

## 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
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	29-Jun,2009	JetNet 5010G
V2.3	V1.6.2.12	24-Nov,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 new version firmware by JetView utility
- Secondary, upgrade new version Boot loader by JetView if Switch boot loader is old version.
- 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 2.3:

- Add Unknown Multicast send to query ports feature
- DHCP Option 82 ( DHCP Relay) function
- Supports IEEE 802.1AB LLDP (Link Layer Discovery Protocol)

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#'

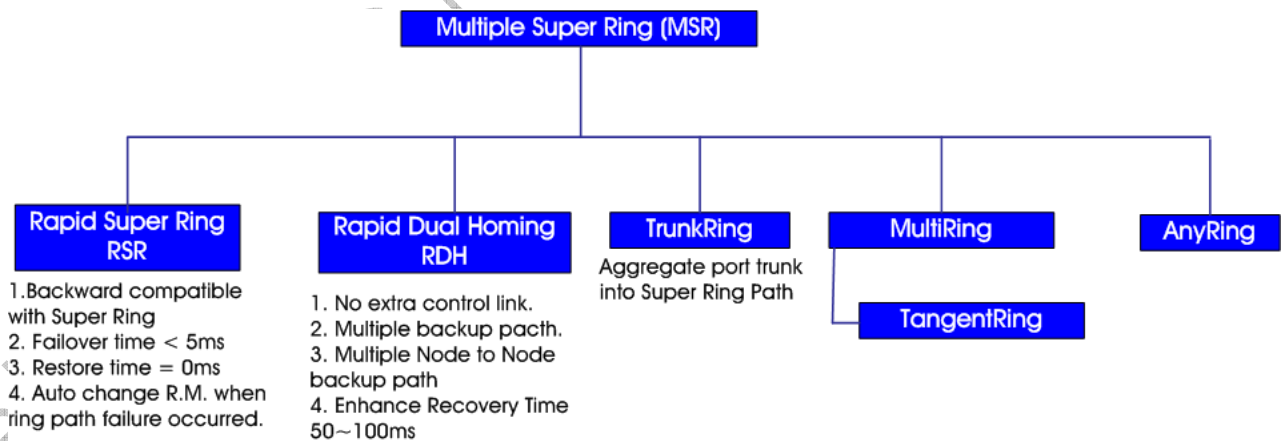
The following changes apply to the version v 2.1:

- 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
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

<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 Object 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 DCHP 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 2.3

- The IGMP query can't be forward successful if the device's CFI=1. (Fixed # 1111).
- Fixed IGMP query and report packets will be removed tag while the packet is send out from VLAN trunk-port or router port (Fixed #1109).
- The Tagged query packet will be remove tag while forward through a non-tagged VLAN trunk port and DUT with IGMP snooping enabled.(Fixed #1112)
- Fixed the description of OID(1.3.6.1.4.1.24062.2.2.1.2.5.7) (#1115).
- Fixed IGMP forwarding issue when multicasting filtering and IGMP functions are enabled. (#1124)
- Fixed the MAC address will not be cleared when port 1~7 were shut down. (#1123).
- Fixed SSH function can't work properly. (#1127).
- Fixed "show mac-address-table dynamic" will causes system hold when switch is MSR enabled and with multiple VLANs (#1128).
- Fixed executed command "lldp run" twice would cause DUT reboot. (#1131).
- Fixed firmware upgrade will take long time issue.(#1138).
- Fixed leave issue when there are 2 members sent leave messages at same time and will cause one of member can't leave; at the same time the specific query for the group from querier will lost.(#1139)
- Fixed last-member-query-interval always shows 1000 centi-seconds if it did not configure.(#1140).
- Fixed the snooping table is not cleared if we enable immediate-leave in vlan 1000 (not vlan 1) (#1141).
- Fixed Rapid Super Ring issue when JetNet 5010G with JetNet 5628G as ring architecture will cause blocking port information can't show properly. (#1081)
- Fixed RDH issue when two JetNet 5010G connect to two unmanaged switches individually with RDH architecture, the RDH function will not change to forwarding after disconnect the

link path between two unmanaged switched.(#1129).

- Fixed DHCP relay circuit port number incorrect issue.(#1114).
- Fixed DHCP option 82 ( DHCP relay) testing will cause system crash while the DHCP Relay Server without exactly configuration (circuit & remote ID).(#1146).
- Fixed DHCP client can't obtain IP address from server when the IP address configuration change from static IP to dhcp client.(1145)
- Fixed CLI command issue when set Gigabit port by command "speed 1000" (#1147).
- Fixed SSL can't login issue.
- Fixed display error message "login failed" issue. (#1148)
- Fixed source-only-learning add timer issue. (#1151)
- send to Query Ports of unknown multicast page. Cli command 已更換 Switch(config)# ip igmp snooping source-only-learning (bug# 1154)
- Fixed DHCP client configure issue when change IP setting from DHCP client to DHCP Client mode.(#1157)
- Fixed configuration restore will cause some of parts of configure will lost while the configuration is DHCP server enabled. (#1162).
- Fixed multicast traffic testing will cause system crash issue.(#179)

