



Firmware for TN-5500A Series (TN-5508A, TN-5510A) Release Notes

Version: v3.13	Build: Build_24052315
Release Date: May 23, 2024	

Applicable Products

TN-5500A Series

Supported Operating Systems

N/A

New Features

- Added support for DHCP Option 61 - Option 61 in DHCP is a client identifier that is sent by all DHCP clients in the DHCP packet 1. It is used to identify a DHCP client uniquely and to configure manual bindings, For now, the value of 2. DHCP Option 61 is user-defined.
- Trunk ports can support two redundant protocols - RSTP and Turbo Ring v2.
- Added support for Secure Copy Protocol (SCP) for firmware upgrade, event log, and configuration backup transmissions.

Enhancements

- Enhanced the RADIUS login functionality:
 - ☐ Added support for additional authentication types: CHAP, MSCHAPv2.
 - ☐ Added support for a 2nd RADIUS authentication server for redundancy purposes.
 - ☐ Added a new event log for successful logins.
- Users can set DeviceIP for the trunk port.
- SNMP v3 now supports AES encryption.
- Static multicast and IGMP now share one MAC table to give users more flexibility and higher capacity for their applications.
 - ?TN-4500A has a total of 512 MAC entries shared between static multicast and IGMP.
 - ?TN-5500A has a total of 256 MAC entries shared between static multicast and IGMP.
- The web interface can now be accessed through mirror ports.
- The TN-5508A and TN-5510A will now assign the new PCP based on the port priority as configured in the QoS settings.
- Turbo Ring V2 can now pass through LACP trunk ports when Dynamic Ring Coupling (DRC) is enabled.

Bugs Fixed

- Importing a configuration file via TFTP when using DHCP Option 66 & 67 would fail.
 - Even if a device and gateway are in the same subnet, users can not assign an IP address (*.*.255) to the device using the SetDeviceIP function.
 - From the WEB GUI, users can't set an IP address(0.0.0.0) to the DNS and NTP server when using the SetDeviceIP function.
 - ACL rules may sometimes make STP unstable and cause network looping.
 - Configuring the syslog server domain name using SNMP or MXconfig would fail.
 - When IGMP is enabled, the device is unable to forward unknown IP multicast packets.
 - CVE-2022-0778: OpenSSL vulnerability.
 - UDP/TCP ports remain open even when the relevant network functions that use these ports are disabled.
 - The device fails to synchronize with the NTP server periodically if the device has been running for a certain period or after restarting.
 - The IGMP Static querier port does not work as intended.
- 10 When IGMP is disabled but a filter for unknown multicast packets is enabled for the Multicast



Forwarding Behavior (MFB) function, the device will still forward some IGMP packets.

- The displayed trunk port TX and RX packet counters are inaccurate.
- When using the “show MAC table” CLI command, trunk port entries are missing from the table.
- When users configure the Dual Homing primary and backup ports via SNMP, there is no message to inform users when the settings have reverted to their default values again.
- When acting as a DHCP server, the device will drop DHCP requests from clients using Option 61.
- When consecutively enabling or disabling the Turbo Ring Coupling function, the device will occasionally lose packets on the ring port.
- Turbo Ring slave devices do not correctly adjust their status after recovering from a power failure.
- Cybersecurity vulnerability: MPSA-230307, MPSA-230203 including CVE-2005-4900, CVE-2015-9251, CVE-2019-11358, CVE-2020-11022, CVE-2020-11023.

Changes

- For security reasons, multicast packets will be blocked if the ingress port is not authenticated by 802.1x.
- To improve interoperability with Moxa devices, the “EAP-MD5 Extra Data” field will no longer be used for 802.1x authentication.

