

Niagara Visibility Controller

Enterprise-wide unified manager of network visibility

Whether you are a manager looking for an overview of all of your visibility nodes (network packet brokers, network taps, network bypasses), or an engineer looking at the configuration details, **the key in addressing the evolving and dynamic needs of the network visibility layer is best described as being seamless.**

360 degree Visibility and Centralized Management

As the number of visibility nodes increases, it becomes paramount to view a total situation awareness picture of your visibility layer. This increase is the result of the growing pervasiveness of network visibility and the move from single-device solutions to multi-device solutions and from single site deployments to multi-site deployments. In this environment, managing each device individually via its dedicated device GUI becomes inefficient. NVC lets authorized users easily and seamlessly navigate and manage network visibility:

- Logical Groups - Cluster visibility elemented tailoring it to your needs.
- Topology and Navigation - 360 degree view to single element navigation
- Granularity - Topology to port status level configurations, visibility, and device schematics.

The user friendly Network Visibility Controller enables seamless management of visibility nodes no matter how many nodes you have or what type they are.

Intuitive and Intelligent Orchestration

Network services and applications are mushrooming to encompass increased levels of sophistication and complexity involving monitoring, performance management and security. The increase in service complexity increases the importance of an intuitive and user-friendly flow that enables engineers to accomplish their tasks quickly and with less errors.

NVC enables authorized users easily configure their visibility nodes seamlessly. By treating connected visibility nodes as a single virtual switching fabric, configuring multi-device solutions becomes transparent without the need to manually configure each of the connected device one by one.

Product Highlights

- Centralized management monitoring and configuration of multiple Niagara visibility nodes
- User friendly and intuitive Fabric Flow creation. Reducing configuration time and errors
- SDN architecture - OpenFlow discovery and topology visualization
- Easy-to-complete firmware updates and configurations updates of multiple visibility nodes from single pane-of-glass.
- REST API Support for Programmability
- Unified management for network packet brokers, network bypasses and network taps
- See the ‘forest’ and the ‘trees’. Seamlessly navigate between three panes of management from Group view to detailed Device view
- Available in a self install Virtual Machine package
- User Management, User Roles and Authentication

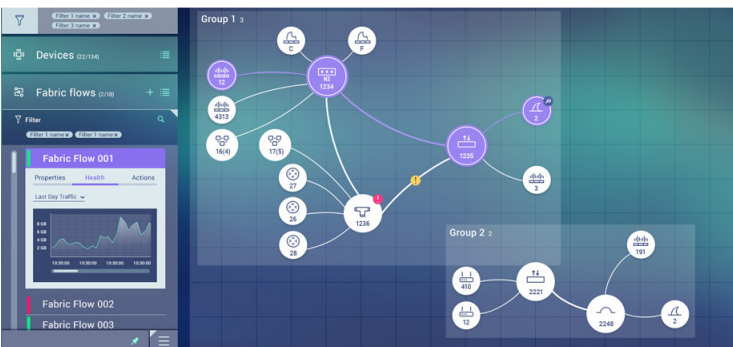
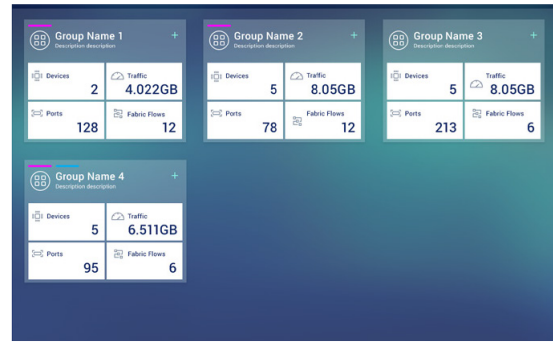


“floating” FabricFlow. Users see the logical element that is at the core of the flow, while providing easy access to editing any component of the flow.

Situation Awareness and Node Visibility

User can easily drill-up to a higher view or drill-down to a more detailed view to obtain the optimal mix between overall visibility node monitoring and detailed port configurations. Each view offers a specific set of contextual actions.

With Groups, users can create a virtual hierarchy of devices (visibility nodes). Achieving a bird's eye view of their deployment and its status.

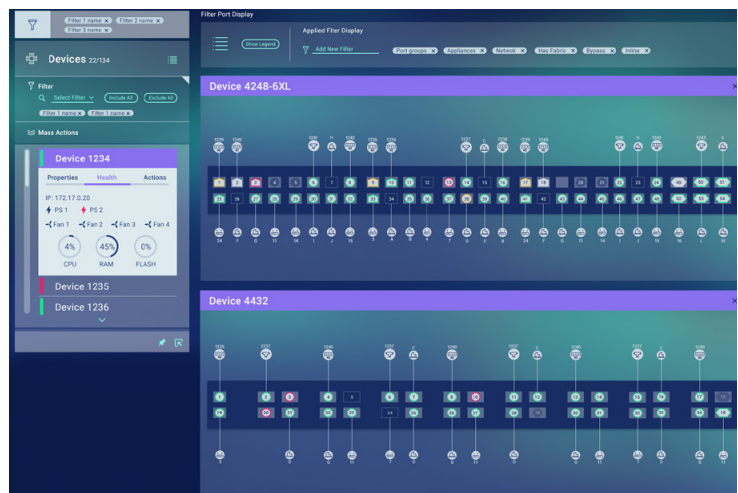


A selected FabricFlow is highlighted on the main screen with its health monitor in the left panel.

