

Korenix JetNet Industrial Managed Switch JetNet 4510 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
V2.0	V1.6.2.10	Jan. 9, 2008	Official release for JetNet 4510
V2.1	V1.6.2.10	21, Apr, 2008	Official release for JetNet 4510
V2.3	V1.6.2.12	24-Nov, 2009	Official release for JetNet 4510

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 JetNet4510 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 firmware by JetView utility
- Second, upgrade new Boot loader by JetView utility
- .After Boot loader upgrade finished, it will auto restart system to enable the new functions.

New Changes and Improvement:

The following change applies to the version V2.3:

- Clone of JetNet4510-v2.2.10
- Add Unknown Multicast send to query ports feature
- Add DHCP Option 82 function
- Add LLDP function
- Fix the firmware upgrade bug on some EN29LV649H flash (Commercial Grade)
- Add new feature of SFP
 - Support DDM SFP
 - Web UI and Warning event of SFP DDM
 - Three SFP check
 - ◆ Duplicated serial number check
Check duplicated serial number and only one duplicated SFP can work
 - ◆ Checksum check
SFP can't work if checksum is not correct
 - ◆ Certification check
None-certified SFP/ DDM SFP only can tx and rx
Certified Rule:
None-DDM SFP
Only check OUI (0x001277)
DDM SFP
Check
1. OUI (0x001277)
2. 16 bytes Code
Formula :
Basic field: Base address 1 = 3, Base address 2 = 20,
Base address 3 = 40
User Writeable EEPROM : Base address 4 = 128
For(Offset = 0 to 15)
{
byte [Base address 1 + offset] +
byte [Base address 2 + offset] +
byte [Base address 3+ offset] == byte [Base address 4+ offset]
}
- Add DI warning event
- Armboot v 1.6.2.12 provides Menu UI and improve i2c access capability for DDM SFP
- Limits 2Mbps all frames to CPU, except PDU

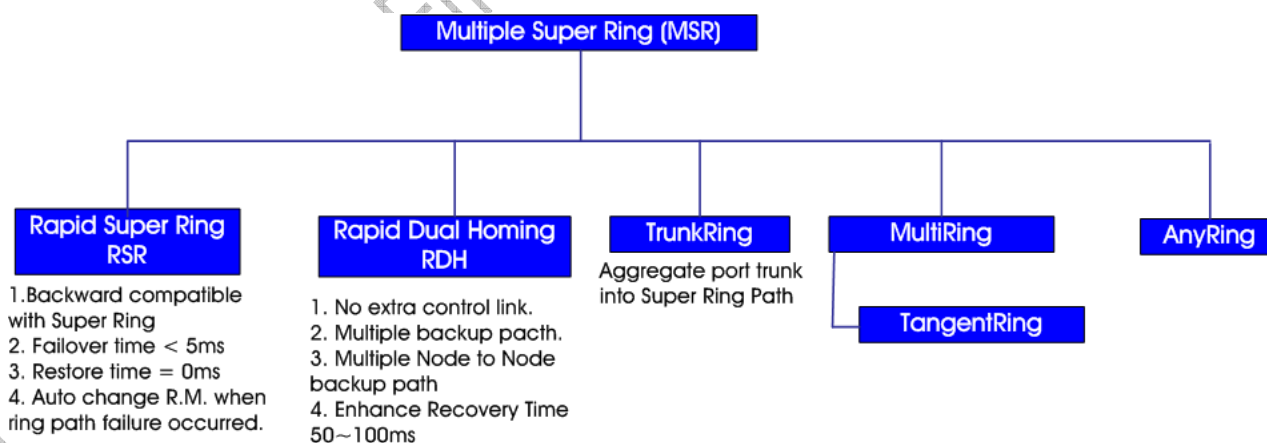
- add relay function that the failure of Power 1 or 2 cause alarm in CLI mode
- Change \$PROMPT to 'switch#'

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.

- 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.

