network interface or flood to all interfaces.

- Use one MAC address per device
- Support new time sync failure warning event
- Support "clock set" and "no clock set" command in command line interface mode.
- Remove WEB UI - RSR Hello Time function.

#### The following changes apply to the version V1.1:

- Add SNMP V3 user table private MIB
- Add RSTP public MIB (dot1dStpExtPortTable).
- Add DHCP server.
- Remove MAC address entries only for topology changed port, link up/down port.
- Add multicast groups clear function if topology changes

## Fixes for Known Faults

#### The following issues fixed and applies to version v 2.2

- Fixed dot1xPortStatusTable display issue.
- Fixed RSTP wrong display issue in Web interface when the port link up and down.
- Fixed SFP GSX recognized issue.
- Fixed Ping fail issue when disable STP function between 2 devices.
- Fixed static port aggregation can't forward and still show in spanning tree table issue when set 3 ports into port aggregation mode.
- Fixed the MAC address table will not clean issue when the last aggregation port link down.
- Fixed the issue that Web login request install "CHT" driver at pure English version O.S. ;
- Fixed IGMP configure issue when it enabled in global mode without VLAN and after saving, reboot the VLAN IGMP still is enabled.
- Fixed Gigabit port can't disable issue.
- Fixed the issue as following: change the frame type from "Accept Frame Type" to "Tag Only" in VLAN Port Configuration, then save and reboot, the "tag only" setting disappear and the port removed from vlan table.
- Fixed the spanning tree priority change will cause looping and forwarding issues when switch link with Cisco device with multi-path.
- Fixed VLAN entry loses issue.
- Fixed the display issue when switch executes the command "switch# sh running-config" in CLI mode.
- Fixed the display issue when switch executes "switch# sh mac-address-table dy vlan 1" and will lose one entry when page down.
- Fixed the display issue when switch executes "Switch#show ip igmp snooping multicast

all" and will lost one entry issue.

- Fixed the display issue when executes help command "?" in CLI configure mode the information will not line feed and display in same column.
- Fixed the exist backup file will be cleaned issue when click " no " icon to choice don't overwrite it.
- Fixed RSTP port cost issue with admin path and operating port path cost.
- Fixed IGMP join member group issue that Member cannot join group when the packet forwarding in fully wire speed.
- Fixed the daylight saving issue.
- Fixed the RSR control packet can't be receiving by ring port that the ring port link type is access or trunk mode even the management VLAN is not VLAN 1.
- Fixed the multicast stream filtering issue that can't work properly.
- Fixed the multicasting filtering function will cause IGMP query packet can't forward to client when the device is a querier.
- Fixed the system unstable issue when add VLAN 2 and show mac-address-table in CLI mode.

**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 5010G 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 Dual Homing limitations
- Fix RSR node up restore time
- Enhance the precision of system time

**The following fixes apply to version v 1.3e and Boot Loader V1.6.2.7**

- Fix 100Mbps SFP transceiver recognizes issue for wide operating temperature model only.

**The following fixes apply to version V1.3c and Boot Loader V1.6.2.6**

- Fix Web firmware upgrade function didn't work.
- Fix Restore configuration function didn't work..

**The following fixes apply to version V1.3b and Boot Loader V1.6.2.6**

- Fix SNMP Trap information could not be recognized by SNMP viewer when port linked up or linked down.

**The following fixes apply to version V1.3 and Boot Loader V1.6.2.6**

- Fix non-RM node up need almost 9 second to become stable state. Need to upgrade ARMboot to V1.6.2.6.
- Fix RSR restore time issue on firmware V1.3 and boot loader V1.6.2.6.
- Fix the failure of RM auto elect when RM power off and on, fixed on firmware V1.3 and Boot Loader V1.6.2.6
- Fix when disable DHCP Service causes JetView can't work.
- Fix when send IGMP V3 leave packets, sometimes can't leave join of multicast entry.
- Fix IGMP Snooping can't receive IGMP Report message unless IGMP Query enabled first.
- Fix event log function for link down, super ring topology change.

**The following fixes apply to version V 1.2**

- Fix RSTP interoperability issue
  - Enhance RSTP proposal, agreement mechanism
  - Enhance RSTP topology change mechanism
  - Enhance RSTP root bridge election mechanism
- Fix integration problems for IGMP snooping and RSR.
- Fix EEPROM overwrite problems of SFP Fiber Transceiver.
- Fix SFP Transceiver compatible issues with JetNet 3010G

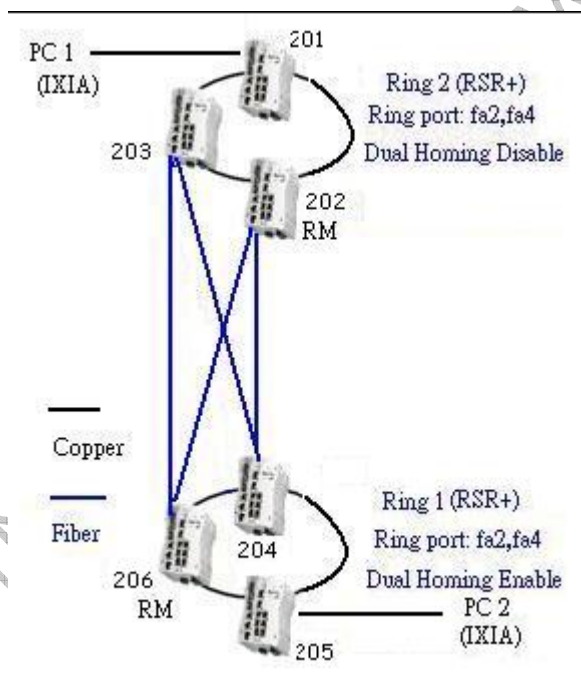
- Fix SFP 100Mbps Fiber Transceiver link problems while rebooting device.

#### The following fixes apply to version V 1.1

- Fix RSR bugs for Fail-over-Time and Restore-Time.
- Fix SNMP Object ID for snmpTrapServerEnable, snmpTrapServerTable
- Fix RSR ring ports blocking problem
- Fix IGMP snooping and RSR integrated problem
- Fix RSTP behaviors for proposal/agreement bug.
- Fix RSTP root bridge election mechanism.

#### Known Restrictions or Limitation

- Bootloader v1.6.2.10 should use firmware 2.1 or above.
- To applied GVRP function into trunk group should configure port trunk firstly and this function only present in Web interface, not available in command line interface (CLI).
- In dual homing architecture, only provide 7 uplink paths. If uplink path over 7 will cause video stream 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.
- The combo port does not support fiber link-up first function when transceiver is 100Mbps multi-mode type.

- 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 5010G does not restrict trunk setting apply to IEEE 802.1X port.
- In some ring architecture, the recovery time of node down is over than 1 sec.
- The SSH function is not available in version v2.2.

JetNet5010G Firmware Release Note