



Release Notes for the Cisco ME4600 OLT-OS Series

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Chapter 1

ME4600 OLT Series Overview

The CISCO ME4600 OLT series runs the CISCO ME4600 OLT-OS software beginning with the Release 3.1.1. This document provides information about the ME4600 OLT-OS software release starting from OLT-OS 3.1.1 release.

CISCO ME 4600 OLT Series Overview

For the central office, the Cisco ME 4600 Series Multiservice Optical Access Platform portfolio is based on a flexible and scalable architecture. Cisco offers the best-of-class solutions in the market designed to evolve easily, from rural and low-density multidwelling unit (MDU) scenarios, using only 8 Gigabit Ethernet and 8 GPON port equipment (Cisco ME 4601 OLT), up to urban and extremely high density, using 768 Gigabit Ethernet and 256 GPON port equipment (Cisco ME 4620 OLT). Cisco ME 4600 Series OLT equipment also implements the features required for residential, business, and enterprise services to be provisioned on an end-to-end basis, with appropriate service-level agreements (SLAs), thus allowing required bit rates to be reserved for each dedicated client needs.

The Cisco ME 4600 Series OLT is a reliable high-availability system that uses common-element 1:1 protection for power, control, switching, and processing, with load balancing link aggregation groups (LAG) and Link Aggregation Control Protocol (LACP) at the uplink interfaces. Ethernet ring protection switching (ERPS) mechanisms based on ITU-T G.8032 are available for access-network upper-layer interconnection. For the client side, Type B protection for GPON ports is available according to ITU-T Recommendation G.984.x. From a security perspective, the Cisco ME 4600 Series OLT supports features that help prevent denial of service (DoS) attacks and fake customer Trojan mechanisms, including Access Control Lists (ACLs), MAC duplication prevention, MAC and IP spoofing prevention, broadcast rate control, and user isolation.

Residential Services

The Cisco ME 4600 Series OLT supports residential broadband aggregation for delivering multiplay services over optical fiber access networks. Designed to support thousands of subscribers from a single OLT, the Cisco ME 4600 Series OLT offers multiple deployment and provisioning models, including 1:1 and N:1 VLAN configurations with quality of service (QoS), resulting in a greatly enhanced broadband user experience. The feature-rich Cisco ME 4600 Series OLT supports a variety of broadband video applications, including RF overlay, IPTV, and video on demand (VoD), with support for IP multicast (IGMPv2/v3 and MLDv2) and Dynamic Host Configuration Protocol (DHCP) Relay Agent (DHCP Option 82 for IPv4 and DHCP Options 18/37 for IPv6). These features enhance and extend the Cisco IP Next-Generation Network (NGN) architecture to the residential environment.

Business Services

The Cisco ME 4600 Series OLT is built to meet service provider requirements for Carrier Ethernet aggregation and transparent LAN services. The Cisco ME 4600 Series OLT offers service flexibility and delivers Layer 2 transport for advanced Layer 2 and Layer 3 VPN and business services, including circuit emulation services (CES) to transport time-division multiplexing (TDM) traffic over packet networks with appropriate clocking, synchronization, and timing

features. VLAN translation and promotion features with the required QoS complement the comprehensive functions needed to interconnect business branches over a P2P or P2MP network topology.

Mobile Backhaul Services

With the growing demand on mobile backhaul networks to support third-generation (3G) and fourth-generation (4G) services, PON and Gigabit Ethernet have become the most common options for backhaul. Deployed as a pre-aggregation platform for mobile backhaul, the Cisco ME 4600 Series OLT can aggregate cell sites and serve as a transport solution for Radio Access Network (RAN) backhaul traffic. The Cisco ME 4600 Series OLT provides the timing services required in today's converged access networks by offering integrated support for the Building Integrated Timing Supply (BITS), 10 MHz, 1 pulse per second (1PPS), and time of day (TOD) interfaces. The Cisco ME Series 4600 OLT also supports synchronous Ethernet (SyncE) and IEEE-1588 functionalities, and it can act as the source for network clocking for TDM, SDH and SONET, SyncE, and GPS interfaces. In addition to the timing services, the Cisco ME 4600 Series OLT offers a compact option that can also be deployed in small and harsh environments, due to its shallow depth and qualification for extended temperature ranges.

ME 4620 OLT Overview

The ME4620 OLT is a Multiservice Optical Access Platform based on a flexible and scalable architecture for urban and extremely high density scenarios able to provide up to 256 GPON and 768 Gigabit Ethernet ports.

The Cisco ME4620 OLT is an ETSI 19" rack size, 14RU, 20 slots fully modular platform supporting up to 18 line cards, two redundant Switch Fabric Cards, dual power supply inputs and a proper fan module. The CISCO ME4620 OLT is natively prepared to evolve to XGPON and NGPON2 access technologies.

For more information on the CISCO ME4620 OLT please see:

<http://www.cisco.com/c/en/us/products/collateral/switches/me-4600-series-multiservice-optical-access-platform/datasheet-c78-730445.pdf>

ME4620 OLT Supported System Units

The supported system units are listed below in Table 1.

Table 1. OLT-OS Supported System Units

Part Number	Description
ME-4620-OLT-FAN	Cisco ME4620 OLT 14RU Chassis Fan Tray Assembly
ME4600-XCO-640	Cisco ME4600 XCO 640Gbps Switch Fabric Card
ME4600-AMX-16GPON	Cisco ME4600 AMX Access Card with 16 x GPON (SFPs not included)
ME4600-UMX-4x10GE	Cisco ME4600 UMX Uplink Card with 4 x 10GE (XFPs not included)
ME4600-AMX-48GE	Cisco ME4600 AMX Access Card with 48 x GE (SFPs/CSFPs not included)

ME 4605 OLT Overview

The ME4605 OLT is a Multiservice Optical Access Platform based on a flexible and scalable architecture for urban, low-density multidwelling unit (MDU) scenarios able to provide up to 48 GPON ports and 144 Gigabit Ethernet ports.

The Cisco ME4605 OLT is an ETSI 19" rack size, 3RU, 5 slots fully modular platform supporting up to 3 line cards, two redundant Switch Fabric Cards, dual power supply inputs and a proper fan module.

For more information on the CISCO ME4605 OLT please see:

<http://www.cisco.com/c/en/us/products/collateral/switches/me-4600-series-multiservice-optical-access-platform/datasheet-c78-730445.pdf>

ME 4605 OLT supported System Units

The supported system units are listed below in Table 1.

Table 2. OLT-OS Supported System Units

Part Number	Description
ME4605-OLT-FAN	Cisco ME4600 OLT 3RU Chassis Fan Tray Assembly
ME4600-XCO-160	Cisco ME4600 XCO 160Gbps Switch Fabric Card with 2 x 10GE uplink ports (SFP+ modules are not included)
ME4600-AMX-16GPON	Cisco ME4600 AMX Access Card with 16 x GPON (SFPs not included)
ME4600-AMX-48GE	Cisco ME4600 AMX Access Card with 48 x GE (SFPs/CSFPs not included)

ME 4601 OLT Overview

The ME4601 OLT is a standalone Multiservice Optical Access Platform for rural and urban low-density multidwelling unit (MDU) scenarios.

The Cisco ME4601 OLT is an ETSI 19", 1RU, standalone system with the following characteristics:

- 1 x Matrix/processing,
- 4x SFP+ 10GE ports (SFP+ modules not included),
- 4x SFP GbE ports (SFP and CSFP modules not included),
- 8xSFP GPON interfaces (SFP modules not included),
- Dual power supply inputs,
- 1x fan module.