#### 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

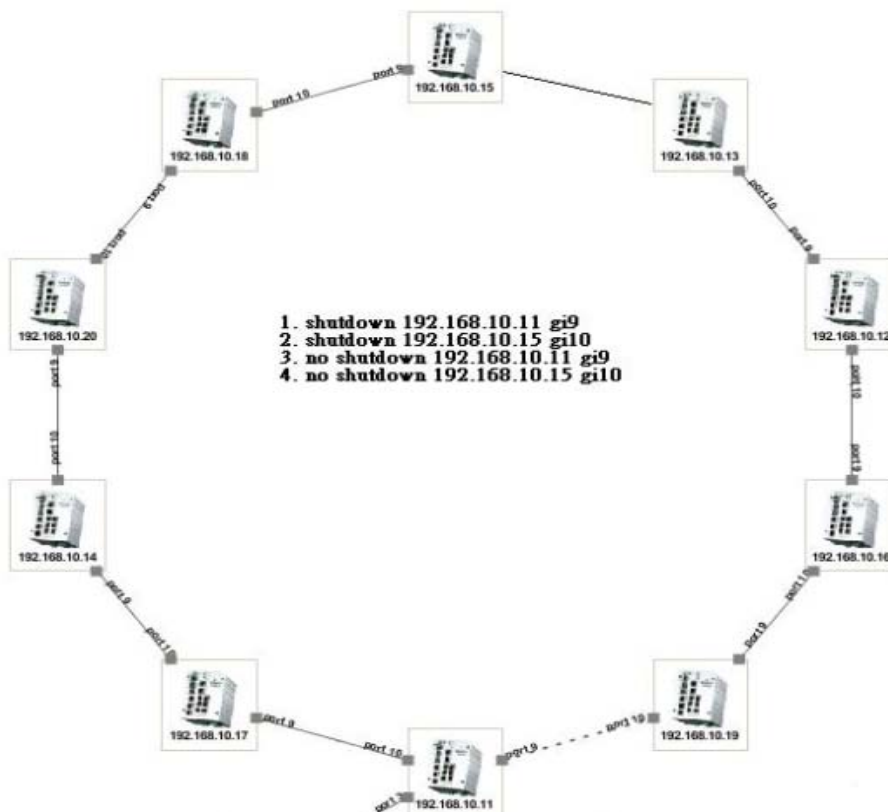
- Fix integration problems for IGMP snooping and RSR.
- Fix EEPROM overwrite problems of SFP Fiber Transceiver.
- Fix SFP Transceiver compatible issues with JetNet 3010G
- Fix SFP 100Mbps Fiber Transceiver link problems while rebooting device.

**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 – v2.3**

- Bootloader v1.6.2.12 should use firmware 2.1 or above.
- Super Ring v2 can't run with LLDP function. (#1142)
- As the ring topology as below, link down /up active ring path will cause the ring status show "Abnormal" when this architecture working with JetView Pro for 2 days, also one of DUT will not be discovery by JetView Pro utility (bug# 1143,1144)



- Can't add "port id" information into lldp packet (# 1158)
- The IGMP join packet can't be learned by aggregate port and will cause load balance fail or looping.( #1159)
- The querier can't auto election when DUCT connect with Cisco Switch. (# 1110)
- Current Ring version does not support AnyRing function Ring version, but in the SNMP interface still can set and will show "notsupported". (# 1061).
- SnmpV3UserTable, snmpTrapServerEnable, and snmpTrapServerTable can't be modified in SNMP when adding a new SNMP V3 user, read only. (# 1063).
- When adding another set of SNMP community string (R & RW), it would cause to fail to write data by SNMP UI. As well, the SNMP Community String setting can't be modified normally even in Web. (# 1064).
- The Reset Time and Hold Time of Ping Failure of Relay can be set to 0 in SNMP. And it can be set to no number in Web too. (# 1067).
- The scroll bars of DI Number and DI state of fault relay show twice in Web interface. (# 1068).
- The Web interface always shows default gateway as 0.0.0.0 whether we set it by Web UI or not. Also, the second time setting wouldn't replace the first time setting. (# 1074).
- Remove Cisco PVST packet's tag and forward to Cisco will cause port blocking. (# 1083).
- Set the port with PVID 2 and belongs Management VLAN ID 2 that connected with Cisco switch will cause loop event occurred between DUT and Cisco Switch.(# 1089).
- The TX mirror destination port will receive tagged packet from source ports which are untagged port and whatever it is belongs to a VLAN member or not.(# 1090).
- The MIB entries OID 1.3.6.1.4.1.24062.2.2.6.4.4.1 and OID 1.3.6.1.4.1.24062.2.2.6.4.4.2 should be rename to "Mutiple super ring" and "Mutiple super ring information". (# 1091).
- If link up 2 ring port with different Ring ID, the status of two rinig port still shows normal. It should be abnormal.(# 1093).
- NodeUp a static trunk ring will cause some device mac table learning failed and the transmission becomes abnormal. (# 1096).
- The re-authentication function is not working properly. (# 1098)
- If type "snmp-server user shaUser1 1 v3 auth sh(a) sha00000" without the '(a)', the entry won't be created. (# 1100)
- The snmp trap can't display detail information, ex: di,do. (# 1101)
- In RDH architecture, if the uplink ports are aggregated as trunk group and one of port with different RDH port priority, then the other ports of the group won't be counted in RDH ports. And it will cause abnormal data transmission. (# 1103)
- VLAN table did not display normally in WEB while lots of VLAN exist and edit the VLAN table. (# 1126)
- DUT can set gvrp enable before set trunk under WEB UI, but it can't be under CLI UI (#

942).

- If link up Dual Homing port more than 7 ports, it will lead to DUT work abnormal. (eg. Viedo) (# 949).
- It will lead to disconnect when PC2 ping PC1 if we node down any DUT in nondual-homing ring (# 961).
- It will take duplicates when we do node up and the recovery time is more than 1 sec (# 981).
- If we change querier's IP, DUT will not change querier (# 1003).
- In the SNMP management mode, the DUT does not restrict aggregate port as trunk group when one is 802.1x enabled.(# 1008).
- Recovery time of node down in topology B and D is over than 1 sec (# 1016); see attached diagram as following.

