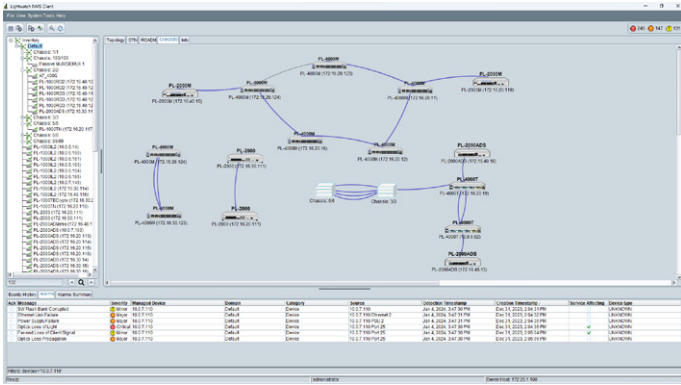


# PacketLight LightWatch NMS

## Multi-platform Java-based network management system (NMS)



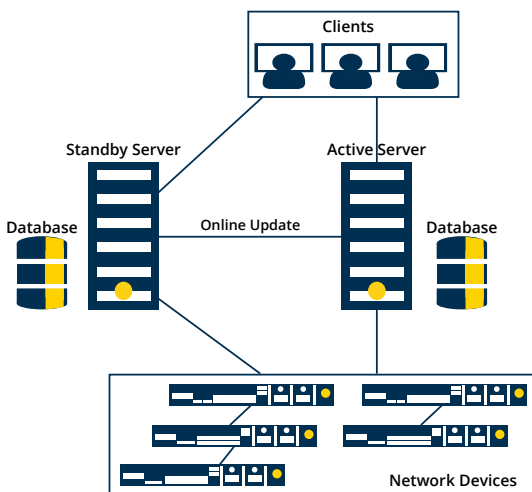
### Overview

PacketLight LightWatch™ provides full fault management, configuration, accounting, performance, security (FCAPS) functionality and is compliant with telecommunications management network (TMN) standards.

LightWatch is built with a client-server architecture. It uses the MySQL™ database, and is built with modular client pay-as-you-grow offerings, scalable to 700 network elements and 20 clients.

For fast and complete recovery, LightWatch supports server redundancy and daily database backup.

LightWatch also provides centralized management of user accounts and several types of users with configurable access privileges: Administrators, NetAdmins, Technicians, Users.



Client-server Architecture

### Technical Specifications

#### Hardware Requirements

##### Server:

Devices	CPU	RAM	Disk Space
200	6 cores @ 3Ghz	12Gb	HDD/SSD 400Gb
400	12 cores @ 3Ghz	24Gb	SSD 600Gb
700	16 cores @ 3.5Ghz	32Gb	SSD 800Gb

##### Client:

- CPU: Intel® Core I5 2.5GHz or higher
- RAM: Minimum 8GB
- Hard Disk: 4GB free space