For more information on the CISCO ME4601 OLT please see:

<http://www.cisco.com/c/en/us/products/collateral/switches/me-4600-series-multiservice-optical-access-platform/datasheet-c78-730445.pdf>

Documentation Roadmap

To view other documents for the CISCO ME4600 OLT Series, please see the:

<http://www.cisco.com/c/en/us/products/switches/me-4600-series-multiservice-optical-access-platform/index.html>

Determining the Software Version

You can verify your ME4600 OLT-OS software version by checking the “Firmware version”:

- at the equipment WEBTI interface main window “Configuration → System” at the “Firmware Version” field;
- at the equipment CLI by using the command “/equipment/system/show”;

Please see CISCO ME4600 OLT series user manuals currently available from Cisco.com.

Upgrading to a New Software Release

New software releases for the ME4600 Series OLT-OS may be downloaded directly from Cisco.com.

Software Dependencies

There are no SW dependencies.

Installation

Note:

In order to install OLT-OS, it is necessary to have free space available at the OLT switch fabric flash memory storage.

If any problem occurs during the installation process please contact the support team.

- Step 1.** Download the ME4600 Series OLT-OS version from Cisco.com to an TFTP server.
- Step 2.** Login in the ME4600 OLT using CLI admin account credentials.
- Step 3.** Import the new ME4600 OLT-OS setup file by using a TFTP client and by typing the following command
: /applications/olt-upgrade/import
- Step 4.** Update the OLT-OS with the imported setup file with the following command: /applications/olt-upgrade/apply-file

For more information on the use of these commands please see any CISCO ME4600 OLT series user manual available from cisco.com.

Chapter 2

NEW FEATURES IN ME4600 OLT-OS 3.1 RELEASES

This chapter provides information about the new features introduced in the Cisco ME4600 OLT-OS 3.1 Releases.

This chapter includes the following sections:

- New Hardware Features in Cisco ME4600 OLT-OS 3.1.2 Release
- New Software Features in Cisco ME4600 OLT-OS 3.1.2 Release

New Hardware Features in Cisco ME4600 OLT-OS 3.1.2 Release

The ME4600 OLT-OS 3.1.2 Release for the CISCO ME4600 OLT Series does not introduce any new hardware features.

New Software Features in Cisco ME4600 OLT-OS 3.1.2 Release

The ME4600 OLT-OS 3.1.2 Release for the CISCO ME4600 OLT Series does not introduce any new Software features.

Chapter 3

NEW FEATURES IN ME4600 OLT-OS 3.4 RELEASES

This chapter provides information about the new features introduced in the Cisco ME4600 OLT-OS 3.4 Releases.

Following sections are included:

- New Hardware Features in Cisco ME4600 OLT-OS 3.4.0 Release
- New Software Features in Cisco ME4600 OLT-OS 3.4.0 Release

New Hardware Features in Cisco ME4600 OLT-OS 3.4.0 Release

The ME4600 OLT-OS 3.4.0 Release for the CISCO ME4600 OLT Series introduces support for the following hardware features:.

- This release introduces support for the following ME4600 OLT-OS series Platforms:
 - ME4601 OLT (standalone OLT)
 - ME4605 OLT
- This release introduces support for the following Switch Fabric Board:
 - ME4600-XCO-160

New Software Features in Cisco ME4600 OLT-OS 3.4.0 Release

The ME4600 -OLT OS 3.4.0 Release for the CISCO ME4600 OLT Series introduces support for the following Software features:.

- Support GPON Type-B Protection
- Uplink 1+1 Protection
- Support Access Control Lists (ACL)
- Support a default entry on the multicast groups ACL (white list)
- IPv6 ready on all OLT product line
- Support IP Routing (demo features)
- Support configuration of static IP routes for management interfaces
- Support IP Source Guard
- ITU-T G.8032/Y.1344 Ethernet Ring Protection Switching (ERPS)
- Support of Y.1731 ETH-CC / ETH-RDI Function (CCM)
- Allow configuration of the "Storm Attack" rate limiters
- Support DSCP to P-bit mapping (at the ONT according to G.988)
- Forward PON traffic based on P-bits

- Support configuration of OMCI channel encryption
- Support configuration of BER interval
- Support FEC in the downstream
- Ethernet BW profile per client using MAC Bridge services
- Remove validations in GPON Upstream Bandwidth allocation
- Allow limiting the number of MAC addresses per service (MAC Bridge services only)
- Display the total number of entries in MAC address tables
- Support of external digital inputs
- Support a new slot mode: disabled
- DHCP related software features support
 - Support the configuration of UNI interfaces as DHCP Trusted or Untrusted
 - Support changing the DHCP Broadcast flag of DHCP Discover and Request messages
- Support the configuration of the MTU
- Support up to 255 network services
- Support ingress bandwidth policers per client service on the ME4600-AMX-48GE
- Support IPTV models for ME4600-AMX-48GE board (ethernet point-to-point)
- Support new type of service: MAC Bridge
- Support of existing client services in ethernet point-to-point line cards
- Support of External Alarm Conditions on ME4620
- Support SYNC-E distribution on Ethernet Uplink Ports
- Reboot related software features support
 - Support the option to perform a system reboot
 - Support the option to reboot a Line Card and Switch Fabric
- Support ping/telnet command on CLI
- VLAN related software features support:
 - Full support of extended VLAN tagging operations (filter+treatment) (according to G.988)
 - Support Default VLAN ID and Priority on Ethernet interfaces
- Multicast group related software features support:
 - Support configuring the end-point of the multicast static groups
 - Support bandwidth configuration of each multicast group
 - Display Client Service information in Multicast Active Groups list
- IGMP related software features support:
 - Improvement of IGMP control per interface, VLAN and client
 - Support IGMP control based on multicast bandwidth and number of groups
 - Allow disabling IGMP packet processing on client services
 - Support IGMPv3 on the scenario of merged UNI multicast VLANs
 - Support of IGMP v3 according to RFC3376

-
- ONU related software features support:
 - Changing the upstream profile of a given ONU without disconnecting the respective service
 - Command "Disable Serial Number" per ONU
 - ONU Authentication by Password
 - Command to reset all ONUs
 - Command to disable the ONU Auto-Discovery mechanism
 - Allow disabling a PON interface with registered ONUs
 - ONU UPS alarms
 - ONU VEIP interfaces
 - Changing the ONU profile of a registered ONU
 - Notification when an ONU is detected as a "New equipment"
 - Interoperability with Zhone and Huawei ONUs
 - ONU MIB synchronization
 - Provide the ONU ID related to the learned MAC Address in Switch MAC table
 - Display the ONU Equipment Model (in 'new' state)
 - Display the T-CONT IDs for each ONU service
 - Command to do ONU MIB (re)synchronization
 - Improvement of the ONU SW automatic upgrade policies
 - Refactoring of ONU Ethernet statistics - split TX and RX
 - Get the ONT Operational Status by SNMP

Chapter 4

RESTRICTIONS AND CAVEATS IN CISCO ME4600 OLT-OS 3.1 RELEASES

This chapter provides information about restrictions and caveats in CISCO ME4600 OLT-OS 3.1 releases.

This chapter contains the following sections:

- Limitations and Restrictions.
- Caveats in CISCO ME4600 OLT-OS 3.1 Releases.

Limitations and Restrictions

The following sections describe the CISCO ME4600 OLT-OS 3.1 limitations:

- Limitations and Restrictions in CISCO ME4600 OLT-OS 3.1.2 release.
- Limitations and Restrictions in CISCO ME4600 OLT-OS 3.1.1 release.