The following change apply to the firmware version V2.0 and Boot Loader V1.6.2.10

- All features are same as JetNet 5010G v2.0

- Support Multiple Super Ring (M.S.R.) as following features:
 - a. Backward compatibility with Super Ring Version 1 supported in JetNet 4008, JetNet 4508 series.
 - b. Provides Rapid Super Ring (R.S.R.), Rapid Dual Homing (R.D.H.), TrunkRing and AnyRing.
- Support CLI, Web, JetView, SNMP v1/v2c/v3, RMON, DHCP client/server, IEEE 802.1x, IGMP Snooping v1/v2/v3, IGMP Query, IEEE 802.1Q VLAN, GVRP, IEEE 802.1D-2004 Rapid Spanning Tree Protocol (RSTP), IEEE 802.1p class of service, IEEE802.3ad LACP, event warning, and IEEE 802.1p class of service.

Fixes for Known Faults

The following fixes apply to version v 2.3 and Boot Loader V1.6.2.12

- Fix dot1xPortStatusTable of mac address display issue. (# 1017).
- Fix RSTP Web display issue that always shows "Shared" if DUT link up to hub then link down. (# 1021).
- Fix SFP GSX EEPROM read issue. (# 1022).
- Fix Ping fail issue after enable RSTP function. (# 1024)
- Use two DUTs, set port2,3,4 to static aggregation group, save config. Reboot one of DUT, those aggregation ports may disappear in spanning tree table, and those aggregation ports will not be in forwarding state. (bug# 1025).
- Fix MAC address table won't be cleaned issue after one of trunk group member link down. (#1026)
- Fix Web login in issue that will request install CHT in pure English OS.(#1027)
- Fix IGMP Snooping global configuration and VLAN IGMP Snooping configure issue.(# 1065).
- Fix the VLAN frame type change issue the change will cause the VLAN member port removed.(#1066).
- Fix the RSTP issue when link with Cisco switch more than 3 paths and change root priority will cause loop and all paths forwarding.(# 1013).
- Fix VLAN entry lose issue.(# 13).
- Fix "switch# sh running-config" will lose one entry data issue. (# 64).
- Fix "switch# sh mac-address-table dy vlan 1" page down will lose one entry data issue. (# 67).
- Fix "Switch#show ip igmp snooping multicast all" will lose entry. (# 118).
- Fix display issue when executes "Switch(config)#? " the display information will not auto line feed and carry return. (#205)
- Fix show running-config display issue.(# 235).
- Fix "Switch(config)#sfp ddm eject all this command doesn't work issue. (# 1084).

- Fix DDM display issue about RX Power value. (# 1085).
- Fix Ring will looping issue when link DUT with JetNet 5628G and link down /up active ring path, the looping will occurred.(# 1082).
- Fix DDM SFP function doesn't work issue. (# 1087).
- Fix SFP DDM warning-event enable, but show running-config doesn't display sfp-ddm warning-event CLI. (# 1088).
- Fix configuration backup issue that will erase exist file when click "no" in Web interface.(# 1094)
- Fix RSTP path cost issue.(# 933).
- Fix MSR protocol issue with JetNet 5628G. (# 1086).
- Fix IGMP member cannot join group issue when the there is wire speed traffic is injected into Switch.(# 1097).
- Fix Daylight saving issue. (# 1099)
- Fix RSR and VLAN interoperability issue. (# 1080)
- Fix Multicast stream forwarding issue.(# 1104)
- Fix multicast filtering issue in querier. (# 1106)
- Fix VLAN add and display VLAN mac information will cause system hanged issue. (# 1108)
- Fix forwarding queue issue. (# 1111).
- Fix IGMP querier with managed VLAN issue.(# 1109).
- Fix IGMP snooping with VLAN trunk port issue.(#1112).
- Fix IGMP stream can't forwarding when multicast filtering is enabled issue. (#1124)
- Fix port shut down will not clear MAC table issue (port 1~7). (#1123).
- Fix "show mac-address-table dynamic" will causes system hold when switch is MSR enabled with multiple VLANs function. (#1128).
- Fix firmware upgrade will take long time issue.(#1138).
- Fix IGMP group leave can't at same time issue.(#1139).
- Fix last-member-query-interval time always shows 1000 centiseconds in VLAN 1 issue. (#1140)
- Fix snooping table won't clean issue when DUT executes immediate-leave in vlan 1000. (#1141).
- Fix RSR blocking port issue with JetNet 5628G (#1081).
- Fix RDH link with unmanged Switch issue.(#1129).
- Fix DHCP client can't get IP issue. (#1145).
- Fix Login fail issue.(#1148).
- Fix IP address configuration change from static to DHCP client and won't change to static IP only disable DHCP client.(#1157).
- Restore config which sets dhcp server will cause some parts of configure lost. (It remains

