Aurelis Command Center

Cloud-based management solution for Aurelis Out-of-Band Management in data centers

The Aurelis Command Center (CC) is a part of Nokia's PON-based Out-of-Band Management (OOBM) solution for data centers. It is a cloud-based management platform for Aurelis optical switches and optical modems, designed to streamline and automate OOBM operations. With an open and programmable architecture, it enables seamless integration into existing environments while enhancing operational efficiency and control.

As data centers scale in the AI supercycle, the need for resilience and operational efficiency has never been greater. While PON technology delivers inherent advantages in power, space, and resilience, Aurelis Command Center is the key enabler of day-to-day operational simplicity.

The CC plays a central role in making PON-based OOBM easy to deploy and operate — streamlining workflows through automation and intent-based operations, leveraging standardized data models, and integrating seamlessly via open interfaces. The result is a management experience that reduces operational effort while maximizing the efficiency and reliability of the entire OOBM environment.

Key features

- Centralized management for optical switches and modems
- Intuitive web-based dashboard for ease of use
- Visualization of network elements, physical location, status, alarms, etc.
- Integrated policy/workflow engines for network automation
- Fast telemetry for massive data collection
- Standard interfaces and data models
- Geo-redundancy configuration for disaster recovery

Key benefits

- Simplified installation
- Zero-touch provisioning and bulk provisioning, with predefined templates
- Automated workflows
- Reduced labor costs and manual interventions
- Easy integration into NOS, with multiple integration options
- Proactive maintenance, fast troubleshooting
- Open platform to onboard 3rd party and develop own apps and build extensions
- Reduced OOBM OPEX

Technical specifications

Supported functions

- Cloud-based management solution, adaptable to bare-metal, private, and public cloud environments

- Intuitive web-based user interface for streamlined operations

- Integration of floor plan visualization for effective network mapping

- Comprehensive fault management capabilities

- Advanced configuration management, including:

  – Copying optical modem service configurations to multiple optical modems

  – Optical modem replacement tools for seamless upgrades

  – Grouping of optical modems for efficient management

- Detailed OOBM network metrics with graphing and charting functionality

- Robust troubleshooting tools including service monitoring

- Enhanced search and filter functionalities for rapid information retrieval

- Comprehensive performance and security management features

- Operational support for OOBM network managers

- Cloud-based Northbound Interfaces (NBI) for seamless integration with OSS systems
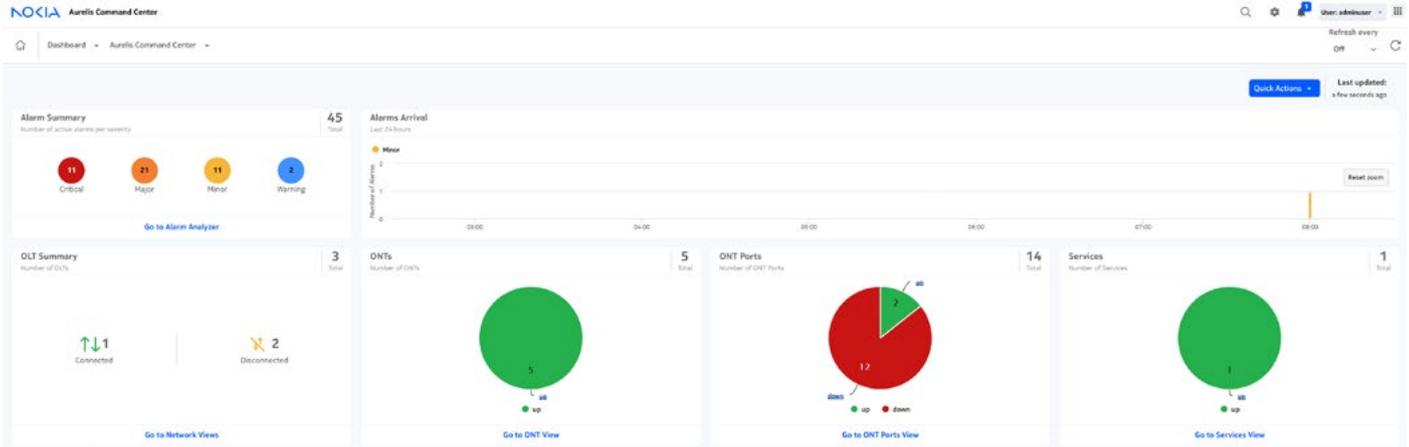
Supported network elements

- Aurelis MF Optical Switch (OLT):

  – LMNT-D Network Termination cards,

  – LWLT-C Line Termination (LT) card

  – MX-44C-A and XS-010S-Z Optical Modems (ONTs)

Hardware and operating system (OS) platforms

- Deployment options include standalone appliances, bare-metal servers, private or public cloud environments

- Supported operating systems: Ubuntu and Red Hat Enterprise Linux (RHEL)

- Kubernetes compatibility:

  – Kubeadm Vanilla, OpenShift Container Platform (OCP) for high availability or Amazon Web Services Elastic Kubernetes Service (AWS EKS)

- Geo-redundant and/or high-availability configurations supported with Kubernetes for disaster recovery

- Supports up to 50 optical switches

Aurelis Command Center landing page: key functions at your fingertips

About Nokia

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