Firmware for PT-7828 Series Release Notes

Version: v4.0	Build: FWR_PT7828_V4.0_Build_23120510
Release Date: Dec 28, 2023	

Applicable Products

N/A

Supported Operating Systems

N/A

New Features

• Added support for new MOXA commands:
- change network setting
- broadcast search
- import config (sys,ini)
- import cli
- upgrade firmware (firmware.rom)
- export plaintext config
- export encrypted config
- get device information
- verify account
- add/remove account
- register a web session id
- set mac address
- export debug log
- factory default
- load commands from a file and sent to the DUT
- Perform broadcast search 100000 times
• Added support for TLS v1.3.
• Added support for Account Password Policy.
• Added support for Account Login Failure Lockout.
• Added support for SSL Certificate Import.
• Added support for Encrypted Configuration.
• Added support for Management Interface in the Security section.

Enhancements

• Upgraded the JavaScript library to jquery-3.7.0.min.js.
• Upgraded the SSH package (dropbear_2019.78) to support "hmac-sha2-256 & diffie-hellman-group14-sha256".

Bugs Fixed

• XSS vulnerabilities
- LLDP diagnostic page
- Time page (1st Time Server IP/Name & 2nd Time Server IP/Name)
- Remote TFTP page (all input filed)
- SNMP Settings page (Admin/User Data Encryption Key, 1st Trap Server IP/Name, 2nd Trap Server IP/Name)
- Email Setup page (email address)
- DHCP Relay Agent page (Value)
• [CVE-2021-27417]: If the file size is exceptionally large, undefined behavior can't be prevented.
• [MSRV-2019-003] Denial of Service (web service) by improper HTTP GET command (CNVD 2019-

116145)
- [MSRV-2019-004] Denial of Service (web service) by over-sized (more than 12 MB) firmware upgrade through HTTP/HTTPS.
- [MSRV-2019-005] Denial of Service (web service) by excessive length of HTTP GET command.
- [MSRV-2017-011] Cross-Site Request Forgery (CSRF).
- [MSRV-2017-021] Release the cookie once the session expires to avoid the old cookie value being reused.
- [CVE-2022-0778] Import certificate issue: Updates OpenSSL package.
- [TALOS-2022-1621] A specially crafted HTTP request can lead to the disclosure of sensitive information.
- [TALOS-2022-1619] A specially crafted HTTP request can lead to an arbitrary JavaScript execution,
- [TALOS-2022-1618] A specially crafted HTTP message header can lead to denial of service.
- [TALOS-2022-1616] A specially crafted network sniffing can lead to the disclosure of sensitive information.
- [CVE-2022-40214] Potential tampered messages.
- [CVE-2022-40691] A specially crafted HTTP request can lead to disclosure of sensitive information.
- [nessus-43156] The remote network time service has a denial-of-service vulnerability.
- [nessus-97861] The remote NTP server responds to mode 6 queries, which can potentially be used in NTP amplification attacks.
- [Nessus-85582]: Web application potentially vulnerable to clickjacking.
- After configuring the NTP local time, if two configured NTP servers are configured, the NTP function does not work properly and may result in time sync failures.
- The SNMPv3 encryption data and shared key of the TACACS and RADIUS server can be viewed by snooping the web interface.
- The system is unable to handle corrupted OSPF packets, resulting in a vulnerable device rebooting after several minutes when receiving a malformed OSPF Hello packet.

Changes

- Removed "IE 11" and "IE 7" wording from the web interface.
- Removed the CBC and SHA1 ciphers from TLSv1.2 for security reasons.
- Disabled TLS v1.0 and v1.1 for security reasons.
- Replaced the Monitoring page with a non-Java version.
- Removed the banner with device-related information from the login page.

Notes

- This firmware version can only be applied to PT-7828 HW Rev. 3.1.0 and higher.

Version: v3.9	Build: Build_17122616
Release Date: Dec 29, 2017	

Applicable Products

PT-7828 Series

Supported Operating Systems

N/A

New Features

• Added configuration file encryption settings.

Enhancements

N/A

Bugs Fixed

• Stack-based buffer overflow vulnerability.
• Risky cryptographic algorithm vulnerability.
• Hard-coded cryptographic key vulnerability.
• Hard-coded password vulnerability.
• RSTP 40 nodes failed issue.
• Turbo Ring v1 failed issue on firmware v3.8.
• Removed misplaced UI config: IEEE 1588v2 E2E 1-step TC.
• CLI configuration export file has no RSTP port information issue.

Changes

N/A

Notes

• This is the last official firmware update for PT-7828 hardware revision v1.x and v2.x due to flash size limitation.
• The future official firmware upgrade will only apply to hardware revision v3.0 and above.

Version: v3.8	Build: Build_17041117
Release Date: N/A	

Applicable Products

PT-7828 Series

Supported Operating Systems

N/A

New Features

• Supports IEC 61850 QoS.

Enhancements

• Added warning message when default password was not changed.
• Encrypted security keys in user interface.
• Enhanced RSTP compatibility.

