

Severity	Category	Name	Source	Address	Details	Last event	Owner	Time
Minor	User		demo3		Alarm was up... Refresh	09:15:07 - 13/04/2016		
Critical	User		demo3		Alarm was up... Refresh	09:15:07 - 13/04/2016		
Critical	User		demo3		Alarm was up... Refresh	09:15:07 - 13/04/2016		
Minor	User		demo3		Alarm was up... Refresh	09:15:06 - 13/04/2016		
Warning	User		demo3		Alarm was up... Refresh	09:15:07 - 13/04/2016		
Critical	User		demo3		Alarm was up... Refresh	09:15:06 - 13/04/2016		
Minor	User		demo3		Alarm was up... Refresh	09:15:07 - 13/04/2016		
Minor	User		demo3		Alarm was up... Refresh	09:15:06 - 13/04/2016		
Minor	User		demo3		Alarm was up... Refresh	09:15:07 - 13/04/2016		
Notification	User		demo3		Alarm was up... Refresh	09:15:06 - 13/04/2016		
Critical	User		demo3		Alarm was up... Refresh	09:15:07 - 13/04/2016		
Critical	User		demo3		Alarm was up... Refresh	09:15:06 - 13/04/2016		
Warning	User		demo3		Alarm was up... Refresh	09:15:07 - 13/04/2016		
Warning	User		demo3		Alarm was up... Refresh	09:15:06 - 13/04/2016		
Warning	User		demo3		Alarm was up... Refresh	09:15:07 - 13/04/2016		
Notification	User		demo3		Alarm was up... Refresh	09:15:06 - 13/04/2016		

VideolPath Monitor

Network Fault Management

Pro-active fault management with service correlation

VideolPath provides alarm monitoring functionality for integrated network elements and correlation with on-going services to identify potentially service affecting issues quickly. The system may be used on its own or integrated with other operation support systems.

Status information is typically retrieved from network elements using regular polling and notification mechanisms (e.g. SNMP traps). Details concerning how status information is retrieved for a specific device is captured in the driver for the device type.

A dashboard provides a centralized overview of the operational status of all equipment in the network. The dashboard is automatically populated based on detected equipment and the user is able to customize multiple dashboards for different parts of the network (e.g. one dashboard per site).

Alarms are presented in an alarm management user interface that allows the user to manage current alarms and browse or search for historic alarms recorded in the log. Alarms are automatically correlated per service allowing the user to view alarms related to a specific service.

Applications

- Supervision of wide-area, metro or in-campus broadcast networks
- Rapid identification of potentially service affecting issues
- Single point of integration with operation support systems (24/7)

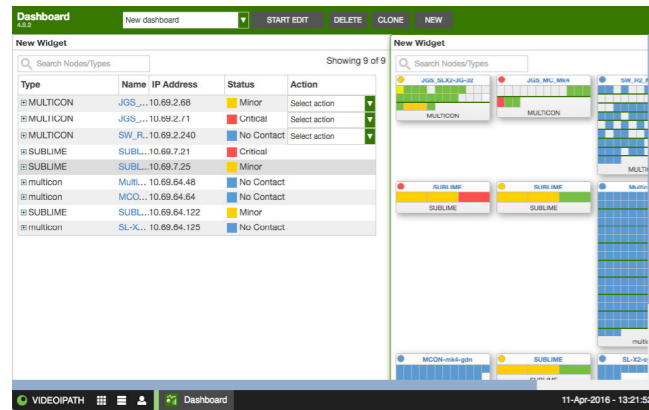
Key features

- Overview all network elements including operational status
- Manage alarms related to services and network elements
- View the life-cycle of an alarm from when it is raised until it is cleared
- Search for historic alarms in the log
- View alarms related to services (based on correlation)



Dashboard

The dashboard app provides a centralized overview of the operational status of all equipment in the network. The dashboard is automatically populated based on detected equipment and the user is able to customize multiple dashboards for different parts of the network (e.g. one dashboard per site).



The display is customizable and allows you to reorder chassis or hide certain chassis from the display. User friendly names may also be assigned to the chassis and it allows filtering of certain chassis types during operation.

The dashboard also allows you to browse directly to the element manager interface for the device. These requests may be proxied through the VideolPath system to provide a central access point for management of the network resources.

The system tracks historical alarms and the Dashboard allows you to view the operational status during a designated time period for historical analysis purposes.

The system also has the capability to correlate alarms against services within the system and provide service related details for so called service affecting alarms.



Alarms

The alarms app provides an alarm supervision function, which allows the operator to manage both current and historical alarms for all integrated devices.

