EtherWAN Managed Switch
Firmware Release Notes
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RELEASE SUMMARY
Version: 1.94.6.3
Release Date: 2018/May/15

PRODUCTS SUPPORTED

PRODUCTS SUPPORTED		
EX89000 Series	EX87000 Series	EX83000 Series
EX78162 Series	EX78602 Series	ED3175 Series
EX78000 Series	EX77000 Series	EX76000 Series
EX75000 Series	EX74000 Series	EX73000 Series
EX72000 Series	EX71000 Series	EX63000 Series
EX62000 Series	EX61000A Series	EX29000 Series
EX27000 Series	EX70900 Series	

Fixed: Security issues-
- Was possible to login without the account password by changing cookies.
- Malicious users with login privileges could use malicious scripts such as a Cross Site Script or CSRF to obtain higher level permissions or perform other detrimental actions.
- When using Firefox to create a root account, another account could be added after logout.
- When Firefox retrieves a URL that requires permission, Burp Suite can be used to intercept web page transmission and obtain access information.

EtherWAN Managed Switch
Firmware Release Notes
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RELEASE SUMMARY
Version: 1.94.6
Release Date: 2017/Dec/30

PRODUCTS SUPPORTED

PRODUCTS SUPPORTED		
EX89000 Series	EX87000 Series	EX83000 Series
EX78162 Series	EX78602 Series	ED3175 Series
EX78000 Series	EX77000 Series	EX76000 Series
EX75000 Series	EX74000 Series	EX73000 Series
EX72000 Series	EX71000 Series	EX63000 Series
EX62000 Series	EX61000A Series	EX29000 Series
EX27000 Series	EX70900 Series	

NEW FEATURES

1. **PoE Watchdog**

PoE Watchdog is a management feature to help system administrators monitor and manage critical PoE powered devices. PD Watchdog is only supported on PoE enabled ports. Once enabled, the system will continuously ping a user specified IP address across the port. If the system does not receive a reply within a specified interval, it can automatically power down or power cycle the powered device.

New CLI Commands: poe watchdog

enable	PoE watchdog enable
failure-action	Action the PD after the PD Failure Check
max-failure-count	PoE Device check failure count
ping-interval	Ping interval
startup-delay	PoE Device startup delay check time
target-address	Failure check IP

2. **Email alarm notifications**

New feature allows switch to send email alerts to up to three recipients when an environmental alarm is triggered, configurable from GUI and CLI.

New CLI Commands: msmtp auth host WORD
                              msmtp auth passwd WORD
                              msmtp auth port <1-65535>
                              msmtp auth ssl
                              msmtp auth username WORD

3. LinkDown Disable

As a security feature, a port can be configured to automatically shut down when it becomes disconnected. When this feature takes effect, the port must be re-enabled manually.

New CLI Command: [no] linkdown-disable

4. Control Access to show running-config

New CLI Command: multiuser-access show-running-config tech (hide | show) oper (hide | show)

5. Multiple (up to 2) NTP servers can be configured

Expanded CLI Command: ntp server server1.ntp.org *192.168.12.20*

6. Show system uptime in CLI

New CLI Command: show system-uptime

7. New commands to view device serial number and product series

New CLI Commands: show serial number
                              show product series

8. Added command to terminate the session after the specified idle time when user initiates a Telnet or SSH connection but no username or password is entered

New CLI Commands: [no] timeout login response <0-300>

9. Added exec timeout command

New CLI Commands: [no] exec-timeout <0-35791> <0-2147483>

10. Added a Relay command for configuring a relay's normally open/closed circuit on EX73000, EX63000 and EX83000 series

MISCELLANEOUS CHANGES

1. Added output to the following commands:

show prod series
show mac
show lldp neighbors
show flowcontrol
show utilization
show ip igmp groups detail
show ip igmp interface
show arp
show route
show ring state
show ring port-state
show ring-coupling state
show ring-coupling port-state
show chain port-state
show chain pt-port-state
show system-uptime

2. Resize terminal contents to match resized terminal window

New CLI Command: terminal resize

BUG FIXES

Fixed: Fixed **show running-config interface** command output.

