

Network Visualization & Realtime Telemetry

"Eliminate Finger Pointing Between Broadcast & IT. Turning Chaos to Clarity"



The professional broadcast industry is embracing IP-based infrastructures and data transport at a rapid pace. Leveraging IP technologies ensures that operations are highly future proofed in terms of scale, geographic reach, and flexibility. What has been missing so far is a software solution to monitor the switch network and the media flows that traverse them. A solution that passively analyzes both the IT and the broadcast side of your operation in realtime. Enter the NVRT, Network Monitoring & Realtime Telemetry, the marriage of network telemetry and deep media packet inspection on a single display.

The Providius **Network Visualization & Realtime Telemetry** Dashboard (aka NVRT) is a vendor agnostic enterprise software suite designed to provide full network and media visibility across an all-IP, or hybrid IP-SDI, LAN/WAN broadcast infrastructure.

Use NVRT to answer any of the following questions and more ...

- Do you want to know what's connected/disconnected from your network in realtime?
- Do you need to trace a media / PTP flow across the network?
- Do you need to confirm media flows are routed on the switch accurately?
- Do you want to track bandwidth utilization and flow metrics?
- Do you want to represent your network routes as an XY matrix?
- Do you need a PTP topology and confirm PTP is locked where expected?
- Do you need to differentiate between a stream issue and a networking issue?



Based on Linux, this software-defined networking solution incorporates a powerful and robust database to document and rapidly search any aspect of the operation—from a simple cable ID number to seeking the journey of a multicast across an infrastructure LAN or transnational multi-hop WAN. By leveraging a vast library of software



communication protocols, the system automatically interrogates live and dormant path connections to create the most intuitive and data rich presentation layers of a COTS-hybrid infrastructure. With its award-winning features, NVRT supports a wide range on network protocols to build up rich graphic representations of the network infrastructure. These automated processes dynamically document the interconnected network design in real-time. NVRT users have a zero-footprint installation: NVRT can be deployed on-prem, private or public cloud, VM / bare-metal server environments, and accessible from a browser or mobile device.

Features & Benefits

- Lightweight software for VM / bare-metal with multi-client seat dashboards
- Auto Discovery of network assets & auto-mapping topology in realtime
- Frequently used with Cisco, Arista, Netgear* and Aruba* networks
- Realtime inventory of assets
- Live event logging. Receive alerts from endpoints including the switch fabric
- Flow path tracing. Search for a multicast and instantly tracks its path across the network
- PTP Traffic Analysis. Understand the entire PTP topology from GM thru to the endpoint
- Scalable from 100 assets to over 10,000 assets



- Multi-User
- Fault Isolation
- OPENCONFIG
- SFP Metrics
- Link Speed Detect
- RTP Flow Metrics
- Alarm Timeline
- Historical Graphing
- SNMP Trap Receiver
- CAPEX/OPEX Modes ... and many more

Ordering Information:	
PKG-NVRT-SYS-ENTRY	Includes support for auto-discovery of the network, single telemetry license, one (1) unique network switch device model (user must provide model #), single client seat. Supports up to 250 total connected assets. Includes pathfind searching of a multicast flow with fusion access, 3rd party device monitoring with SNMP alarming.
PKG-NVRT-SYS-SMALL	Includes support for auto-discovery of the network, single telemetry license, two (2) unique network switch device model (user must provide model #), single client seat. Supports up to 500 total connected assets. Includes pathfind searching of a multicast flow with fusion access, 3rd party device monitoring with SNMP alarming. Includes one (1) BMG base license for stream verification and PTP analysis (each BMG is capable of <30x 1080p 3G Uncompressed Streams / <100x Compressed Streams per BMG Base license)
PKG-NVRT-SYS-MED	Includes support for auto-discovery of the network, single telemetry license, three (3) unique network switch device model (user must provide model #), single client seat. Supports up to 1000 total connected assets. Includes pathfind searching of a multicast flow with fusion access, 3rd party device monitoring with SNMP alarming. Includes two (2) BMG base license for stream verification and PTP analysis (each BMG is capable of <30x 1080p 3G Uncompressed Streams / <100x Compressed Streams per BMG Base license)
PKG-NVRT-SYS-LRG	Includes support for auto-discovery of the network, single telemetry license, four (4) unique network switch device model (user must provide model #), single client seat. Supports up to 2000 total connected assets. Includes pathfind searching of a multicast flow with fusion access, 3rd party device monitoring with SNMP alarming. Includes three (3) BMG base license for stream verification and PTP analysis (each BMG is capable of <30x 1080p 3G Uncompressed Streams / <100x Compressed Streams per BMG Base license)
PKG-NVRT-SYS-TRUCK	Includes support for auto-discovery of the network, single telemetry license, one (1) unique network switch device model (user must provide model #), single client seat. Supports up to 250 total connected assets. Includes pathfind searching of a multicast flow with fusion access, 3rd party device monitoring with SNMP alarming. Includes one (1) BMG base license for stream verification and PTP analysis (each virtual BMG is capable of <12x 1080p 3G Uncompressed Streams / <25x Compressed Streams per BMG Base license)
Compute Hardware (Optional)	
SRV-2CPU-1TB	1RU server, Dual XEON, 1TB Storage
SRV-2CPU-8TB SRV-2CPU-100GB-1TB	1RU server, Dual XEON, 8TB Storage 1RU server, Dual XEON, Dual NIC, up to 100Gb/s, 1TB Storage
SRV-2CPU-100GB-11B SRV-2CPU-100GB-8TB	1RU server, Dual XEON, Dual NIC, up to 100Gb/s, 11B Storage