GigaVUE Cloud Suite for Nutanix

Unified joint solution has certified integration with Nutanix's Prism and Flow management automation suite for comprehensive insight and control
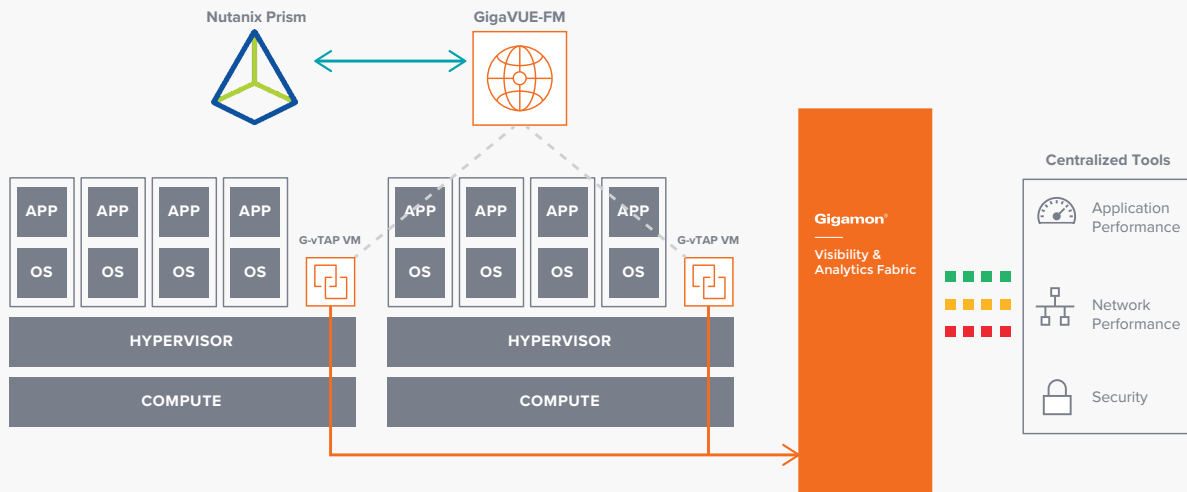

Figure 1. The Gigamon Visibility and Analytics Fabric is integrated with Nutanix-based private clouds to mirror traffic from all sources, then optimally process and distribute to the appropriate tools.

Key Features

- Gigamon G-vTAP VM virtual machines are automatically deployed and traffic sent to the visibility tier
- Tight integration with Nutanix Prism and Flow for orchestration and support for Nutanix AHV
- Advanced visibility for hybrid architectures with single pane of glass fabric management with GigaVUE-FM
- Leverage advanced capabilities with the Visibility and Analytics Fabric such as GigaSMART® intelligence — includes application intelligence, packet slicing, data de-duplication, masking, decapsulation, header stripping, and more

Key Benefits

- Optimize traffic processing and distribution with 100 percent visibility while reducing load on tools
- Complete visibility into inter-VM traffic on Nutanix clusters; scales to support any number of virtualized servers
- Discover new workloads and automatically update the Gigamon Visibility and Analytics Fabric without any manual intervention
- Improve tool effectiveness, obtain superior performance and accelerate troubleshooting

Figure 2. GigaVUE Fabric Manager for Nutanix displaying fabric, management addresses and status.

Gigamon Dashboard with Nutanix

GigaVUE Cloud Suite for Nutanix Components

G-vTAP VM

For traffic acquisition, G-vTAP VM virtual machines are deployed as a Nutanix AHV guest VM on each hypervisor. G-vTAP VM receives copied packets from each of the other VMs on the same server through service insertion on a virtual switch. They subsequently send mirrored traffic to the visibility nodes. Key benefits include:

- Single, lightweight VM per hypervisor minimizes impact on compute nodes and delivers several gigabits per second of traffic per instance
- No need to run special software or changes to kernel modules
- Reduces application downtime — there is no need to redesign applications when adding new tools
- Optionally set VM host affinity by choosing the required nodes to run G-vTAP VM
- Automatic Target Selection (ATS) automatically extracts traffic of interest from any containerized workload
- Flow Mapping for Selection of Layer 2 to 4 traffic