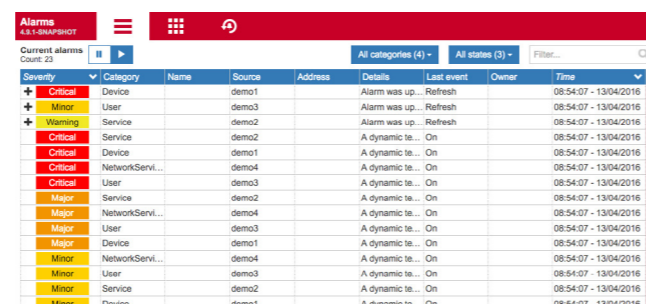
The alarms are presented in a list view with one row per alarm and columns showing a number of attributes. The alarm view may be grouped or searched based on any of the columns in the list.

The filtering function simplifies retrospective fault analysis and enables efficient alarm handling even with millions of alarms in the database. The filtering function is performed on the server-side and allows alarm records to be retrieved for a long time period without retrieving non-matching records to the client side.

The alarm view provides access to basic alarm management functions such as acknowledgment, comments, hide alarm etc.

The alarm log contains every alarm that has been received by the system and that is stored in the database. The search and filtering function allows the operator to retrieve alarms based on specific attributes or for a user specified time interval.

Alarms are automatically cleared and moved from the current alarm list to the alarm log when they are cleared by the device. VideolPath relies on a combination of notifications (traps) and regular synchronization of alarms in order to prevent possible loss of notifications to result in alarms that are never cleared in the system.



Other user interfaces

Alarm information collected by the Alarm Manager is also used in the connection management apps to present the user with the status of endpoints and services in the network.



Timeline - Calendar based



Connect - Broadcast



Maps - View alarm status

The Maps app may also be used to create custom monitoring views based on a geographic or logical map overlay.

Alarm information

The following information is part of an alarm record in the system:

- Severity
- Alarm Name
- Alarm Description
- Node Name
- Device Name
- Device Type
- Status
- Last Changed

Northbound interface

VideolPath supports forwarding of alarm information over an SNMP based northbound interface to a higher level management system. The interface relies on SNMP V2c traps and uses a normalized trap format defined in the VideolPath Northbound MIB (VIP-NBI-MIB).

This northbound interface will forward events to one or more destinations. The destinations are configurable by the administrator of the system. It is also possible to provide filter criteria to only forward specific events. If the filter condition is met, the event will be forwarded to the specified destinations. Note that the configuration allows different filter criteria per destination.

The following type of events are supported over the northbound interface:

- Service affecting events may be forwarded with the identify of the affected service
- Other events for devices monitored by the VideolPath system may be forwarded
- Traps received from devices not monitored by the VideolPath system may be forwarded (in this case the system acts as a proxy)

Specifications

Number of concurrent clients per server	50
Number of network resources per server	1000
Hardware server	Intel Xeon based, 1 rack-unit, disk mirroring (RAID), redundant power, dual GbE interfaces
Virtual server	VideolPath may be installed on VMWare infrastructure (vRAM, vCPU and disk allocation depends on application)

Ordering options

VP-SW-SERVER	VideolPath hardware standard server. Intel Xeon E5 32 GB RAM 500GB SSD drive. Dual 1 GbE network and power.
VIP-SW-BASE	VideolPath base platform license. License fee per server. Includes 5 user licenses. Includes alarm and inventory management functions. Requires node licenses.
VIP-SW-NODE-A/B/C	VideolPath level A/B/C node license. License fee per node added to the system. See guidelines for classification of node types.
VIP-SW-USER-5	VideolPath user license. License fee per 5 simultaneous user sessions. Note 5 license included with base platform.
VIP-SW-DRIVER-A/B/C	VideolPath level A/B/C driver for third-party devices. License fee per device type. Contact Nevion pre-sales for classification of third-party devices.
VIP-SW-MAINT-SUPPORT	VideolPath maintenance and support agreement. Provides access to all major and minor software updates. Basic support services provided during office hours. 15% of all installed SW licenses.



Management systems

Nevion offers a range of management systems for broadcasters, telcos, cable, DTT and satellite operators providing an end-to-end service oriented perspective on the operation of the infrastructure.

Nevion offers a complete service and network management system, including element managers for media networks. Our management platform is a fully integrated system providing an innovative new approach for management of media networks based on recent cloud computing technologies, delivering managed services and customer access, consolidating data across the entire network, providing a service perspective on operations, and service delivery capabilities to efficiently provision occasional use or permanent services.

CONTACT INFORMATION

The Americas

ussales@nevion.com +1 (805) 247-8560

Asia Pacific

asiasales@nevion.com +65 6872 9361

Europe and Africa

sales@nevion.com +47 33 48 99 99 / +47 22 88 97 50

Middle East

middle-east@nevion.com +971 (0)4 3901018

UK

uksales@nevion.com +44 118 9735831

nevion.com