Fixed: Issue with GUI web page Max Age no displaying running value. The current Max Age should follow Root bridge's setting. No changes to CLI.

Fixed: In GUI "port status" page, flow control now shows current status and not configuration value.

Fixed: When logging in via SSH, in multi-user mode, a non-root user was always required to enter the root password first before being prompted for user's own name/password. This bug is fixed in this release.

Fixed: Two problems with SNMP 'Get-Bulk' request: A memory leak and a null pointer.

EtherWAN Managed Switch
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RELEASE SUMMARY
Version: 1.94.5.1
Release Date: 2016/12/15

PRODUCTS SUPPORTED		
EX89000 Series	EX87000 Series	EX83000 Series
EX78162 Series	EX78602 Series	ED3175 Series
EX78000 Series	EX77000 Series	EX76000 Series
EX75000 Series	EX74000 Series	EX73000 Series
EX72000 Series	EX71000 Series	EX63000 Series
EX62000 Series	EX61000A Series	EX29000 Series
EX27000 Series	EX70900 Series	

BUG FIXES

Fixed: Fixed the GVRP Applicant to run in Active mode on a port, the GVRP protocol will not send out any PDUs from a port if the port is being blocked by STP

Fixed: IGMP Report Suppression without work

Fixed: Problem where IGMP force-forward/passive-forward clear all-ports didn't work

Fixed: System crash bug caused when user removes IP from VLAN 1 by issuing 'no IP address A.B.C.D/M' command

Fixed: Problem in which a Giga-Combo-port Link change caused system crash

Fixed: Overflow-problem with /proc/uptime after 497 days

KNOWN CONSTRAINTS

RADIUS user accounts can be authenticated by a RADIUS server over Web, Telnet, and Console connections to a switch except for the Secure Shell (SSH) connection. Logging in to a switch via SSH requires the use of a root account instead of a RADIUS user account.

EtherWAN Managed Switch

Firmware Release Notes

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RELEASE SUMMARY

Version: 1.94.5

Release Date: 2016/7/30

PRODUCTS SUPPORTED		
EX89000 Series	EX87000 Series	EX83000 Series
EX78162 Series	EX78602 Series	ED3175 Series
EX78000 Series	EX77000 Series	EX76000 Series
EX75000 Series	EX74000 Series	EX73000 Series
EX72000 Series	EX71000 Series	EX63000 Series
EX62000 Series	EX61000A Series	EX29000 Series
EX27000 Series	EX70900 Series	

NEW FEATURES

11. **Added support for TACACS+ command authorization**
12. **Added Redundant Pair Protocol**
13. **Added Predefine Path Protocol**
14. **Added a Relay command for configuring a relay's normally open/closed circuit**

    New CLI Commands:

    To display the device's model number:
    CLI Command Mode: **Privileged Exec Mode**
    CLI Command Syntax:
    Closed-on-alarm
    Open-on-alarm

    Usage Example:

    Set the alarm relay normal state to closed
    ```
    switch_a>enable switch_a#conf t
    switch_a(config)relay closed-on-alarm
    ```

```
switch_a(config)#q
switch_a#
```

15. **Added the following syslog events and MIBs support for PoE series**
    - PoE up / PoE down /PoE Over load /PoE System Error

KNOWN CONSTRAINTS

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EtherWAN Managed Switch
Firmware Release Notes

RELEASE SUMMARY
Version: 1.94.4.13
Release Date: March 07, 2016

PRODUCTS SUPPORTED		
EX73000 Series	EX63000 Series	EX83000 Series
EX78000 Series	EX78602 Series	EX76000 Series
EX71000 Series	EX61000A Series	EX72000 Series
EX62000 Series	EX74000 PoE Series	ER58000 PoE series

BUG FIXES

Fixed: Unplugging a single strand of100BASE fiber or disabling a fiber port causes the existing Ring block port not responding

KNOWN CONSTRAINTS

RADIUS user accounts can be authenticated by a RADIUS server over Web, Telnet, and Console connections to a switch except for the Secure Shell (SSH) connection. Logging in to a switch via SSH requires the use of a root account instead of a RADIUS user account.