in startup-config but lost in running-config.) (#1162).

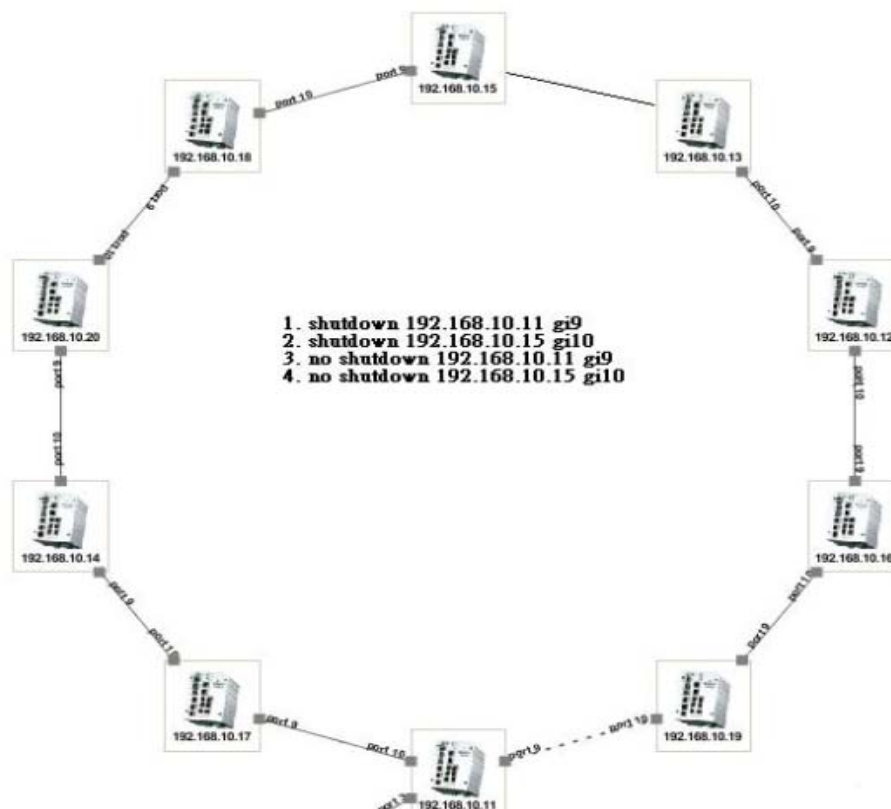
- Fix multicast traffic (20Mbps) testing will cause system crash issue. (#179)

The following fixes apply to version v 2.1 and Boot Loader V1.6.2.10

- 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 SFP checking function for JetView V1.3.
- Fix the DHCP server IP address can't poll by SNMP issue.
- Fix DHCP client issue when one of Ring entity enabled DHCP server, all of DHCP client will get same IP address.
- Correct help information misspellings issues in Web interface.

Known Restrictions or Limitation

- 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 (# 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)
- The querier can't auto election when DUT connect with Cisco Switch. (# 1110)

- VLAN table did not display normally in WEB while lots of VLAN exist and edit the VLAN table. (# 1126)
- The SNMP MIB can't show exactly Ring information after destroy the architecture. (# 977)
- It will take duplicates when we do node up and the recovery time is more than 1 sec (# 981)
- It will lead to disconnect when PC2 ping PC1 if we node down any DUT in nondual-homing ring. (# 961)
- The GVRP configuration only supports in Web interface. (# 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.

