Cisco ROSA Network Management System (NMS) Version 04.06

The Cisco® ROSA® Network Management System (NMS) system is the Element and Network Management system for Cisco IPVS Video Processing Portfolio. It provides service providers with a complete and powerful solution for managing digital content delivery platform for broadcasting over satellite, terrestrial, DSL, and cable networks. The system supports a diverse range of applications that allows the operators and engineers, with a device-oriented management front-end, to operate and manage video devices in today’s digital video processing headend applications.

The ROSA NMS enables you to configure and control your Cisco Video Processing devices, including IRDs, Encoders, and Digital Content Managers (DCMs).

Figure 1. ROSA NMS Graphical User Interfaces

The ROSA NMS system manages all the equipment of your video delivery systems. This widely deployed network management solution for IP television (IPTV), broadcast, and cable networks, provides uncomplicated access to powerful and sophisticated capabilities.

Device Oriented Management for Cisco Digital Media Processing Devices

The ROSA NMS system integrates the Cisco Digital Media Processing devices to serve as an element management layer. It integrates the Video Processing devices, such as Cisco Digital Content Manager (Cisco DCM series), Cisco Modular Encoding Platform (Cisco D9036 series), Cisco Integrated Receiver Decoder (Cisco IRDs), and various other device types. As a result, the ROSA NMS offers the entire operational control for Cisco’s video headend applications in the Origination and Acquisition Suite. The system provides the engineers and operators with a single powerful platform to manage the digital video processing gear in satellite, cable, and IPTV type applications.

Integrated with the ROSA Video Service Manager (ROSA VSM) and ROSA Element Management System (ROSA EM)

The ROSA VSM system can optionally be deployed together with the ROSA NMS system to leverage the complete feature set of the ROSA Suite Management Software. ROSA NMS supports a broad range of devices for alarms, configuration, and redundancy management control. Each device supported in the ROSA NMS layer is
automatically supported in the ROSA VSM for device alarms and access to the graphical user interface (GUI) or other ROSA NMS GUI controls.

ROSA EM solves the device redundancy in the Acquisition and Origination type video processing platform, such as the Cisco Reference Architecture of the D9036 - DCM - Statmux Compression System.

Key Features and Benefits

- Alarm management via a powerful Alarm Message viewer, allows sorting, filtering, and acknowledging all device alarms.
- Instant view of the entire network and device status.
- Immediate identification of critical issues.
- Service Status Representation (ASSR) reflects the Service Status using Cisco DCM and D9036 Service Alarms, optionally enriched with Video Probe information.
- DCM Platform DVB Tools (SI Editor/Distributor, EIS, Macros).
- Store/Restore settings for Device Configurations (Settings Management).
- Automation of recurring tasks using Macros.
- Scalability to adapt to various network sizes and features.
- Graphical network schematics and alarm messages are customizable on customer's behalf.
- Control of every active device in the video delivery system.
- 1:1 and N+M automatic device redundancy support, in combination with the ROSA EM.
- Notifications via e-mail triggered by user defined events.
- Scalable from small systems to corporate wide deployments.
- Designed for 24/7 operations and control of Cisco IPVS video processing solutions.

ROSA NMS Deployment

ROSA NMS can be deployed as a standalone application or in co-deployment with the ROSA VSM system.

ROSA NMS Redundancy

Cisco ROSA High-Availability Support is supported as a standalone or co-deployment option.

The ROSA NMS High-Availability (ROSA NMS HA) is a heartbeat solution, where two identical ROSA NMS Servers are synchronized over a connection between the two servers.

For more information on ROSA NMS redundancy, contact your local Cisco account representative.

ROSA NMS Client – PC Application

The remote client user interface allows access to all the applications present on the ROSA NMS server platform.

It can be installed on any PC, running a Windows XP or Windows 7 operating system.
ROSA NMS Server – Server Side Software and Requirements

Operating System Requirements

Windows

- Windows Server 2008 R2 Standard Edition (with Service Pack 1)
- MS SQL Server 2008 R2 Standard Edition (included in ROSA NMS Large System offer)

Table 1. Cisco ROSA NMS 04.06 System Requirements: Minimum Server System Requirements

<table>
<thead>
<tr>
<th>Microsoft Windows (Memory and Hardware Recommendations)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel Xeon processor 5400 series, 2 GB RAM, 10 GB free disk space</td>
</tr>
</tbody>
</table>

Table 2. Cisco ROSA NMS 04.06 System Requirements: Recommended Server System Requirements

<table>
<thead>
<tr>
<th>Microsoft Windows (Memory and Hardware Recommendations)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel Xeon processor 5600 series or better, 8 GB RAM, 40 GB free disk space</td>
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</tbody>
</table>

Cisco Unified Computing System (UCS) Support

Cisco ROSA NMS 04.06 is supported on the UCS C server platform. The server requirements on Cisco UCS servers are the same as specified in Table 1 above for Windows servers. For more information, refer to the following data sheet: http://www.cisco.com/en/US/products/ps10493/products_data_sheets_list.html.

Ordering Information

Cisco ROSA NMS 04.06 is available for purchase through regular Cisco sales and distribution channels worldwide. To place an order, visit the Cisco Commerce Workspace.