EtherWAN Managed Switch
Firmware Release Notes
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RELEASE SUMMARY
Version: 1.94.4
Release Date: DEC 31, 2015

PRODUCTS SUPPORTED		
EX89000 Series	EX87000 Series	EX83000 Series
EX78162 Series	EX78602 Series	ED3175 Series
EX78000 Series	EX77000 Series	EX76000 Series
EX75000 Series	EX74000 Series	EX73000 Series
EX72000 Series	EX71000 Series	EX63000 Series
EX62000 Series	EX61000A Series	EX29000 Series
EX27000 Series		

<u>**NEW FEATURES**</u>

16. **Added EtherWAN Device Discovery Protocol**
17. **Added a show command and MIBs support for displaying device information**

    New CLI Commands:

    To display the device's model number:
    CLI Command Mode: **Privileged Exec Mode**
    CLI Command Syntax:
    show integrate product series
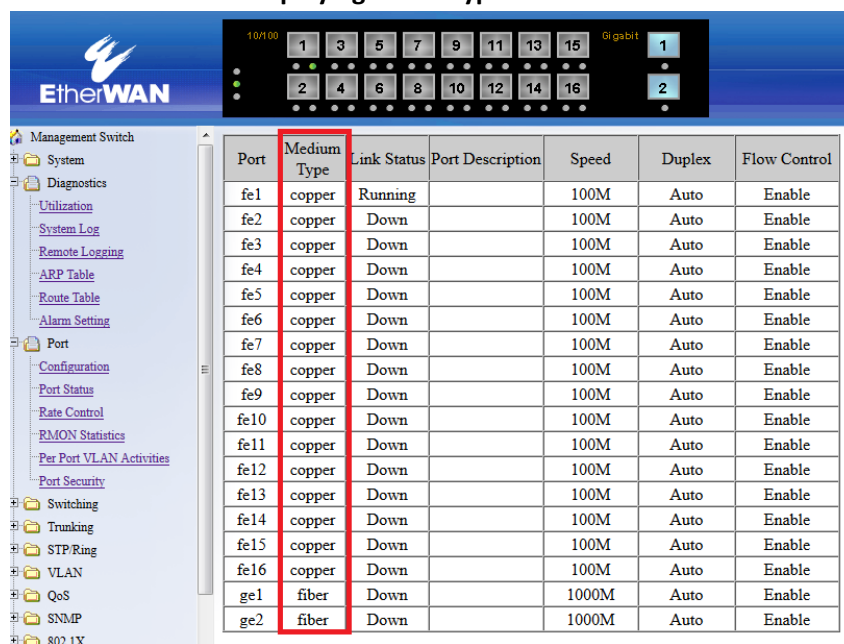
    Usage Example:

    ```
    switch_a> enable
    switch_a# show integrate product series
    EX76000 series
    ```

18. **Added the following syslog events and MIBs support on all series except EX78900 and EX70900**
    - Alpha ring/Ring coupling topology change
    - Loopback /storm detection
19. **Added a column for displaying media types**

CHANGES

1. **Change**: All eight ports (Port1~8) on EX78000-T series can now support up to 30W PoE power. However, the total PoE power budget is still 181W. The previous firmware version only allows four ports (Port1~4) to deliver up to 30W PoE power.

2. **Change**: SNMP default as Enable and get only

REMOVED FEATURES

N/A

BUG FIXES

Fixed: Clearing rmon counter on any port triggers "storm-detect err-disable" on that port

Fixed: Unplugging a single strand of fiber or disabling a fiber port causes the existing Ring block port not responding

Fixed: Failed to get SNMP power failure satus on EX89000/29000/EX87000/EX77000/EX27000 series

Fixed: Adjusting system time by using RTC causes xSTP topology change

KNOWN CONSTRAINTS

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EtherWAN Managed Switch
Firmware Release Notes
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RELEASE SUMMARY
Version: 1.94.3
Release Date: May 19, 2015