Limitations and Restrictions in CISCO ME4600 OLT-OS 3.1.2 release

The limitations for this release are the same as those for CISCO ME4620 OLT-OS Release 3.1.1.

Limitations and Restrictions in CISCO ME4600 OLT-OS 3.1.1 release

The following limitations apply to the CISCO ME4600 OLT-OS 3.1.1 Release:

Synchronism

- Synchronism source lockout command is not working after fabric switchover. A valid synchronism source is locked out by command. The system is using another synchronism source. After fabric switchover the system should maintain the Sync source in use but instead of that it uses the lockout synchronism source.
- The PLL Status is not presenting the correct information. When switching from JS1 Sync reference to JS2 Sync reference, the PLL status should indicate Normal state but, instead of that the PLL state is holdover.

Line card support

- Multicast services are not supported at ME4600-AMX-48GE line card.

Line card Memory detection

- Although all ME4600-AMX-16GPON line card are equipped with 1G RAM, in some of these cards only 512MB RAM are detected by uboot at start up.

Multiple browser limitation:

- This OS release just supports Internet Explorer 7.0 (or above) as client compliant browsers.

Caveats in CISCO ME4600 OLT-OS 3.1 Releases

This section describes caveats in CISCO ME4600 OLT-OS 3.1 releases. The following information is provided for each caveat:

- **Symptom**—A description of what is observed when the caveat occurs.
- **Conditions**—The conditions under which the caveat has been known to occur.
- **Workaround**—Solutions, if available, to counteract the caveat.

The following sections describe the open and resolved caveats in 3.1 Releases:

- Open Caveats – CISCO ME4600 OLT-OS 3.1.2
- Resolved Caveats – CISCO ME4600 OLT-OS 3.1.2
- Open Caveats – CISCO ME4600 OLT-OS 3.1.1

Open Caveats – CISCO ME4600 OLT-OS 3.1.2

This document section details the unexpected behavior that might be seen with the CISCO ME4620 OLT with OLT-OS Release 3.1.2

- CSC OLTOS-ME4600- 3935
 - Symptoms:** CFM Probes/MEPs are not working when using MEPs on different uplink LCs.
 - Conditions:** As described.
 - Workaround:**CFM probes/MEPs should be configured at the same line card
- CSC OLTOS-ME4600-4240
 - Symptoms:** CLI Statistics throughput in Ethernet interfaces do not show proper values; negative values are observed for throughput counters.
 - Conditions:** Traffic flowing with variable throughput over time
 - Workaround:** There is no workaround
- CSC OLTOS-ME4600-3653
 - Symptoms:** DHCP op.82 Tx counters at upstream are not increasing in number.
 - Conditions:** In services with DHCP Relay active, when DHCP client packets are transmitted by the client, the counters of DHCP op.82 Tx packets should increase
 - Workaround:** There is no workaround.
- CSC OLTOS-ME4600-3664
 - Symptoms:** DHCP Statistics: Client Request and Server Replies Without Options.
 - Conditions:** Occurs when Client Request and server replies packets without options are injected; the corresponding statistics do not show any values.
 - Workaround:** There is no workaround.

- CSC OLTOS-ME4600-3936

Symptoms: DHCPv6 LDRA: Release Success is being dropped by the OLT

Conditions: Occurs when using a DHCPv6 LDRA, and client following send a release packet to the server; the server replies but the packet is not arriving to the client (ONT).

Workaround: There is no workaround.
- CSC OLTOS-ME4600-3937

Symptoms: DHCPv6 LDRA: Server Replies Service Statistics are not increasing

Conditions: In services with DHCPv6 LDRA active, when DHCP server packets are transmitted by the server, the counters of DHCP received server replies should increase.

Workaround: There is no workaround.
- CSC OLTOS-ME4600-4225

Symptoms: Error in "GPON Errors Statistics" using CLI

Conditions: When two ONUs are connected at the same PON, the signal power is attenuated to the sensitivity limit for one of the ONUs and finally the fibre is disconnected at this ONU. Presented GPON error statistics are not reliable because counters are both not enabled for both ONUs.

Workaround: Quit the GPON Errors Statistics and then start again
- CSC OLTOS-ME4600-3351

Symptoms: IGMP Last Member Query is not being sent

Conditions: In case of having 2 or more clients watching the same TV channel, if one of them leave the channel, the OLT does not send Last Member Query to the rest of the clients.

Workaround: Last Membership Query is never sent because all the client information is based on MAC Address of the Clients using a Fast Leave mechanism.
- CSC OLTOS-ME4600-3999

Symptoms: IGMP Proxy is not responding (with IGMP Report-Joins) to IGMP Group-Specific Querys, is just responding to IGMP General Querys.

Conditions: Having a multicast service configured

Workaround: There is no workaround.
- CSC OLTOS-ME4600-3866

Symptoms: IGMP Statistics by service on the PON interface are not recording the IGMP query packets

Conditions: Having a Multicast Service configured

Workaround: There is no workaround.
- CSC OLTOS-ME4600-4241

Symptoms: It is not possible to consult the Switch MAC table when using a LAG interface (CLI)

Conditions: When using a LAG there is no slot available.

Workaround: There is no workaround.

- CSC OLTOS-ME4600-1154
 - Symptoms:** LAG Load Balancing based on SA is not working properly
 - Conditions:**LAG load balancing based on SA; maintaining SA and varying DA cause the traffic to pass through to the other interface.
 - Workaround:** There is no workaround.
- CSC OLTOS-ME4600-3868
 - Symptoms:** ONU IGMP statistics doesn't show the General Querys transmitted
 - Conditions:**. ONU IGMP statistics doesn't show the General Querys transmitted to the ONU. The Total and Partial counters show always zero value (in CLI and WebTI).
 - Workaround:** There is no workaround.
- CSC OLTOS-ME4600-4453
 - Symptoms:** Problems with Multicast active chanel (using IGMPV 3) after performing a Fabric Switchover
 - Conditions:**. With 2 multicast streams configured, before Fabric switchover the process of requesting the channels and the opening of the MC channels is working well. After performing Fabric switchover for one of the MC streams only one channel is working, while the second MC stream stops flowing
 - Workaround:** Perform a Zapping.
- CSC OLTOS-ME4600-4426
 - Symptoms:** Problems with 'remoteID' parameter on webTI, using characters "" or '<'
 - Conditions:**. Use of text strings with “ and < characters
 - Workaround:** Use different characters.

Resolved Caveats – CISCO ME4600 OLT-OS 3.1.2

This section documents the issues that have been resolved in CISCO ME4600 OLT with OLT-OS Release 3.1.2

- CSC OLTOS-ME4600-4619
 - Symptoms:** SNMP agent is becoming unresponsive after SNMP walk operation
 - Conditions:** In the case of absent equipment (line cards/remote equipment), SNMP walk operations may results in unresponsive SNMP agent.
 - Workaround:** There is no workaround.

