

VideolPath

Media Service Assurance

Easy-to-use aggregated service monitoring

VideolPath provides an easy-to-use and powerful media network monitoring solution that even non-expert users can operate. This provides access to key performance indicators targeting a variety of users from operations, engineering, sales to external customers.

The solution is designed to simplify day-to-day operations, monitor compliance with Service Level Agreements (SLAs), as well as rapidly identify and resolve the root-cause of any issues in the network, thereby saving on the costs associated with the loss of signals and proactively addressing potential service affecting issues before they escalate.

The solution incorporates Nevision's award winning VideolPath network management software with trusted network monitoring probes from the nSure product family, including the flagship TNS4200 solution, and offers a complete solution for end-to-end monitoring without the need for costly and time consuming integration per project. The solution can also take monitoring data from other equipment, from Nevision or 3rd parties, that are part of the transport chain, and correlate this against services.

Applications

- Monitoring of central head-ends for IPTV, satellite, cable and DTT networks
- Remote monitoring of signals in DTT networks
- End-to-end monitoring of contribution links

Key features

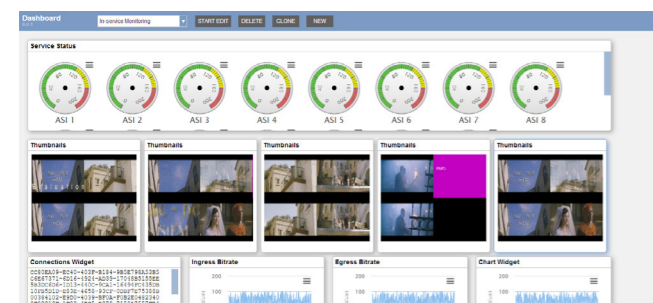
- Aggregation and overview capabilities for multiple probes
- Ability to "zoom-in/out" from the aggregated view to individual probes (deep-dive)
- Correlation of alarms with indication of the actual services affected
- Dashboard with drag'n'drop customizable widgets, so users can tailor the display to their needs
- Thumbnail display, to provide a convenient overview of the streams for confidence monitoring
- Historical reporting of monitoring data (performance and alarms)
- Loading monitoring profiles to the monitoring probes to accommodate to planned changes in the network.
- Ability to make a probe join an IP stream (when multicasting is used), so it can be monitored

VideolPath-MSA provides an overview of all services running across the network. The information is collected from the nSure probes (and from other third party equipment) in the network. The probes monitor the signals and streams present in the network and report measurements to VideolPath. This data is correlated and aggregated by VideolPath, which can show both the current status of the network and historical views. This enables users to gain a deep understanding of the performance of their network, and rapidly get to the root-cause of any problems. This is particularly important where there are multiple hand-over points between providers and users of media networks, and compliance to Service Level Agreements (SLAs).

Dashboard

Customize and view aggregated service

The solution is based on a new Dashboard app in VideolPath that provides an aggregated overview of the status of services and resources in the network. The new Dashboard is fully user customizable and can be tailored to fit the needs of the specific application. The user interface is based on widgets that can be combined to create the desired user experience.



The dashboard also allows you to browse directly to the element manager interface for the device, in order to perform a deep-dive to examine problems that are highlighted in the aggregated view provided by VideolPath. These requests may be proxied through the VideolPath system to provide a central access point for management of the network resources.

The Dashboard provides a set of standard widgets that can be added to a layout, and in addition there are device specific widgets that may be added. Examples of widgets includes: service status, thumbnail view, alarm display (current and historical) and bitrate trending.

Alarms

Manage current alarms and view history

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

Filtering functions simplifies retrospective fault analysis and enables efficient alarm handling even with millions of alarms in the database. The filtering functions are 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 log contains every alarm that has been received by the system and that is stored in the database. The search and filtering functions allows the operator to retrieve alarms based on specific attributes or for a user specified time interval.

Severity	Category	Name	Source	Address	Details	Last event	Owner	Time
Critical	Device	demo1	demo1		Alarm was up...	Refresh		08:54:07 - 13/04/2016
Minor	User	demo3	demo3		Alarm was up...	Refresh		08:54:07 - 13/04/2016
Warning	Service	demo2	demo2		Alarm was up...	Refresh		08:54:07 - 13/04/2016
Critical	Service	demo2	demo2		A dynamic te...	On		08:54:07 - 13/04/2016
Critical	Device	demo1	demo1		A dynamic te...	On		08:54:07 - 13/04/2016
Critical	NetworkServi...	demo4	demo4		A dynamic te...	On		08:54:07 - 13/04/2016
Critical	User	demo3	demo3		A dynamic te...	On		08:54:07 - 13/04/2016
Major	Service	demo2	demo2		A dynamic te...	On		08:54:07 - 13/04/2016
Major	NetworkServi...	demo4	demo4		A dynamic te...	On		08:54:07 - 13/04/2016
Major	User	demo3	demo3		A dynamic te...	On		08:54:07 - 13/04/2016
Minor	Device	demo1	demo1		A dynamic te...	On		08:54:07 - 13/04/2016
Minor	NetworkServi...	demo4	demo4		A dynamic te...	On		08:54:07 - 13/04/2016
Minor	User	demo3	demo3		A dynamic te...	On		08:54:07 - 13/04/2016
Minor	Service	demo2	demo2		A dynamic te...	On		08:54:07 - 13/04/2016
Minor	Device	demo1	demo1		A dynamic te...	On		08:54:07 - 13/04/2016

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

Connect

Broadcast oriented end user control

The Connect app is used to provide on-demand monitoring of streams. The system supports joining any available multicast stream on the network to a monitoring probe. In the Connect app a list of available streams may be presented and the user can easily select one or more of these and join it to a monitoring probe.

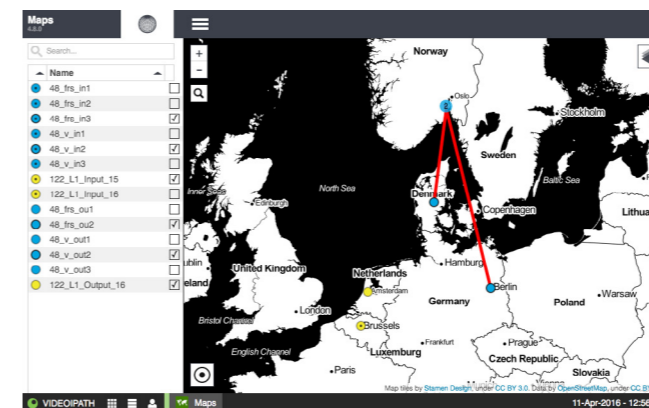
This functionality can also be used to assign ASI or SDI signals to a probe provided there are routing matrixes in the network to enable forwarding the signal to an appropriate probe for ad-hoc monitoring.

Maps

View alarm status and connect

Alarm and performance information collected by the VideolPath-SM module may also be used in the Maps app to present the user with the status of services and devices in the network.

The Maps app may be used to create custom monitoring views based on a geographic or logical map overlay. The monitoring overlay is added by the system on top of the map data (or schematic) used as a background image.



Feature overview

- Aggregation and overview capabilities for multiple probes
- Ability to "zoom-in/out" from the aggregated view to individual probes (deep-dive)
- Correlation of alarms with indication of the actual services affected
- Dashboard with drag & drop customizable widgets, so users can tailor the display to their needs
- Thumbnail display, to provide a convenient overview of the streams for confidence monitoring
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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)

Ordering options

VP-HW-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-MONITOR-1	VideolPath service monitoring license. License fee per monitored end-to-end service.
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.

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