PRODUCTS SUPPORTED		
EX89000 Series	EX87000 Series	EX83000 Series
EX27000 Series	EX78602 Series	ED3175 Series
EX78000 Series	EX77000 Series	EX76000 Series
EX75000 Series	EX74000 Series	EX73000 Series
EX72000 Series	EX71000 Series	EX63000 Series
EX62000 Series	EX61000A Series	EX29000 Series

NEW FEATURES

    1. Added DHCP Relay (Option 82)

        New CLI Commands:
        To Enable/Disable DHCP Relay:
        CLI Command Mode: **General Configuration Mode**
        CLI Command Syntax:
        dhcprelay enable
        no dhcprelay enable

        Usage Example:

        switch_a> enable
        switch_a#configure terminal
        switch_a(config)#dhcprelay enable
        switch_a(config)#write memory
        switch_a(config)#q
        switch_a#

        To set the DHCP Relay Remote ID TYPE:
        CLI Command Mode: General Configuration Mode
        CLI Command Syntax:
        dhcprelay remote-id <ip-address|mac-address>

Usage Example 1:

```
switch_a> enable
switch_a#configure terminal
switch_a(config)#dhcprelay remote-id ip-address
switch_a(config)#write memory
switch_a(config)#q
switch_a#
```

Usage Example 2:

```
switch_a> enable
switch_a#configure terminal
switch_a(config)#dhcprelay remote-id mac-address
switch_a(config)#write memory
switch_a(config)#q
switch_a#
```

To set the DHCP Relay SHCP Server IP:
CLI Command Mode: General Configuration Mode
CLI Command Syntax: **dhcprelay serverip <A.B.C.D>**
A.B.C.D = The DHCP Server IP Address (ex:192.168.2.2)

Usage Example 1:

```
switch_a> enable
switch_a#configure terminal
switch_a(config)#dhcprelay serverip 192.168.2.2
switch_a(config)#write memory
switch_a(config)#q
switch_a#
```

2. Added switch login using Radius Authentication (Web and Console)

To enable the radius-user feature, use the following CLI commands:
CLI Command Mode: Line Configuration Mode
CLI Command Syntax: **login radius**

Usage Example:

```
switch_a>enable
switch_a#configure terminal
switch_a(config)#line console 0
switch_a(config-line)#login radius
% Switching Single/Multi/Radius-User mode need to reboot the
switch to take effect!
```

```
switch_a(config-line)#q
switch_a(config)#q
switch_a#
```

3. Added MIBs support for PoE, excluding EX78602 (60W) series
4. Added power failure trap on all series except EX74/77/27/87000
   Trap is sent if either of the two power inputs fails or the power supply cable is removed

CHANGES

1. **Change:** Added additional information to the show spanning-tree CLI command
   Added: **Current Forward Delay/Hello Time/Max Age**

   Example:
   switch_a>show spanning-tree
   % 1: Bridge up - Spanning Tree Enabled
   % 1: Root Path Cost 400000 - Root Port 13 - Bridge Priority 32768
   % 1: Forward Delay 15 - Hello Time 2 - Max Age 20
   % 1: Current Forward Delay 15 - Hello Time 2 - Max Age 20
   % 1: Root Id 800000e0b30043d16% 1: Current Forward Delay 15 - Hello
   Time 2 - Max Age 20
   (...)

2. **Change:** Ring-coupling port can now be configured using only one port. Previously, two ports per switch where required when using ring-coupling. In the case where two switches are used instead of one for ring coupling, only one port is needed per switch

BUG FIXES

Fixed: The Ring block port is uncertain when the network connection is pluged/unpluged.

Fixed: Enabling the LLDP function causes a memory leak

Fixed: LACP setting missing after reboot

KNOWN CONSTRAINTS

RADIUS user accounts can be authenticated by a RADIUS server over Web, Telnet, and Console connections to a switch except for the Secure Shell (SSH) connection. Logging in to a switch via SSH requires the use of a root account instead of a RADIUS user account.