Open Caveats – CISCO ME4600 OLT-OS 3.1.1

This section documents the unexpected behavior that might be seen with the CISCO ME4600 OLT with CISCO ME4600 OLT-OS Release 3.1.1

- CSC OLTOS-ME4600-3935
 - Symptoms:** CFM Probes/MEPs are not working when using MEPs on different uplink LCs.
 - Conditions:** As described.
 - Workaround:** CFM probes/MEPs should be configured at the same line card
- CSC OLTOS-ME4600-4240
 - Symptoms:** CLI Statistics throughput in Ethernet interfaces do not show proper values; negative values are observed for throughput counters.
 - Conditions:** Traffic flowing with variable throughput over time
 - Workaround:** There is no workaround
- CSC OLTOS-ME4600-3653
 - Symptoms:** DHCP op.82 Tx counters at upstream are not increasing in number.
 - Conditions:** In services with DHCP Relay active, when DHCP client packets are transmitted by the client, the counters of DHCP op.82 Tx packets should increase
 - Workaround:** There is no workaround.
- CSC OLTOS-ME4600-3664
 - Symptoms:** DHCP Statistics: Client Request and Server Replies Without Options.
 - Conditions:** Occurs when Client Request and server replies packets without options are injected; the corresponding statistics do not show any values.
 - Workaround:** There is no workaround.
- CSC OLTOS-ME4600-3936
 - Symptoms:** DHCPv6 LDRA: Release Success is being dropped by the OLT
 - Conditions:** Occurs when using a DHCPv6 LDRA, and client following send a release packet to the server; the server replies but the packet is not arriving to the client (ONT).
 - Workaround:** There is no workaround.
- CSC OLTOS-ME4600-3937
 - Symptoms:** DHCPv6 LDRA: Server Replies Service Statistics are not increasing
 - Conditions:** In services with DHCPv6 LDRA active, when DHCP server packets are transmitted by the server, the counters of DHCP received server replies should increase.
 - Workaround:** There is no workaround.
- CSC OLTOS-ME4600-4225
 - Symptoms:** Error in "GPON Errors Statistics" using CLI
 - Conditions:** When two ONUS are connected at the same PON, the signal power is attenuated to the sensitivity limit for one of the ONUs and finally the fibre is disconnected at this ONU. Presented GPON error statistics are not reliable because counters are both not enabled for both ONUs.
 - Workaround:** Quit the GPON Errors Statistics and then start again

- CSC OLTOS-ME4600-3351
 - Symptoms:** IGMP Last Member Query is not being sent
 - Conditions:** In case of having 2 or more clients watching the same TV channel, if one of them leave the channel, the OLT does not send Last Member Query to the rest of the clients.
 - Workaround:** Last Membership Query is never sent because all the client information is based on MAC Address of the Clients using a Fast Leave mechanism.
- CSC OLTOS-ME4600-3999
 - Symptoms:** IGMP Proxy is not responding (with IGMP Report-Joins) to IGMP Group-Specific Querys, is just responding to IGMP General Querys.
 - Conditions:** Having a multicast service configured
 - Workaround:** There is no workaround.
- CSC OLTOS-ME4600-3866
 - Symptoms:** IGMP Statistics by service on the PON interface are not recording the IGMP query packets
 - Conditions:** Having a Multicast Service configured
 - Workaround:** There is no workaround.
- CSC OLTOS-ME4600-4241
 - Symptoms:** It is not possible to consult the Switch MAC table when using a LAG interface (CLI)
 - Conditions:** When using a LAG there is no slot available.
 - Workaround:** There is no workaround.
- CSC OLTOS-ME4600-1154
 - Symptoms:** LAG Load Balancing based on SA is not working properly
 - Conditions:** LAG load balancing based on SA; maintaining SA and varying DA cause the traffic to pass through to the other interface.
 - Workaround:** There is no workaround.
- CSC OLTOS-ME4600-3868
 - Symptoms:** ONU IGMP statistics doesn't show the General Querys transmitted
 - Conditions:** ONU IGMP statistics doesn't show the General Querys transmitted to the ONU. The Total and Partial counters show always zero value (in CLI and WebTI).
 - Workaround:** There is no workaround.
- CSC OLTOS-ME4600-4453
 - Symptoms:** Problems with Multicast active chanel (using IGMPV 3) after performing a Fabric Switchover
 - Conditions:** With 2 multicast streams configured, before Fabric switchover the process of requesting the channels and the opening of the MC channels is working well. After performing Fabric switchover for one of the MC streams only one channel is working, while the second MC stream stops flowing
 - Workaround:** Perform a Zapping.
- CSC OLTOS-ME4600-4426
 - Symptoms:** Problems with 'remoteID' parameter on webTI, using characters "" or '<
 - Conditions:** Use of text strings with “ and < characters
 - Workaround:** Use different characters.

- CSC OLTOS-ME4600-4619

Symptoms: SNMP agent is becoming unresponsive after SNMP walk operation

Conditions: In the case of absent equipment (line cards/remote equipment), SNMP walk operations may result in unresponsive SNMP agent.

Workaround: There is no workaround.

Chapter 5

RESTRICTIONS AND CAVEATS IN CISCO ME4600 OLT-OS 3.4 RELEASES

This chapter provides information about restrictions and caveats in CISCO ME4600 OLT-OS 3.4 releases.

This chapter contains the following sections:

- Limitations and Restrictions
- Caveats in CISCO ME4600 OLT-OS 3.4 Release

Limitations and Restrictions

The following sections describe the CISCO ME4600 OLT-OS 3.4 limitations:

- Limitations and Restrictions in CISCO ME4600 OLT-OS 3.4.1 release
- Limitations and Restrictions in CISCO ME4600 OLT-OS 3.4.0 release
- Caveats in CISCO ME4600 OLT-OS 3.4 Release

Limitations and Restrictions in CISCO ME4600 OLT-OS 3.4.1 release

The limitations for this release are the same as those for CISCO ME4620 OLT-OS Release 3.4.0.

Limitations and Restrictions in CISCO ME4600 OLT-OS 3.4.0 release

The following limitations apply to the CISCO ME4600 OLT-OS 3.4.0 Release:

Ethernet Protection

- Is not possible to apply an Ethernet Uplink 1+1 Protection on Stacked Services (except for MAC Bridge services).

IP source Guard + GPON Protection

- IPSPG must not be used simultaneously with GPON Type-B Protection.

Multicast

- Maximum number of simultaneous multicast channels: 1024

Services

- Not able to create 9th service with DHCP enabled

Multiple browser limitation:

- This OLT-OS release only supports Internet Explorer 7.0 (or above) as client compliant browsers.

Release Notes for the Cisco ME4600 OLT-OS Series ■

Caveats in CISCO ME4600 OLT-OS 3.4 Releases

This section describes caveats in CISCO ME4600 OLT-OS 3.4 releases. The following information is provided for each caveat:

- **Symptom**—A description of what is observed when the caveat occurs.
- **Conditions**—The conditions under which the caveat has been known to occur.
- **Workaround**—Solutions, if available, to counteract the caveat.

The following sections describe the open and resolved caveats in 3.4 Releases:

- Open Caveats – CISCO ME4600 OLT-OS 3.4.1
- Resolved Caveats – CISCO ME4600 OLT-OS 3.4.1
- Open Caveats – CISCO ME4600 OLT-OS 3.4.0
- Resolved Caveats – CISCO ME4600 OLT-OS 3.4.0

Open Caveats – CISCO ME4600 OLT-OS 3.4.1

This document section details the unexpected behavior that might be seen with the CISCO ME4600 OLT with OLT-OS Release 3.4.1

- CSC OLTOS-ME4600-9108
 - Symptoms:** ME4600: Bandwidth for multicast Group is not working.
 - Conditions:** As described above.
 - Workaround:** There is no workaround
- CSC OLTOS-ME4600-10056
 - Symptoms:** ME4600: Source IP address for multicast Group is not working
 - Conditions:** As described above.
 - Workaround:** There is no workaround
- CSC OLTOS-ME4600- 10300
 - Symptoms:** ME4605:Eth Protection :Switch over not happened in 'manual to working'
 - Conditions:** As described above.
 - Workaround:** There is no workaround
- CSC OLTOS-ME4600-11065
 - Symptoms:** ME4605-OLT: Seldomly, after a system (re)boot, same AMX48GE data ports became inactive (link down) .
 - Conditions:** As described above.
 - Workaround:** Configure each port with ADMIN/ DOWN - ADMIN/ UP .