In the Topology view the users clearly sees the visibility nodes and their connection to network devices like routers and switches on one hand and to network services, such as monitoring, security and performance management on the other hand.

The main screen depicts an editable topology canvas with all the visibility appliances and their connections to network sources and services destinations. An expandable left panel supports easy navigation and provides details on the selected entity without hindering the overall topology view of the network.

Selecting devices from the Topology view or by directly drilling from the left panel devices' tab, the user can view device details. This includes detailed port status, connected ports, detailed port mapping and more.



Creating FabricFlow

Creating FabricFlows is intuitive and user-friendly, enabling users to configure complex forwarding rules without getting bogged down in the technical bookkeeping and CLI commands. Being intuitive and user friendly is especially important as network packet brokers are often high density 1U devices with over 48 ports, each, possibly, servicing different network services.

NVC handles connected Niagara visibility nodes as a seamless virtual switching fabric. User can then create cross-device FabricFlows mappings by simple drag-and-drop, without the need to configure each device separately.

The user can initiate a FabricFlow directly from the device view or from the topology view.



What is a FabricFlow?

Users map traffic flow relationships between network traffic (sources) and network services (destinations). Niagara's FabricFlow technology exposes sophisticated capabilities including fully featured network packet broker, network bypass and network tap.

Bulk Configuration Changes and Firmware Upgrades

The screenshot displays the Niagara Network Management System (NVC) interface. The top navigation bar includes 'SYSTEM VISIBILITY', 'SYSTEM MANAGEMENT', and 'FILTERS'. The 'SYSTEM MANAGEMENT' menu is expanded, showing options: System Information, Firmware Management, Configuration Management, User Management, Authentication Mode, and Backup/Restore. Below the menu, there are buttons for 'New Configuration' and 'Upload From Device'. A table lists configuration files with columns: Version, Model, Description, Created Date, File Name, and Actions. The table contains one entry: 'niagara' model, 'Config file Pulled from device' description, 'Jan 10, 2018 2:57:15 AM' created date, and a long alphanumeric file name. Below this, the 'Devices' section shows a table with columns: Device, Date of Update, and Configuration File Name. It contains one entry: 'Niagara1' device, '06/01/2018' update date, and 'Test Conf 01' configuration file name.

Version	Model	Description	Created Date	File Name	Actions
	niagara	Config file Pulled from device	Jan 10, 2018 2:57:15 AM	637437d8-6ce8-4287-ac80-45d1261ab8bd-0f00000000000001.conf	[Icons]

Device	Date of Update	Configuration File Name
Niagara1	06/01/2018	Test Conf 01

The NVC serves as a repository of devices' firmware and configurations. Selected firmware and configuration file can be pushed to selected devices.

Specifications

NVC is delivered as an Open Virtualization Format (OVF) virtual machine image. The OVF is an open and secure format that can be used with different hypervisors.

Host Machine Requirements

Hypervisor	Any hypervisor that supports OVG 1.0 virtual machines
CPU	64-bit x 86 CPU with virtualization assist enabled
RAM	Minimum of 16GB
Disk Space	Minimum of 16GB
Network	IP connectivity to managed NBP devices

NVC VM Requirements

Memory	Minimum 8GB
Virtual CPU	1
Virtual Network Interface	1 vNIC (bridged mode)

Part Numbers

NVC-APP-STD	Niagara Visibility Controller software license, including license to manage up to 5 Niagara visibility nodes
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Licensing

NVC-LC-G2	Additional licensing for 6-10 devices (per device)
NVC-LC-G3	Additional licensing for 11-20 devices (per device)
NVC-LC-G4	Additional licensing for for 21-50 devices (per device)
NVC-LC-G5	Additional licensing beyond 51 devices (per device)

About Niagara Networks

Niagara Networks provides high performance network visibility solutions for seamless administration of security solutions, performance management and network monitoring. Niagara Networks products provide advantages in terms of network operation expenses, downtime, and total cost of ownership.

A former division of Interface Masters, Niagara Networks provides all the building blocks for an advanced Visibility Adaptation Layer at all data rates up to 100Gb, including Taps, bypass elements, packet brokers and a unified management layer. Thanks to its integrated in-house capabilities and tailor-made development cycle, Niagara Networks are agile in responding to market trends and in meeting the customized needs of service providers, enterprise, data centers, and government agencies.

NVC 2018 Version 1