Bugs Fixed

• Cross-site scripting vulnerability.
• Denial of service attack vulnerability.
• Privilege escalation vulnerability.
• SSL v2/v3 vulnerability in HTTPS.
• Web console cannot be accessed when the SNMP get bulk service is running.
• Specific CLI command caused switch to reboot with default settings.
• Adding a new VLAN changed IGMP querier state from disable to enable.
• Could not save configurations to the ABC-01 via IE browser.
• Rate limit could not be set in web UI.
• PTP timestamp error in announce message.
• Removed 1588v2 PTP message of IEC 61850 QoS.
• Corrected authorization of Radius/TACACS+ login.

Changes

• SW PTP.
• IP filter.
• Line Swap.
• Traffic prioritization.
• SNMP setting.
• Port Access Control.
• Auto warning.
• Note: The above feature settings are removed from the menu mode console due to flash size limitation. However, user can also setup by web UI and CLI.

Notes

N/A

Version: v3.5	Build: Build_16052409
Release Date: N/A	

Applicable Products

PT-7828 Series

Supported Operating Systems

N/A

New Features

N/A

Enhancements

N/A

Bugs Fixed

• Inaccurate system local time.
• Time floating in NTP mechanism.

Changes

N/A

Notes

N/A

Version: v3.4	Build: Build_15071516
Release Date: N/A	

Applicable Products

PT-7828 Series

Supported Operating Systems

N/A

New Features

• Supports IEC 61850 QoS.

Enhancements

• 12 digit product series number.

Bugs Fixed

• Fixed bugs on firmware v3.

Changes

N/A

Notes

N/A

Version: v3.3	Build: N/A
Release Date: N/A	

Applicable Products

PT-7828 Series

Supported Operating Systems

N/A

New Features

• Added SNMP MIB for SFP DDM.

Enhancements

• Added web interface for loop-protection enable/disable.
• Added web interface for SSH/SSL key generation.

Bugs Fixed

• Login failed in CLI mode when password included a special character.
• Hybrid VLAN lacked SNMP MIB object.
• Access Control List (ACL) did not function correctly.
• SFP DDM displayed inaccurate values.
• IEEE 1588 PTP did not function correctly.

Changes

N/A

Notes

N/A

Version: v3.1	Build: N/A
Release Date: N/A	

Applicable Products

PT-7828 Series

Supported Operating Systems

N/A

New Features

N/A

Enhancements

• Passed ODVA EtherNet/IP certificate.
• Added some minor SNMP OIDs.
• Enhanced multicast performance.
• Added version number in MIB file.
• Supports Command Line Interface.

Bugs Fixed

• NTP did not synchronize time in default setting.
• NTP client function did not work with Windows XP NTP server.
• Firmware Upgrade Failed when IEEE 802.1x was enabled.
• Switch rebooted when receiving IGMP v3 packets (commonly used in Windows).

Changes

N/A

Notes

N/A

Version: v2.7	Build: N/A
Release Date: N/A	

Applicable Products

PT-7828 Series

Supported Operating Systems

N/A

New Features

N/A

Enhancements

• Added new internal algorithm to prevent system hang when a layer 3 interface is changed due to link up and down and also received a lot of unknown packets at a rate greater than 50 Mbps.
• Added new internal algorithm to prevent system from generating incorrect layer 3 routing table when an Ethernet switch port abnormally links up/down.

Bugs Fixed

• Fixed bug for Turbo Ring V2 recovery issue when Gigabit Fiber port abnormally links up/down.

Changes

N/A

Notes

N/A

Version: v2.6	Build: N/A
Release Date: N/A	

Applicable Products

PT-7828 Series

Supported Operating Systems

N/A

New Features

• Supports TurboPack™ 2009 (add new functions for Turbo Chain, IPv6, Modbus/TCP, IEEE 1588 PTP, SNMP Inform, LLDP, DHCP Option 82, Firefox, and SSH).
• Added OSPF, and VRRP.
• Push Ring port button when running Turbo Chain, the Chain ports' LED will be activated.
• Link Healthy Check on Gigaports for redundant protocols changed from Alarm mode to Polling mode.
• Added 10FL and MTRJ module.
• Added "RSTP_2004","CHANGE_IP_NOREBOOT", "RTC".
• Adds an exception error to the system log and reboots the system when the system hangs.

Enhancements

N/A

Bugs Fixed

N/A

Changes

N/A

Notes

N/A

Version: v1.2	Build: N/A
Release Date: N/A	

Applicable Products

PT-7828 Series

Supported Operating Systems

N/A

New Features

• Added the PM-7200-8SFP compatibility function.

Enhancements

N/A

Bugs Fixed

N/A

Changes

N/A

Notes

N/A

Version: v1.1	Build: N/A
Release Date: N/A	

Applicable Products

PT-7828 Series

Supported Operating Systems

N/A

New Features

• Added web interface for SSH/SSL key generation.
• Added SNMP MIB for SFP DD.

Enhancements

N/A

Bugs Fixed

• Hybrid VLAN lacks of SNMP MIB object.
• Access Control List (ACL) cannot function correctly.
• SFP DDM display inaccurate values.
• IEEE 1588 PTP cannot function correct.

Changes

N/A

Notes

N/A