- CSC OLTOS-ME4600-10867

Symptoms: ME4601-OLT: Multicast doesn't work when Join packets reach uplink port of OLT that is part of the ring.

Conditions: As described above.

Workaround: There is no workaround .
- CSC OLTOS-ME4600-11158

Symptoms: ME4601-OLT: In the default reset, not all LAG parameters are clean from the DB.

Conditions: As described above.

Workaround: There is no workaround .
- CSC OLTOS-ME4600-11069

Symptoms: ME4620-OLT: Multicast traffic corresponding to a different Group List is not being blocked.

Conditions: As described above.

Workaround: There is no workaround .
- CSC OLTOS-ME4600-10771

Symptoms: ME4620-OLT: A denial IPv6 Extended ACL rule with DSCP parameter configured is not blocking the traffic that matches the rule parameters

Conditions: As described above.

Workaround: There is no workaround .
- CSC OLTOS-ME4600-10952

Symptoms: ME4620-OLT: ME4620-OLT: Active group page are showing wrong service name when sending joins for a diferent service

Conditions: As described above.

Workaround: There is no workaround .
- CSC OLTOS-ME4600-11106

Symptoms: ME4620-OLT: IGMPv3 In Menu: “Multicast-> Active Groups -> Details” , Active users for Group Pools with Source IPs not shown.

Conditions: As described above.

Workaround: There is no workaround .
- CSC OLTOS-ME4600-11128

Symptoms: When the GPON SFPs are changed, the SFPs parameters are not changed.

Conditions: As described above.

Workaround: Perform Admin Down/ Admin Up
- CSC OLTOS-ME4600-11095

Symptoms: IGMPv3 is affected and appears when we have configured more than one multicast service (e.g. one for SD and another for HD) per client (e.g. ONU).

Conditions: As described above.

Workaround: There is no workaround .

- CSC OLTOS-ME4600-11282

Symptoms: ME4620-OLT, ME4605-OLT: Seldomly, ONT status remaining in busy after reboot with sw version=auto.

Conditions: As described above.

Workaround: Configure the ONT with ADMIN/ DOWN - ADMIN/ UP .

- CSC OLTOS-ME4600-11287

Symptoms: ME4620-OLT, ME4605-OLT: IP source guard with DHCP V4 session is dropping some packets when the session is renewed..

Conditions: As described above.

Workaround: There is no workaround

- CSC OLTOS-ME4600-11105

Symptoms: ME4620-OLT: In IGMPv3 using the same group pool for two ONTs, if an Include with sources is made in one ONT and an exclude without sources is made in the other ONT, the Group Pool without sources cannot be seen in “Multicast-> Active Groups” menu.

Conditions: As described above.

Workaround: There is no workaround

- CSC OLTOS-ME4600-11281

Symptoms: ME4601-OLT: Unexpected alarms are displayed when inserting physically a 1G SFP

Conditions: As described above.

Workaround: There is no workaround

- CSC OLTOS-ME4600-11284

Symptoms: ME4605-OLT: Alarms related to ETH interfaces (CXO and LC) are not registered on CLI

Conditions: As described above.

Workaround: There is no workaround

- CSC OLTOS-ME4600-11338

Symptoms: ME4601-OLT: Tcont Table is not appearing on the ONT status

Conditions: As described above.

Workaround: There is no workaround

- CSC OLTOS-ME4600-3664

Symptoms: DHCP Statistics: Client Request and Server Replies Without Options.

Conditions: Occurs when Client Request and server replies packets without options are injected; the corresponding statistics do not show any values.

Workaround: There is no workaround.

- CSC OLTOS-ME4600-3937
 - Symptoms:** DHCPv6 LDRA: Server Replies Service Statistics are not increasing
 - Conditions:** In services with DHCPv6 LDRA active, when DHCP server packets are transmitted by the server, the counters of DHCP received server replies should increase.
 - Workaround:** There is no workaround.
- CSC OLTOS-ME4600-4225
 - Symptoms:** Error in "GPON Errors Statistics" using CLI
 - Conditions:** When two ONUS are connected at the same PON, the signal power is attenuated to the sensitivity limit for one of the ONUs and finally the fibre is disconnected at this ONU. Presented GPON error statistics are not reliable because counters are both not enabled for both ONUs.
 - Workaround:** Quit the GPON Errors Statistics and then start again
- CSC OLTOS-ME4600-3866
 - Symptoms:** IGMP Statistics by service on the PON interface are not recording the IGMP query packets
 - Conditions:** Having a Multicast Service configured
 - Workaround:** There is no workaround.
- CSC OLTOS-ME4600-1154
 - Symptoms:** LAG Load Balancing based on SA is not working properly
 - Conditions:** LAG load balancing based on SA; maintaining SA and varying DA cause the traffic to pass through to the other interface.
 - Workaround:** There is no workaround.
- CSC OLTOS-ME4600-8535
 - Symptoms:** ME4600: IGMP Add GroupList Parameters missing in WEBTI Display
 - Conditions:** As described above.
 - Workaround:** There is no workaround.
- CSC OLTOS-ME4600-8189
 - Symptoms:** ME4600: Extended VLAN Tagging operations VLAN ID Rule does not work
 - Conditions:** As described above.
 - Workaround:** There is no workaround.
- CSC OLTOS-ME4600-8707
 - Symptoms:** ME4620: PON protection SYNC status shows Error.
 - Conditions:** As described above.
 - Workaround:** There is no workaround.
- CSC OLTOS-ME4600-9100
 - Symptoms:** ME4600: class D IP allowed for Source IP while adding a multicast group
 - Conditions:** As described above.
 - Workaround:** There is no workaround

Uplink Protection:

- CSC OLTOS-ME4600-9190

Symptoms: When a group is created with LOS in the working path, switchover does not occur

Conditions: As described above.

Workaround: There is no workaround.

- CSC OLTOS-ME4600-8620

Symptoms: ME4601/ ME4605 Uplink Ethernet protection does not comply 50ms switchover time

Conditions: As described above.

Workaround: There is no workaround.

Type-B Protection:

- CSC OLTOS-ME4600-8812

Symptoms: Type-B switch to protection causes traffic disruption in all services that use same working linecard

Conditions: As described above..

Workaround: There is no workaround.

CFM Probes

- CSC OLTOS-ME4600-8731

Symptoms: ME4605: With 2 probes configured using the format Y.1731 and a T.Period of 10ms, the alarm log are constantly registering ME connectionUP/Lost

Conditions: As described above.

Workaround: There is no workaround.

- CSC OLTOS-ME4600-5978

Symptoms: ME4605: It is not possible to create CFM probes for the XCO-162i interfaces

Conditions: As described above.

Workaround: There is no workaround.

Power Measurements:

- CSC OLTOS-ME4600-8568

Symptoms: The value displayed on PON interfaces for Tx power is not correct

Conditions: As described above..

Workaround: There is no workaround.

- CSC OLTOS-ME4600-8560

Symptoms: RX Power status menu shows DISCONNECTED on PON card before performing the 1st read command

Conditions: As described above..

Workaround: There is no workaround.

