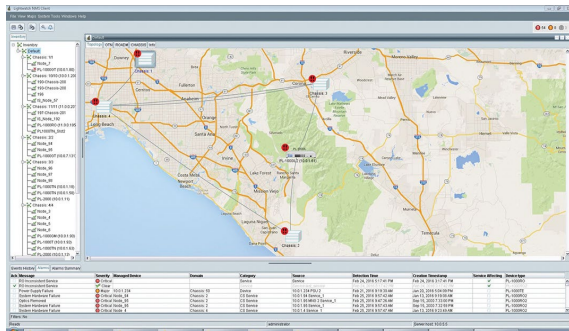
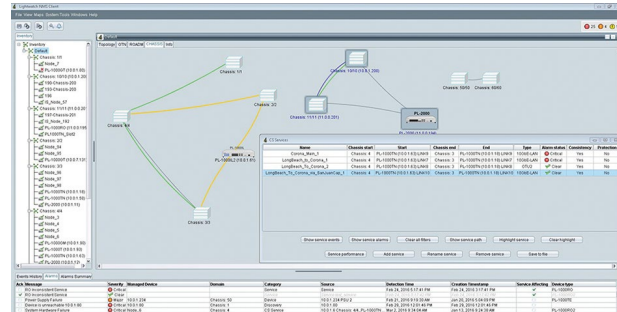


# PacketLight LightWatch NMS

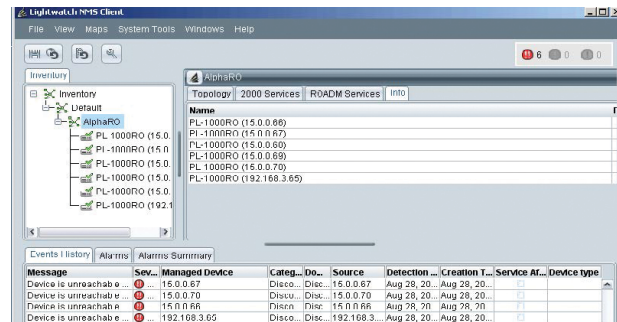


## Topology



- 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



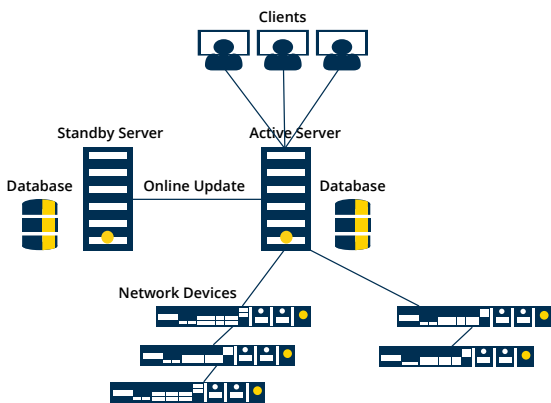
- Displays history of network events
- Shows current alarms
- Supports filtering events and alarms
- Keeps up to 30 days of event history
- Event forwarding to email
- Supports audible alarms

## A multi-platform Java-based network management system (NMS)

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 500 network elements and 20 clients.

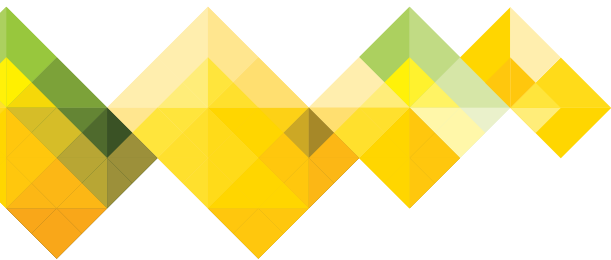
For fast and complete recovery, LightWatch supports server redundancy and daily database backup.



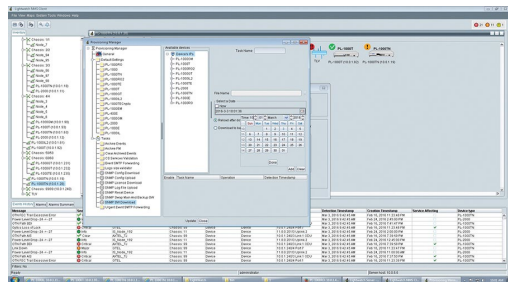
Client-server Architecture

## NMS Highlights

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



## Task Scheduling



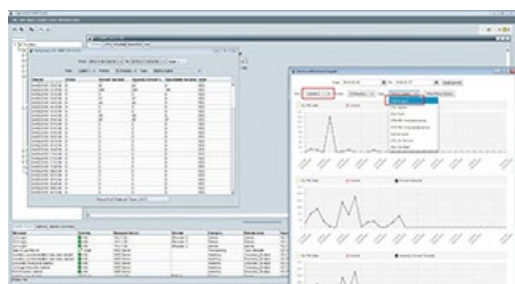
### Scheduling of:

- 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

## 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

## User Management

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

## SMM - Service Management Module

- A-to-Z service provisioning wizard
- Automatic detection of provisioned services
- Displays and highlights the path of a selected service
- Supports display of service path, status and faults
- Supports full service awareness with advanced chassis service management module (CSMM)

## Technical Specifications

### Hardware Requirements

#### Server:

- CPU - Xeon L3 or L5
- Minimum 8GB RAM
- Minimum 20GB free disk space

#### Client:

- CPU - Intel™ Core I5 2.5GHz or higher
- Minimum 8GB RAM
- 2GB free disk space for installation

**Color monitor:** 1024x768 resolution or higher

### Software Requirements

**Server:** Windows Server 2012/2016 64-bits, or Linux Ubuntu 16.04.3 LTS

MySQL 5.6.22 database included with LightWatch installation

**Client:** Windows 2007/2010 64-bits

### Scalability

**Network Elements:** Up to 500

**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