PacketCable Multimedia (PCMM) specification is a program initiative from CableLabs to support the deployment of general Multimedia services by providing a technical definition of several IP-based signaling interfaces that leverage core QoS and policy management capabilities native to DOCSIS Versions 1.1 and greater. PCMM defines a service delivery framework that provides general-purpose QoS, event-based accounting, and security functionality founded upon the mechanisms defined in PacketCable.

As part of the SDN evolution, an OpenDayLight PCMM project was created to provide:

- Simple, powerful access to DOCSIS QoS mechanisms supporting both time and volume-based network resource authorizations
- Abstract, event-based network resource auditing and management mechanisms
- A robust security infrastructure that provides integrity and appropriate levels of protection across all interfaces

Current PCMM deployments use expensive, legacy applications with limited enhancements, upgrades, and support. Lumina’s SDN Controller provides a supported, low-cost alternative to manage PCMM using an open source and open partner solution. Lumina’s extensive work with the Linux Foundation and OpenDaylight have delivered proven SDN Controller projects that manage and control networks for service providers around the globe.
# LUMINA SDN CONTROLLER - FEATURES SUPPORTED

## OpenDaylight Projects Supported

- AAA
- BGP-PCEP
- Controller
- Data Export Import
- L2Switch
- MD-SAL
- NETCONF
- NetVirt
- ODL Root Parent
- OpenFlow Java
- OpenFlow Plug-in
- OVSDB
- Neutron
- YANG tools
- PCMM
- JSON-RPC

## Other Features

- Installation scripts
- Data migration and upgrade tools
- Operator’s web-based GUI and application slider
- Application development tools
- Clustering
- User documentation and support included

## Service Interfaces

- Karaf: http://karaf.apache.org/ (3.0.4)
- OSGi: http://www.osgi.org/
- Akka: http://akka.io (2.4.1)

## Southbound Plugins

- OpenFlow 1.0 and 1.3
- NETCONF/YANG (RFC 6241/6020)
- OVSDB
- BGP-LS/PCE-P
- PCMM/COPS

## Northbound Applications and Plugins

- RESTCONF
- OpenStack Neutron, ML2 Driver
- Lumina Topology Manager™
- Lumina Flow Manager™
- Lumina Zero Touch Installer™
- Lumina Overlay Manager™
- Lumina VNF Manager™
- Flow Optimizer

## Editions and Support

- Lumina SDN Controller Commercial Edition
- Lumina SDN Controller Developer Edition and Support
- Eclipse Public License v1.0-Compliant Source Code Distribution
- Developer’s Repository, Archetype and Support
- 24x7 Operations and Deployment Support

## NetDev Services

- Custom software development
- Testing and integration services
- Operations support
- Architectural design
- Software practice methodology, Agile development
- Education and training

## Pricing

- Annual recurring and subscription licenses are measured by nodes, seats, virtual machines or ports supported, depending upon the product
- NetDev Services are priced via contract or statement of work
- Perpetual licenses, packages, longer terms and volume purchase agreements can be specified by contract
- Eclipse Public License v1.0 source code distributions are available at no charge