Alarms:

- CSC OLTOS-ME4600-8670

Symptoms: After performing a switch of the SF the alarme log change and the previous alarmes disappear

Conditions: As described above.

Workaround: There is no workaround.

- CSC OLTOS-ME4600-8604

Symptoms: After a massive reboot, incoherences between CLI and WebTI alarms were registered

Conditions: As described above.

Workaround: There is no workaround.

- CSC OLTOS-ME4600-7855

Symptoms: After a massive reboot, incoherences between CLI and WebTI alarms were registered

Conditions: As described above.

Workaround: There is no workaround.

- CSC OLTOS-ME4600-7837

Symptoms: The "begin power high" alarm is not registered (1550nm Rx RF Overlay)

Conditions: As described above.

Workaround: There is no workaround.

- CSC OLTOS-ME4600-7823

Symptoms: After performing a protection type B using the reboot command the working card became with the LOS PON alarm intermittent-

Conditions: As described above.

Workaround: There is no workaround.

Performance:

- CSC OLTOS-ME4600-8696

Symptoms: Massive simultaneous operations over all LC PONs (1K ONUs insertion, for example), causes temporary delay in management communications with AgoraNG/ WebTI/ CLI.

Conditions: As described above.

Workaround: There is no workaround.

PON Status:

- CSC OLTOS-ME4600-8673

Symptoms: The date and time for the RX Power in a PON interface are not synchronizing with the system.

Conditions: As described above.

Workaround: There is no workaround.

System Status:

- CSC OLTOS-ME4600-8283

Symptoms: ME4605: Negative temperatures are not being reported correctly in XCO-162i (WebTI; CLI).

Conditions: As described above.

Workaround: There is no workaround.

Status:

- CSC OLTOS-ME4600-7839

Symptoms: ONU RGW RF interfaces do not present the correct optical RX power value for 1550nm on the WebTI /CLI.

Conditions: As described above.

Workaround: There is no workaround.

DHCP Statistics:

- CSC OLTOS-ME4600-8452

Symptoms: Incomplete and incorrect DHCP Statistics.

Conditions: As described above.

Workaround: There is no workaround.

Statistics:

- CSC OLTOS-ME4600-7563

Symptoms: ETH uplink Statistics - Oversize and Jabbers packets increments the "1024 or more" counter.

Conditions: As described above.

Workaround: There is no workaround.

- CSC OLTOS-ME4600-7561

Symptoms: ME4601: ETH uplink Statistics - Multicast and Broadcast packets are not registered in counters.

Conditions: As described above.

Workaround: There is no workaround.

- CSC OLTOS-ME4600-7554

Symptoms: ME4601: MAC Bridge services Statistics not available.

Conditions: As described above.

Workaround: There is no workaround.

- CSC OLTOS-ME4600-7553

Symptoms: MAC Table Switch - duplicated entry.

Conditions: As described above.

Workaround: There is no workaround.

- CSC OLTOS-ME4600-7842

Symptoms: Error on downstream FEC Counters for ONU SFU G.

Conditions: As described above.

Workaround: There is no workaround.

- CSC OLTOS-ME4600-5596

Symptoms: ME4605/ ME4620: On AMX-48GE ETH Interfaces, packets with 2000 bytes and FCS errors increment both Jabbers and Packets ≥ 1024 .

Conditions: As described above.

Workaround: There is no workaround.

CLI:

- CSC OLTOS-ME4600-5717

Symptoms: Copy-paste of scripts into the CLI is not working

Conditions: As described above.

Workaround: There is no workaround.

WebTi:

- CSC OLTOS-ME4600-7482

Symptoms: ME4601: Add CLient services - Service list should be filtered by PON.

Conditions: As described above.

Workaround: There is no workaround.

Network Services:

- CSC OLTOS-ME4600-7986

Symptoms: It is not possible to create 255 services, just 254.

Conditions: As described above.

Workaround: There is no workaround.

ONU Update:

- CSC OLTOS-ME4600-7838

Symptoms: After performing a manual update to a SFU tipe G with version 3NT7SW03010001 the ONU was rebooted twice.

Conditions: As described above.

Workaround: There is no workaround.

SyncE:

- CSC OLTOS-ME4600-7772

Symptoms: ME4620: Synchronism source change not being applied after fabric switchover.

Conditions: As described above.

Workaround: There is no workaround

PBits:

- CSC OLTOS-ME4600-7697

Symptoms: Upstream traffic ingressing LC switch does not respect packet PBits.

Conditions: As described above.

Workaround: There is no workaround

Factory Reset:

- CSC OLTOS-ME4600-7608

Symptoms: PON interfaces stay with admin up after "Delete service configuration".

Conditions: As described above.

Workaround: There is no workaround

Multicast Service:

- CSC OLTOS-ME4600-8976

Symptoms: IGMP stops working after admin down/up the multicast client service without admin down/up IGMP client service.

Conditions: As described above.

Workaround: There is no workaround

AMX-48GE Services:

- CSC OLTOS-ME4600-9177

Symptoms: When creating a Client Service in a second port, using the same network service, traffic stops flowing.

Conditions: As described above.

Workaround: There is no workaround

Resolved Caveats – CISCO ME4600 OLT-OS 3.4.1

This section documents the issues that have been resolved in CISCO ME4600 OLT with OLT-OS Release 3.4.1

- CSC OLTOS-ME4600- 10301

Symptoms: ME4605:Eth protection: NO switchover in Manual to Protection mode.

Conditions: As described above.

Workaround: There is no workaround

Uplink Protection:

- CSC OLTOS-ME4600-9566

Symptoms: ME4620:Eth Protection :PON TX traffic not flowing in Downstream.

Conditions: As described above.

Workaround: There is no workaround.

Type-B Protection:

- CSC OLTOS-ME4600-8879

Symptoms: ME4605/ME4620: In a Type-B protection, if a reboot is performed after a force to protection command on a Line Card, a switchover occurs.

Conditions: As described above.

Workaround: There is no workaround.

- CSC OLTOS-ME4600-9570

Symptoms: ME4605:PON Protection:After 'Reboot', Switchover is not happening.

Conditions: As described above.

Workaround: There is no workaround.

- CSC OLTOS-ME4600-9572

Symptoms: ME4605: TYPE-B:Protect card Reboot

Conditions: As described above.

Workaround: There is no workaround.

Alarms:

- CSC OLTOS-ME4600-7505

Symptoms: ME4605/ME4620: LOS alarm is not being registered on Webti for AMX-48GE

Conditions: As described above.

Workaround: There is no workaround.

- CSC OLTOS-ME4600-5602

Symptoms: ME4605/ ME4620: There is no alarms of "begin SFP module absent-fail" after rebooting AMX-48GE

Conditions: As described above.

Workaround: There is no workaround.

CLI Access:

- CSC OLTOS-ME4600-8611

Symptoms: When performing a fabric switchover, the active telnet sessions become hanged. SSH should be used instead of telnet.

Conditions: As described above.

Workaround: There is no workaround.

ONU:

- CSC OLTOS-ME4600-7704

Symptoms: After a MIB Upload of an ONU, its Ethernet ports were always set to admin down.

Conditions: As described above.

Workaround: There is no workaround~

- CSC OLTOS-ME4600-8284

Symptoms: ME4600: ONT Port statistics RX Octet Counter always increase.

Conditions: As described above.

Workaround: There is no workaround

Filter Treatment:

- CSC OLTOS-ME4600-8986

Symptoms: When creating a filter treatment rule to accept single-tag packets and add a new VLAN, traffic does not flow on the downstream direction.

Conditions: As described above.