GigaVUE Physical Appliances

Traffic aggregation, intelligence and distribution occurs within the GigaVUE-HC Series visibility nodes, which are deployed within the visibility tier. Advanced transformations on the aggregated network traffic can be performed before it is delivered to the tools. Key benefits include:

- Generate NetFlow/IPFIX flow records from network traffic to determine IP source and destination
- Transform headers: Modify content in the header (L2–L4) to ensure security and segregation of sensitive information
- Handle sensitive data including slicing, sampling and masking packets to optimize traffic sent to tools, reducing tool overload
- Extract application-level intelligence: Identify thousands of applications and extract traffic, and access more than 7,000 application-metadata elements to further refine distribution rules, troubleshoot issues and identify security risks

GigaVUE-FM

GigaVUE-FM handles centralized orchestration and management. Using RESTful APIs and tight coupling to Nutanix Prism and Flow, GigaVUE-FM instantiates G-vTAP VM on each hypervisor and configures policies for these virtualized instances within multiple environments. Key benefits include:

- Detect changes in VM location and then scale. Automatically move and instantiate G-vTAP VM and adjust the visibility tier, through pre-built integration with Prism APIs
- Enable visibility policies to be tied to the monitored VMs and migrate with the VMs as they move across physical hosts
- Publish REST APIs: Integrate with third-party systems and tools to dynamically adjust traffic received or to orchestrate new traffic policies
- Auto-discover and visualize end-to-end network topology, including VM workloads, by using an intuitive drag-and-drop user interface
- Eliminate manual processes and errors by automatically identifying each new workload and its associated traffic mirroring via ATS, and then configuring the G-vTAP VMs to direct traffic to physical appliance nodes

Minimum Requirements for GigaVUE Cloud Suite Software Components

SOFTWARE COMPONENT	DESCRIPTION
G-vTAP VM	Server hardware: • Hypervisor: Nutanix AHV 5.5x and above • CPU: One or more 64-bit x86 CPUs with virtualization assist (Intel-VT or AMD-V) enabled • Network: At least one 1 Gbps NIC • Disk space: 12 GB Compute instance requirements: • Memory: Minimum 4GB memory • Virtual CPU (VCPU): 2 • Virtual network interfaces: 1 – Management IP + vTAP interfaces
GigaVUE-FM (software version)	Hypervisor: Nutanix AHV 5.5 and above CPU: 4x vCPU Memory: 8GB RAM Disk space: 2x: 40GB Note: GigaVUE-FM must be able to access the controller instance for relaying the commands.
GigaVUE Fabric Controller	CPU: 1xvCPU Memory: Minimum 1GB Disk space: 10GB Note: Based on the number of GVMs being monitored, multiple fabric controllers are required to scale out horizontally

Ordering Information

PRODUCT CATEGORY	PART NUMBER	DESCRIPTION
G-vTAP VM	GFM-NUT-100/GFM-NUT-1000	GFM-NUT-100/-1000: Monthly Term license for traffic visibility up to 100 virtual TAP Points in Nutanix. Min Term is 12 months. Includes bundled Elite Support
GigaVUE-FM (software)	GFM-FM001/5/10	GigaVUE-FM: Select from 1/5/10 physical visibility fabric nodes to manage from one Fabric Manager
	GFM-FM000	GigaVUE-FM Prime Edition: Manage up to 200 Physical Visibility Fabric Nodes
GigaVUE-HC appliances, GigaSMART cards and Gigamon Application Intelligence		See separate data sheets for details and ordering information

Support and Services

Gigamon offers a range of support and maintenance services. For details regarding the Gigamon Limited Warranty and our product support and Software Maintenance Programs, visit www.gigamon.com/support-and-services/overview-and-benefits.

Learn More

For more information about the Gigamon Visibility and Analytics Fabric, or to contact your local representative, please visit gigamon.com.