# Centrally Manage Digital Video and Audio Service Operations

Synamedia's Video Network Service Manager (VSM) manages service and media providers' distribution video and audio system operations. A centralized interface for your streaming, satellite, cable, and telco operations, VSM configures, controls, monitors, and ensures high availability of all Synamedia video network products and applications.

VSM is an ideal fit for 24/7 streaming and broadcast headend operations requiring a service-oriented management solution. It enables you to manage audio and video services and map them onto monitored resources whether run on appliances – bare metal, virtualized or orchestrated containers – or as software instances.

### **Key Functionalities**

#### Centralized operations

- Single interface for all operations (configuration, monitoring, and control)
- Local and geo-distributed systems
- Web UI and REST API interfaces
- Central license management (node-locked and floating modes)
- Embedded help and tool tips

#### Service configuration

- Streaming and linear workflows
- Configuration wizards with consistency controls
- Configuration templates
- Offline configuration
- Scheduled updates
- Input database with a wide range of formats

#### Increased uptime

- Pools of processing resources
- Density management optimizing the load distribution on resources
- 1+1 and N+M failover modes
- Service redundancy through automated failover capabilities
- Automatic and manual triggers
- Ecosystem management and reconfiguration for failovers (SDI routers, output switches)

#### Monitoring

- System and application health monitoring
- Alarm correlation
- Multi-criteria filters
- Topology graphical view
- Service flow monitoring
- Grafana dashboards displaying system and application metrics

#### **Technical Advantages**

- Centralized operations for Synamedia Video Network products
- Service-oriented management
- Pre-defined lineups supporting streaming and linear workflows from signal acquisition to output delivery
- Input abstraction from service configuration
- Optimized availability with pools of resources and failover management at workflow level
- Comprehensive monitoring of system and applications with myriad metrics and Grafana dashboards
- Integrated scheduler and license server
- Support of Synamedia 3PP ecosystem devices (SDI matrixes, IP switches)
- Flexible deployment patterns (bare metal, VM and containers on K8S infrastructure)



# **Product Specifications**

Access and Interfaces					
User Authentication	Local, LDAP active directory, or Radius authentication				
Graphical User Interface	<ul> <li>Centralized operations with web UI access</li> <li>Embedded help</li> <li>Compatibility with former desktop client</li> </ul>				
Northbound Interface	<ul><li>REST API for control and monitoring</li><li>SNMP trap forwarding</li></ul>				
Southbound Interface	<ul><li>IIOP, REST, HTTP</li><li>SNMP</li><li>Leitch</li></ul>				

Service-Oriented Configuration				
	Streaming, broadcast and IPTV use cases			
	<ul> <li>Multi-processing stage workflows (Xcode, mux/package)</li> </ul>			
Workflows	<ul> <li>Lineup management supporting service configuration variants</li> </ul>			
WORKHOWS	<ul> <li>Lineup organization (folders, filters, list, and tile views)</li> </ul>			
	Wizard and template-based configuration			
	Consistency controls			
	Linear Xcode, ABR Xcode			
Dragonina Topolatos	• Audio			
Processing Templates	Stream protection, service protection			
	Packaging			
	ABR encryption			
Other Templates	Origin storage			
	Alarm templates			
0	Scan and import			
Sources	Acquisition rules			

Resource Management				
Synamedia Products	DCM Virtualized, DCM (ASI, GbE cards), DCM Gateway			
	<ul> <li>D9034, D9036, D9094/D9094SE encoders</li> </ul>			
	<ul> <li>D9887, D9854, D9846, D9850, D9800, D9896 IRDs</li> </ul>			
	Media Edge Gateway			
	JITP Controller, ABR-E			
	Nvision NV9000 Router Controller			
	Snell & Wilcox Pro-Bel Halo Video Router			
	Imagine / Harris Panacea / Platinum Video Router			
	Grass Valley Sirius / Vega Video Router			
3PP Ecosystem Devices	Evertz 7880 ASI Switch			
	Enensys ASIIP Guard			
	Newtec USS0202 Redundancy Switch			
	Cisco IP routers and switches			
	Newtec M6100 Broadcast Satellite Modulator			

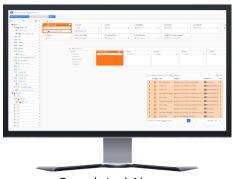


Monitoring						
	Built-in alarm collection and representation, multi-criteria filters					
Alarms & Events	<ul><li>Service status representation</li><li>Alarm correlation (service/resource)</li></ul>					
	Metrics	System and application Grafana dashboards				
Automation						
	Built-in scheduler for configuration and CA					
Scheduling	Event management for contribution use cases					
	Offline preparation of target configuration					
System						
	• CentOS/RHEL 7.2 - 7.9, 64 bits					
Operating System	• Oracle Linux/RHEL 8.3 – 8.8, 64 bits					
	• RHEL 8 and 9.2, 64 bits					
Recommended	4 vCPU, 8 GB RAM, 60 GB of available hard disk space, 10/100/1000 Ethernet network  adapter.					
Requirements	adapter					









Correlated Alarms



# Ordering information

Description	Part Number
VSM appliance (includes VN-Node and SW), single node, or HA cluster options	• VSM-A
VSM software license (CAPEX)	<ul> <li>VSM-APPS</li> </ul>
VSM software subscription (OPEX)	VSM-SUBSCRIPT

Configured Model	Platform	Processor	Drive	Memory	Network Interfaces	Power Supply
VN-NODE-S	SYNA-UDP	2x Intel® Xeon® Silver 4110	2x 1.2TB HDD	8x 8GB DDR4- 2666 IRx8 ECC	Four onboard copper gigabit Ethernet ports - 10/100/1000 Mbps	2x 750W redundant

# **Services & Support**

Synamedia provides a broad portfolio of services and support to increase your network's business value and return on investment. We take a customer-centric approach, aligning our level of support to your technological requirements and network complexity. That way, you can successfully operate our products and solutions to ensure that you achieve optimal performance throughout your network's life cycle.

#### **Warranty & Contact Information**

Read our detailed warranty information.

# **About Synamedia**

Synamedia delivers, enriches, and protects video. Our cloud-native and SaaS solutions empower customers to scale and monetize video services efficiently, ensuring low-latency delivery and exceptional image quality. Our Video Network portfolio includes video distribution, streaming, Edge CDN and multi-CDN management, monetization, ad insertion, cloud DVR (cDVR) and time-shift TV, video compression and processing, and cloud and IP transition.