Workaround: There is no workaround

AMX-16GPON:

- CSC OLTOS-ME4600-9043

Symptoms: During ONU firmware upgrade, GPON card gives timeout when making queries to other ONUs.

Conditions: As described above.

Workaround: There is no workaround

XCO-160G Switch Fabric:

- CSC OLTOS-ME4600-9176

Symptoms: XCO160G Fabric switchover does not comply 50ms switchover time.

Conditions: As described above.

Workaround: There is no workaround

Open Caveats – CISCO ME4600 OLT-OS 3.4.0

This document section details the unexpected behavior that might be seen with the CISCO ME4600 OLT with OLT-OS Release 3.4.0

- CSC OLTOS-ME4600-3664

Symptoms: DHCP Statistics: Client Request and Server Replies Without Options.

Conditions: Occurs when Client Request and server replies packets without options are injected; the corresponding statistics do not show any values.

Workaround: There is no workaround.

- CSC OLTOS-ME4600-3937

Symptoms: DHCPv6 LDRA: Server Replies Service Statistics are not increasing

Conditions: In services with DHCPv6 LDRA active, when DHCP server packets are transmitted by the server, the counters of DHCP received server replies should increase.

Workaround: There is no workaround.

- CSC OLTOS-ME4600-4225

Symptoms: Error in "GPON Errors Statistics" using CLI

Conditions: When two ONUS are connected at the same PON, the signal power is attenuated to the sensitivity limit for one of the ONUs and finally the fibre is disconnected at this ONU. Presented GPON error statistics are not reliable because counters are both not enabled for both ONUs.

Workaround: Quit the GPON Errors Statistics and then start again

- CSC OLTOS-ME4600-3866

Symptoms: IGMP Statistics by service on the PON interface are not recording the IGMP query packets

Conditions: Having a Multicast Service configured

Workaround: There is no workaround.

- CSC OLTOS-ME4600-1154

Symptoms: LAG Load Balancing based on SA is not working properly

Conditions: LAG load balancing based on SA; maintaining SA and varying DA cause the traffic to pass through to the other interface.

Workaround: There is no workaround.

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- CSC OLTOS-ME4600-8535
 - Symptoms:** ME4600: IGMP Add GroupList Parameters missing in WEBTI Display
 - Conditions:** As described above.
 - Workaround:** There is no workaround.
 - CSC OLTOS-ME4600-8189
 - Symptoms:** ME4600:Extended VLAN Tagging operations VLAN ID Rule does not work
 - Conditions:** As described above.
 - Workaround:** There is no workaround.
 - CSC OLTOS-ME4600-8707
 - Symptoms:** ME4620:PON protection SYNC status shows Error.
 - Conditions:** As described above.
 - Workaround:** There is no workaround.
 - CSC OLTOS-ME4600-9100
 - Symptoms:** ME4600:class D IP allowed for Source IP while adding a multicast group
 - Conditions:** As described above.
 - Workaround:** There is no workaround

Uplink Protection:

- CSC OLTOS-ME4600-9190
 - Symptoms:** When a group is created with LOS in the working path, switchover does not occur
 - Conditions:** As described above.
 - Workaround:** There is no workaround.
- CSC OLTOS-ME4600-8620
 - Symptoms:** ME4601/ ME4605 Uplink Ethernet protection does not comply 50ms switchover time
 - Conditions:** As described above.
 - Workaround:** There is no workaround.
- CSC OLTOS-ME4600-9566
 - Symptoms:** ME4620:Eth Protection :PON TX traffic not flowing in Downstream.
 - Conditions:** As described above.
 - Workaround:** There is no workaround.

Type-B Protection:

- CSC OLTOS-ME4600-8879

Symptoms: ME4605/ME4620: In a Type-B protection, if a reboot is performed after a force to protection command on a Line Card, a switchover occurs.

Conditions: As described above.

Workaround: There is no workaround.

- CSC OLTOS-ME4600-8812

Symptoms: Type-B switch to protection causes traffic disruption in all services that use same working linecard

Conditions: As described above..

Workaround: There is no workaround.

- CSC OLTOS-ME4600-9570

Symptoms: ME4605:PON Protection:After 'Reboot', Switchover is not happening.

Conditions: As described above.

Workaround: There is no workaround.

- CSC OLTOS-ME4600-9572

Symptoms: ME4605: TYPE-B:Protect card Reboot

Conditions: As described above.

Workaround: There is no workaround.

CFM Probes

- CSC OLTOS-ME4600-8731

Symptoms: ME4605: With 2 probes configured using the format Y.1731 and a T.Period of 10ms, the alarm log are constantly registering ME connectionUP/Lost

Conditions: As described above.

Workaround: There is no workaround.

- CSC OLTOS-ME4600-5978

Symptoms: ME4605: It is not possible to create CFM probes for the XCO-162i interfaces

Conditions: As described above.

Workaround: There is no workaround.

Power Measurements:

- CSC OLTOS-ME4600-8568

Symptoms: The value displayed on PON interfaces for Tx power is not correct

Conditions: As described above..

Workaround: There is no workaround.

- CSC OLTOS-ME4600-8560

Symptoms: RX Power status menu shows DISCONNECTED on PON card before performing the 1st read command

Conditions: As described above..

Workaround: There is no workaround.

Alarms:

- CSC OLTOS-ME4600-8670

Symptoms: After performing a switch of the SF the alarme log change and the previous alarmes disappear

Conditions: As described above.

Workaround: There is no workaround.

- CSC OLTOS-ME4600-8604

Symptoms: After a massive reboot, incoherences between CLI and WebTI alarms were registered

Conditions: As described above.

Workaround: There is no workaround.

- CSC OLTOS-ME4600-7855

Symptoms: After a massive reboot, incoherences between CLI and WebTI alarms were registered

Conditions: As described above.

Workaround: There is no workaround.

- CSC OLTOS-ME4600-7837

Symptoms: The "begin power high" alarm is not registered (1550nm Rx RF Overlay)

Conditions: As described above.

Workaround: There is no workaround.

- CSC OLTOS-ME4600-7823

Symptoms: After performing a protection type B using the reboot command the working card became with the LOS PON alarm intermittent-

Conditions: As described above.

Workaround: There is no workaround.

- CSC OLTOS-ME4600-7505

Symptoms: ME4605/ME4620: LOS alarm is not being registered on Webti for AMX-48GE

Conditions: As described above.

Workaround: There is no workaround.

- CSC OLTOS-ME4600-5602

Symptoms: ME4605/ ME4620: There is no alarms of "begin SFP module absent-fail" after rebooting AMX-48GE

Conditions: As described above.

Workaround: There is no workaround.

Performance:

- CSC OLTOS-ME4600-8696

Symptoms: Massive simultaneous operations over all LC PONs (1K ONUs insertion, for example), causes temporary delay in management communications with AgoraNG/ WebTI/ CLI.

Conditions: As described above.

Workaround: There is no workaround.

PON Status:

- CSC OLTOS-ME4600-8673

Symptoms: The date and time for the RX Power in a PON interface are not synchronizing with the system.

Conditions: As described above.

Workaround: There is no workaround.

System Status:

- CSC OLTOS-ME4600-8283

Symptoms: ME4605: Negative temperatures are not being reported correctly in XCO-162i (WebTI; CLI).

Conditions: As described above.

Workaround: There is no workaround.

Status:

- CSC OLTOS-ME4600-7839

Symptoms: ONU RGW RF interfaces do not present the correct optical RX power value for 1550nm on the WebTI /CLI.

Conditions: As described above.