#### Software Requirements

##### Server:

- Windows Server 2019/2022
- Windows 10/11
- Linux Ubuntu 22.04/ 20.04.6

##### Client:

- Windows 10/11
- Linux Ubuntu 22.04/ 20.04.6
- macOS 14.1.1 Big Sur

#### Scalability

**Network Elements:** Up to 700

**Clients:** Up to 20

#### Management Protocols

**Between Server to NE:** SNMPv2c/v3

**File Transfer Between Server to/from NE:** TFTP/SFTP

**Web Browser to NE:** HTTP/HTTPS

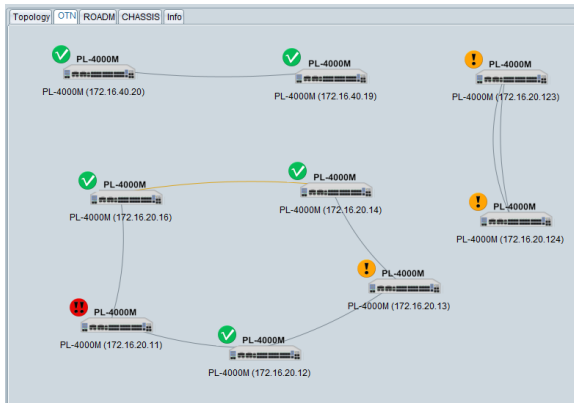
**CLI to NE:** Telnet/SSH

**Syslog Messages from NE to the Server:** Syslog

#### Highlights

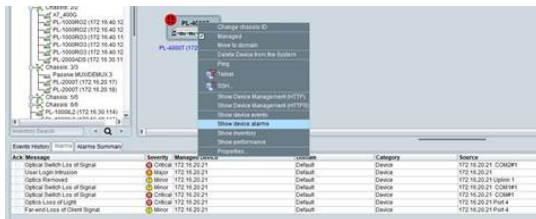
- Hierarchical topology of the devices in the network
- NMS server resiliency
- Network fault management
- Network inventory management
- Task scheduling (upload/download)
- Collects and stores PM counters from all network elements
- Advanced A-Z service management

## Topology



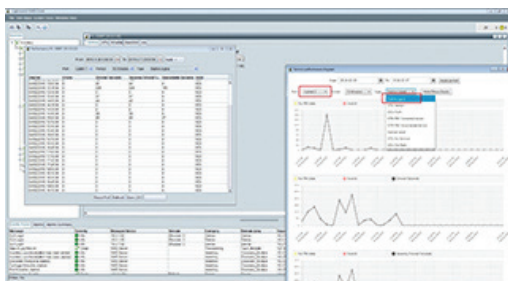
- Allows hierarchical domains in the network
- Automatic network topology discovery
- Manual drawing of the connections between nodes
- Multi-chassis management
- Allow definition of background map

## Fault Management



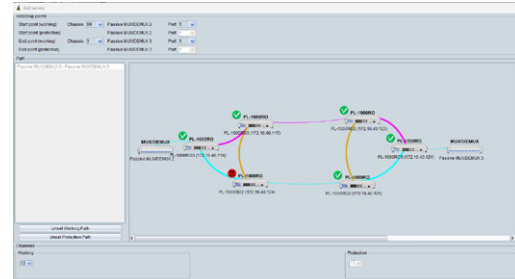
- Displays history of network events
- Shows current alarms
- Supports filtering events and alarms
- Keeps up to 30 days of event history
- Event forwarding to email
- Supports audible alarms

## Performance Management



- Collects PM from all devices in the network
- Displays 30 days of history of 15-minute and Day PM data
- Supports configurable graphical view of PM data
- Supports export of PM information into an external file

## SMM - Service Management Module



- Supports OTN and channel service provisioning.
- Supports ring, linear add/drop and multi degree topologies.
- Supports provisioning of unprotected, protected and restoration services.

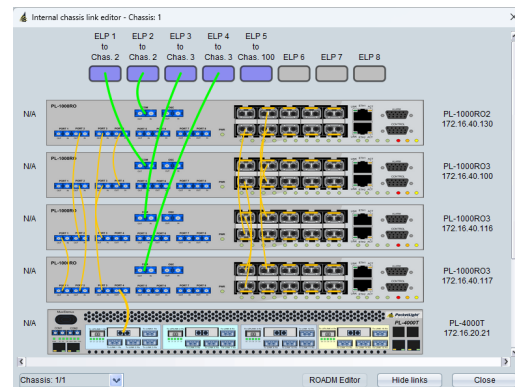
## Task Scheduling

- Download of new SW version into groups of device elements
- Upload of configuration files from group of device elements
- Download of configuration files into group of devices
- Downloading license files into group of devices
- Uploading log files from group of devices

## Inventory

- Displays inventory of group of network elements
- Filters network elements according to field values
- Supports export of inventory into an external file

## Chassis Management



- Supports virtual chassis view with each device information
- Supports drawing the internal connections within the virtual chassis
- Supports full service awareness with advanced chassis service management module (CSMM)
- Automatic consistency check with other service provisioning wizards