Notes

- Due to a major issue with specific TN Series models, we have revoked firmware v3.12 for the TN-5508A and TN-5510A Series. If you are using TN-5508A/5510A Series products with firmware v3.12, upgrade to firmware v3.13 as soon as possible to avoid issues.
- Secure Copy Protocol (SCP) encrypts file transfers between the switch and the remote host and required considerably more computing power. Therefore, we do not recommend using SCP to transfer event logs as the high volume of logs may cause the web interface to become unresponsive.
- If users want to import a configuration file through DHCP Option 66 & 67, the switch will only support the configuration file format (.ini file) exported via the switch web interface.
- When importing a configuration file through DHCP Option 66 & 67, the following information can not be updated: AUTOIP, IPAddress, Netmask, Gateway, DNSIP, DNSIP1, PV6AddressPrefix, DHCP_FILTER_ENABLE_(port index), HCPRetryPeriod, DHCPRetryTimes, OPTION61_ENABLE, OPTION61_TYPE, OPTION61_USER_DEFINED_CLIENT_ID.
- Static multicast and IGMP static querier port cannot operate at the same time. After configuring a static multicast group, the IGMP static querier port will not forward to that multicast group anymore.
- If users enable Multiple Spanning Tree Protocol (MSTP) and GARP VLAN Registration Protocol (GVRP) at the same time, MSTP convergence would be affected. Therefore, we do not recommend enabling both these functions at any given time.
- From now on, upon receiving a DHCPDISCOVER message with a unicast flag from a DHCP client, the switch will respond to the DHCP client with a DHCPOFFER message via Layer 2 unicast.



• With firmware v3.12, the following functions and protocols are no longer supported:

☐ Industrial protocols: Modbus, EtherNet/IP

☐ IEEE 1588 PTP

☐ Turbo Chain v1

☐ TLS v1.0, v1.1

Version: v3.9	Build: N/A
Release Date: Nov 16, 2021	

Applicable Products

TN-5508A, TN-5510A

Supported Operating Systems

N/A

New Features

N/A

Enhancements

N/A

Bugs Fixed

- If a configuration conflict occurs during firmware upgrading, the device password is unexpectedly changed.
- If loop protection and redundancy protocols are working simultaneously, the set port stp state recorded by the software is different from the actual driver setting.
- When exporting the configuration through the console, the device will reboot.
- If an event log is produced during a firmware upgrade, the firmware upgrade process will fail.

Changes

N/A

Notes

N/A



Version: v3.8	Build: N/A
Release Date: Apr 22, 2021	

Applicable Products

TN-5508A, TN-5510A

Supported Operating Systems

N/A

New Features

- Added support for Security Guideline level 2.

Enhancements

- Updated to TLS 1.2.

Bugs Fixed

- When acting as Querier, the Router Alert Option is added to all IGMP packets.
- The event log is unable to display dates after February 2038 (Y2K 2038).
- The Set Device IP function in the web interface would reject a valid IP address containing the value "255".
- Duplicate Option-82 Relay unicast DHCP discovery issue.
- HTTP/HTTPS are not accessible after changing the device IP.
- The NTP query interval is not working properly.
- Incorrect language and information in the user interface.
- Importing through CLI causes the system time to reset.
- Any user account logged in through the CLI can see the encrypted password of the administrator account.
- Logging in to the device using an account with a name longer than 8 characters causes the system to reboot.
- Showing or exporting logs after a sudden system shutdown generates an error.
- When configuring the Set IP function, entering an IP and gateway address that are in the same subnet would be rejected by the system.
- PoE settings cannot be completed through the CLI because the "Exceed PoE system power budget" command is missing.
- The DHCP server is not referencing to the unicast flag to identify unicast or broadcast packets.

Changes

- Increased the serial number (S/N) length to 12 characters.
- The DHCP Option-82 and Set Device IP functions are now configured per port.
- Removed the Console Menu.

Notes

N/A



Version: v3.7	Build: 20060918
Release Date: Oct 01, 2020	

Applicable Products

TN-5508A, TN-5510A

Supported Operating Systems

N/A

New Features

N/A

Enhancements

- Added compatibility driver for a new real-time clock (RTC) component.

Bugs Fixed

N/A

Changes

N/A

Notes

N/A



Version: v3.6	Build: N/A
Release Date: May 17, 2016	

Applicable Products

N/A

Supported Operating Systems

N/A

New Features

NA

Enhancements

NA

Bugs Fixed

Fixed PoE user interface settings issue.

Changes

NA

Notes

N/A