Workaround: There is no workaround.

DHCP Statistics:

- CSC OLTOS-ME4600-8452

Symptoms: Incomplete and incorrect DHCP Statistics.

Conditions: As described above.

Workaround: There is no workaround.

Statistics:

- CSC OLTOS-ME4600-7563

Symptoms: ETH uplink Statistics - Oversize and Jabbers packets increments the "1024 or more" counter.

Conditions: As described above.

Workaround: There is no workaround.

- CSC OLTOS-ME4600-7561

Symptoms: ME4601: ETH uplink Statistics - Multicast and Broadcast packets are not registered in counters.

Conditions: As described above.

Workaround: There is no workaround.

- CSC OLTOS-ME4600-7554

Symptoms: ME4601: MAC Bridge services Statistics not available.

Conditions: As described above.

Workaround: There is no workaround.

- CSC OLTOS-ME4600-7553

Symptoms: MAC Table Switch - duplicated entry.

Conditions: As described above.

Workaround: There is no workaround.

- CSC OLTOS-ME4600-7842

Symptoms: Error on downstream FEC Counters for ONU SFU G.

Conditions: As described above.

Workaround: There is no workaround.

- CSC OLTOS-ME4600-5596

Symptoms: ME4605/ ME4620: On AMX-48GE ETH Interfaces, packets with 2000 bytes and FCS errors increment both Jabbers and Packets ≥ 1024 .

Conditions: As described above.

Workaround: There is no workaround.

CLI Access:

- CSC OLTOS-ME4600-8611

Symptoms: When performing a fabric switchover, the active telnet sessions become hanged. SSH should be used instead of telnet.

Conditions: As described above.

Workaround: There is no workaround.

CLI:

- CSC OLTOS-ME4600-5717

Symptoms: Copy-paste of scripts into the CLI is not working

Conditions: As described above.

Workaround: There is no workaround.

WebTi:

- CSC OLTOS-ME4600-7482

Symptoms: ME4601: Add Client services - Service list should be filtered by PON.

Conditions: As described above.

Workaround: There is no workaround.

Network Services:

- CSC OLTOS-ME4600-7986

Symptoms: It is not possible to create 255 services, just 254.

Conditions: As described above.

Workaround: There is no workaround.

ONU Update:

- CSC OLTOS-ME4600-7838

Symptoms: After performing a manual update to a SFU type G with version 3NT7SW03010001 the ONU was rebooted twice.

Conditions: As described above.

Workaround: There is no workaround.

ONU:

- CSC OLTOS-ME4600-7704

Symptoms: After a MIB Upload of an ONU, its Ethernet ports were always set to admin down.

Conditions: As described above.

Workaround: There is no workaround

- CSC OLTOS-ME4600-8284

Symptoms: ME4600: ONT Port statistics RX Octet Counter always increase.

Conditions: As described above.

Workaround: There is no workaround

SyncE:

- CSC OLTOS-ME4600-7772

Symptoms: ME4620: Synchronism source change not being applied after fabric switchover.

Conditions: As described above.

Workaround: There is no workaround

PBits:

- CSC OLTOS-ME4600-7697

Symptoms: Upstream traffic ingressing LC switch does not respect packet PBits.

Conditions: As described above.

Workaround: There is no workaround

Factory Reset:

- CSC OLTOS-ME4600-7608

Symptoms: PON interfaces stay with admin up after "Delete service configuration".

Conditions: As described above.

Workaround: There is no workaround

Multicast Service:

- CSC OLTOS-ME4600-8976

Symptoms: IGMP stops working after admin down/up the multicast client service without admin down/up IGMP client service.

Conditions: As described above.

Workaround: There is no workaround

Filter Treatment:

- CSC OLTOS-ME4600-8986

Symptoms: When creating a filter treatment rule to accept single-tag packets and add a new VLAN, traffic does not flow on the downstream direction.

Conditions: As described above.

Workaround: There is no workaround

AMX-16GPON:

- CSC OLTOS-ME4600-9043

Symptoms: During ONU firmware upgrade, GPON card gives timeout when making queries to other ONUs.

Conditions: As described above.

Workaround: There is no workaround

AMX-48GE Services:

- CSC OLTOS-ME4600-9177

Symptoms: When creating a Client Service in a second port, using the same network service, traffic stops flowing.

Conditions: As described above.

Workaround: There is no workaround

XCO-160G Switch Fabric:

- CSC OLTOS-ME4600-9176

Symptoms: XCO160G Fabric switchover does not comply 50ms switchover time.

Conditions: As described above.

Workaround: There is no workaround

Resolved Caveats – CISCO ME4600 OLT-OS 3.4.0

This section documents the issues that have been resolved in CISCO ME4620 OLT with OLT-OS Release 3.4.0

- CSC OLTOS-ME4600-3935

Symptoms: CFM Probes/MEPs are not working when using MEPs on different uplink LCs.

Conditions: As described.

Workaround:CFM probes/MEPs should be configured at the same line card

- CSC OLTOS-ME4600-4240

Symptoms: CLI Statistics throughput in Ethernet interfaces do not show proper values; negative values are observed for throughput counters.

Conditions: Traffic flowing with variable throughput over time

Workaround: **There is no workaround**

- CSC OLTOS-ME4600-3653

Symptoms: DHCP op.82 Tx counters at upstream are not increasing in number.

Conditions: In services with DHCP Relay active, when DHCP client packets are transmitted by the client, the counters of DHCP op.82 Tx packets should increase

Workaround: There is no workaround.

- CSC OLTOS-ME4600-3936

Symptoms: DHCPv6 LDRA: Release Success is being dropped by the OLT

Conditions: Occurs when using a DHCPv6 LDRA, and client following send a release packet to the server; the server replies but the packet is not arriving to the client (ONT).

Workaround: There is no workaround.

- CSC OLTOS-ME4600-3351

Symptoms: IGMP Last Member Query is not being sent

Conditions: In case of having 2 or more clients watching the same TV channel, if one of them leave the channel, the OLT does not send Last Member Query to the rest of the clients.

Workaround: Last Membership Query is never sent because all the client information is based on MAC Address of the Clients using a Fast Leave mechanism.

- CSC OLTOS-ME4600-3999

Symptoms: IGMP Proxy is not responding (with IGMP Report-Joins) to IGMP Group-Specific Querys, is just responding to IGMP General Querys.

Conditions: Having a multicast service configured

Workaround: There is no workaround.

- CSC OLTOS-ME4600-4241

Symptoms: It is not possible to consult the Switch MAC table when using a LAG interface (CLI)

Conditions: When using a LAG there is no slot available.

Workaround: There is no workaround.

- CSC OLTOS-ME4600-3868

Symptoms: ONU IGMP statistics doesn't show the General Querys transmitted

Conditions: ONU IGMP statistics doesn't show the General Querys transmitted to the ONU. The Total and Partial counters show always zero value (in CLI and WebTI).

Workaround: There is no workaround.

- CSC OLTOS-ME4600-4453

Symptoms: Problems with Multicast active chanel (using IGMPV 3) after performing a Fabric Switchover

Conditions: With 2 multicast streams configured, before Fabric switchover the process of requesting the channels and the opening of the MC channels is working well. After performing Fabric switchover for one of the MC streams only one channel is working, while the second MC stream stops flowing

Workaround: Perform a Zapping.

- CSC OLTOS-ME4600-4426

Symptoms: Problems with 'remoteID' parameter on webTI, using characters "" or '<'

Conditions: Use of text strings with “ and < characters

Workaround: Use different characters.