

Product Overview

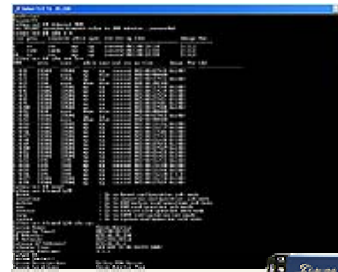
Salira DePON™ enables cable operators to begin the migration to EPON-based fiber networks while continuing to leverage existing DOCSIS OSS operating procedures. DePON supports significantly higher bandwidth levels compared to existing and emerging HFC-based solutions, providing 1Gbps bandwidth for both upstream and downstream traffic. The total bandwidth capacity reaches 4Gbps on a single fiber feeder when applying Salira's multi-wavelength MW-PON™ solutions. Future migration to 10G EPON technology can easily be achieved to yield 50Gbps throughput when combined with MW-PON.

DePON networks can seamlessly coexist with DOCSIS-based systems and are suitable for commercial as well as residential applications. Cable operators have the flexibility to implement solutions that best fit the requirements of varying deployment types. To emulate functionalities of the DOCSIS Cable Modem Termination System (CMTS) and Cable Modems (CMs), DePON components include the following:

- D-Server – runs DOCSIS-compliant SNMP agent, DHCP and TFTP client, and performs system management and Command Line Interface (CLI) configuration.
- D-Switch – is a Layer2/Layer3 aggregation switch that connects to the optical line cards' Gigabit Ethernet (GE) interfaces to emulate a single high-capacity CMTS Network Side Interface (NSI).
- Optical Line Terminal (OLT) – provides Ethernet Passive Optical Network (EPON) interface control and connectivity to the D-Switch.
- Salira family of single-play, double-play, and triple-play Optical Network Units (ONUs) – equivalent to Cable Modems with extensions such as Multimedia Terminal Adapters (MTAs), home routers, and video gateways.
- Command Line Interface (CLI) – supports configuration and monitoring functions related to OLT shelf, ONU, interface, and subscriber management, Quality of Service (QoS), filtering, and event management.

Features and Benefits

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| <ul style="list-style-type: none"> ■ Integrated DePON system managed by existing DOCSIS OSS ■ Higher bandwidth with proven EPON technology ■ 1Gbps bandwidth per fiber feeder can potentially increase to 4Gbps using Salira's multi-wavelength solution ■ Security and high reliability of signal transmission ■ Up to 1792 ONUs connected to each OLT ■ Auto-discovery of ONUs eases deployment process and reduces time to service | <ul style="list-style-type: none"> ■ Metro Ethernet Forum (MEF) compliance for commercial service ■ Same system applicable for both commercial and residential services, controlled by one pre-existing OSS ■ DOCSIS-like implementation minimizes the training required for network operators |
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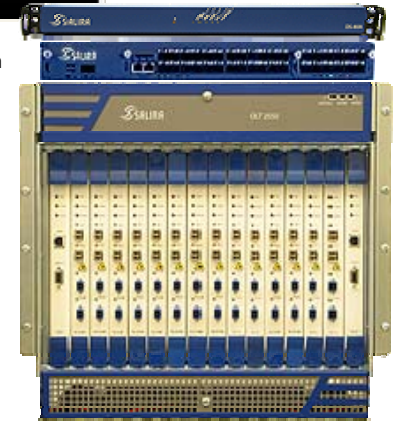


Command Line Interface

Salira D-Switch

Salira D-Server

Salira optical line terminal



System Feature Summary

■ **OSSI Management**

- Fault
- Configuration
- Accounting
- Performance
- Security

■ **PON**

- Real-time Dynamic Bandwidth Allocation (DBA)
- Carrier-class Service Level Agreement (SLA)
- ONU authentication
- AES-128 encryption

■ **Redundancy**

- OLT power, fan, system controller card
- D-Servers, active and cold standby units

DePON Architecture