Table 3. Ordering Information – Cisco ROSA NMS

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROSA NMS Software Suite, Licenses and Upgrades</td>
<td>ROSA-LIC-NMS-UPG</td>
</tr>
<tr>
<td>NMS Platform License Options</td>
<td></td>
</tr>
<tr>
<td>• NMS Platform: Single User (NMS-SU)</td>
<td>LROSA-N-SU</td>
</tr>
<tr>
<td>• NMS Platform: Client Server System (NMS-C/S)</td>
<td>LROSA-N-CS</td>
</tr>
<tr>
<td>• NMS Deploy: Client Server Lab System</td>
<td>LROSA-N-LABSYS</td>
</tr>
<tr>
<td>NMS Deployment License Options</td>
<td></td>
</tr>
<tr>
<td>• NMS Deploy: High-Avail System (HA)</td>
<td>LROSA-N-HA</td>
</tr>
<tr>
<td>• NMS Deploy: Upgrade from HA to DR</td>
<td>LROSA-N-HA2DR</td>
</tr>
<tr>
<td>• NMS Deploy: Upgrade from DR to HADR</td>
<td>LROSA-N-DR2HADR</td>
</tr>
<tr>
<td>• NMS Deploy: Client Server Large System (NMS-C/S-LRG)</td>
<td>LROSA-N-LARGESYS</td>
</tr>
<tr>
<td>NMS Co-Deployment License Options</td>
<td></td>
</tr>
<tr>
<td>• NMS co-deploy with VSM: High-Avail System (HA)</td>
<td>LROSA-N-HA-CO</td>
</tr>
<tr>
<td>• NMS co-deploy with VSM: Upgrade from HA to DR</td>
<td>LROSA-N-HA2DR-CO</td>
</tr>
<tr>
<td>• NMS co-deploy with VSM: Upgrade DR to HADR</td>
<td>LROSA-N-DR2HADR-CO</td>
</tr>
<tr>
<td>NMS Feature Pack License Options</td>
<td></td>
</tr>
<tr>
<td>• NMS Lic Package: Standard (incl. 250 mon. point + 3 Clients)</td>
<td>LROSA-N-STD</td>
</tr>
<tr>
<td>• NMS Lic Upgrade Package: Standard 2 Advanced</td>
<td>LROSA-N-STD2ADV</td>
</tr>
<tr>
<td>• NMS Lic Upgrade Package: Advanced 2 Enterprise</td>
<td>LROSA-N-ADV2ENT</td>
</tr>
</tbody>
</table>
## Performance Specifications

**Table 4. Performance Specification - General**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum number of connected ROSA NMS Client</td>
<td>20</td>
</tr>
<tr>
<td>Minimum required bandwidth between Client and Server</td>
<td>1 Mbps</td>
</tr>
</tbody>
</table>

### Description | Part Number
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NMS Lic Upgrade Package: Standard 2 HFC | LROSA-N-STD2HFC
NMS Driver Pack Licenses
- NMS Lic Package: Standard (incl. 250 mon. point + 3 Clients) | LROSA-N-STD2HFC
- NMS Device Lic. Pack: All Drivers | LROSA-N-ALLDRV
- NMS Device Lic. Pack: All ROSA EM Drivers | LROSA-N-ALLREM
- NMS Device Lic. Pack: Single Channel Encoders | LROSA-N-ENCS
- NMS Device Lic. Pack: Multichannel Encoders | LROSA-N-ENCM
- NMS Device Lic. Pack: Receivers & Decoders (IRD) | LROSA-N-IRD
- NMS Device Lic. Pack: Multifunct Devices | LROSA-N-MFIE
- NMS Device License Pack: Video Routers | LROSA-N-VRT
- NMS Device Lic. Pack : current IP Routers and Switches | LROSA-N-IP
- NMS Device Lic. Pack: current eQAM Devices | LROSA-N-EQAM
- NMS Device Lic. Pack: current HFC equipment | LROSA-N-HFC
- NMS Device License: Transport Equipment | LROSA-N-TRANSP
NMS Licenses - Monitored Points
- NMS Licenses - Monitored Points - 250 Device Adress Block | LROSA-N-MON-CT250
- NMS Licenses - Monitored Points - 1000 Device Adress Block C | LROSA-N-MON-CT1K
- NMS Licenses - Monitored Points - 500 Device Adress Block Co | LROSA-N-MON-CT500
NMS Client License
- NMS Client License - qty. of ROSA NMS Client App | LROSA-N-CLIENT
NMS Software Upgrade License
- NMS SW Upgrade option to V4X | LROSA-N-UP-V4X-K9
Service and Support

Using the Cisco Lifecycle Services approach, Cisco and its partners provide a broad portfolio of end-to-end services and support that can help increase your network’s business value and return on investment. This approach defines the minimum set of activities needed, by technology and by network complexity, to help you successfully deploy and operate Cisco technologies and optimize their performance throughout the lifecycle of your network.

For More Information

For more information about Cisco ROSA Management and Control Solutions, visit http://www.cisco.com/go/rosa or contact your local Cisco account representative.