Performance Monitoring for Nutanix Enterprise Cloud Platform

Nutanix hyper-converged infrastructure (HCI) is being widely adopted by businesses to cut down CAPEX and OPEX costs and increase the flexibility to scale as needed by the business. While hyper-convergence offers several benefits such as reducing infrastructure footprint and simplifying operations, performance monitoring is an inherent challenge. IT teams need visibility into every layer of the closely-coupled HCI architecture (including storage, compute, network and virtualization). The business-critical nature of server and desktop workloads that Nutanix HCI supports makes it imperative for IT operations to monitor key performance metrics, identify and triage performance anomalies quickly, and ensure smooth operations of business services.
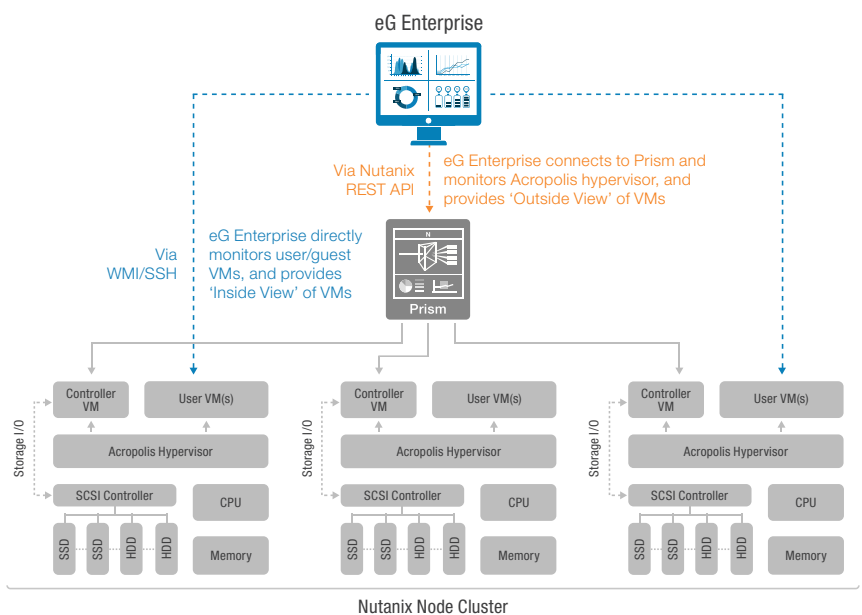
End-to-End Monitoring of Nutanix Platform

With eG Enterprise, you get comprehensive monitoring of your Nutanix enterprise cloud platform. Through native integration with Nutanix Prism via REST APIs, eG Enterprise offers visibility into the performance of the Nutanix Acropolis Hypervisor (AHV), the controller VMs (CVMs) on each hypervisor, virtual machine status and resource usage levels, storage disks, and network infrastructure.

With eG Enterprise, you can:

- Automatically discover your Nutanix enterprise cloud platform
- Monitor the performance of all key elements of the Nutanix platform
- Identify resource bottlenecks on the Acropolis hypervisors, and understand where to invest additional resources for enhancing capacity
- Track VM migration and compare KPIs to identify resource-intensive VMs
- Monitor storage pools and clusters managed by Prism and view data in context of hypervisor, VM and application performance

Key Benefits

- **Single pane of glass** for monitoring the Nutanix enterprise cloud platform and applications running on it
- **Deep-dive analytics and proactive alerting** of Acropolis and Prism performance anomalies
- **Rapid time to resolution** of performance problems through automated root-cause diagnosis
- **Eliminate downtime** and improve datacenter efficiency
- **High ROI** through right-sizing and optimization
- **Reduce cost and complexity** of IT operations management

I like eG Enterprise's ability to monitor just about every component you can think of in this entire organization and be able to show it on one single dashboard. It's just like, wow. It's really an excellent product.

Richard Hussain
Solutions Architect Virtualization, Denali Advanced Integration
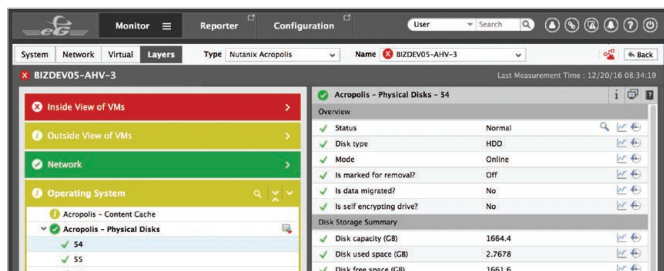

Agentless monitoring of a Nutanix Acropolis infrastructure

Proactive, Multi-Vendor Virtualization Monitoring and Capacity Planning

The Nutanix enterprise cloud platform can run multiple hypervisors. Besides Nutanix Acropolis, VMware vSphere, Microsoft Hyper-V and Citrix XenServer are supported. Administrators can leverage the built-in virtualization monitoring capabilities of eG Enterprise to eliminate the need for vendor-specific monitoring solutions for their virtual environment. From a single pane of glass, eG Enterprise delivers deep-dive visibility into performance, configuration changes, and capacity utilization across all of these virtualization platforms.

eG Enterprise presents a comprehensive picture of virtual infrastructure resource utilization through its patented inside-outside monitoring technology. This makes it easy for administrators to monitor:

- Resource allocation by the host and resource utilization by the virtual machine (outside view)

- What application, process and user activity consumes resources within a guest virtual machine (inside view)

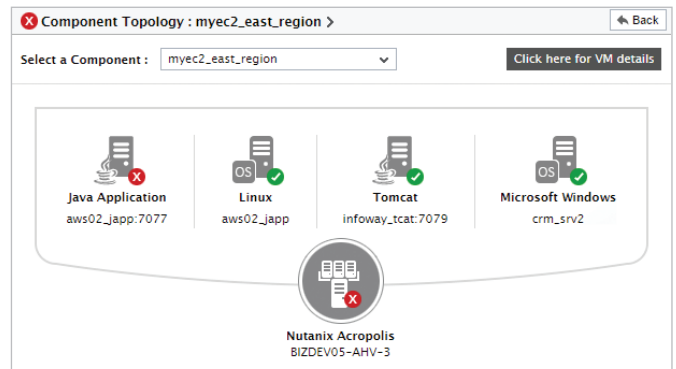*Acropolis hypervisor monitoring with eG Enterprise*

This 360° view indicates where resources are being consumed, enabling effective capacity planning and right-sizing. Further, administrators can identify over-allocated and under-allocated virtual machines and get reports on how many more VMs can be added based on available CPU, memory, and disk space.

Monitoring Virtual Desktop and Application Server Workloads

eG Enterprise provides domain-specific monitoring, regardless of whether the Nutanix enterprise cloud platform is used for virtual desktop or application server workloads. For virtual desktops, all users logged into the virtual desktops

Automatic infrastructure discovery and topology mapping

are identified, session start and end times tracked, and top users by resources used are reported. For application server workloads, eG Enterprise provides extensive coverage. Hundreds of packaged applications are supported, including Java, SAP, SharePoint, PeopleSoft, Microsoft Dynamics, databases, messaging servers and more. When an application is slow, automated root cause diagnosis across various tiers helps admins quickly determine whether a performance slowdown is caused by an issue in the application code or in the Nutanix platform.

Key Performance Metrics

Nutanix Acropolis Hypervisor

- Monitor CPU and memory utilization to identify if the physical server is adequately sized

- Auto-discover physical disks, track IOPS and read/write latencies to each disk, to identify I/O bottlenecks

- Compare resource utilization across VMs to identify resource-hungry VMs

- Analyze performance inside VMs to find which application is responsible for resource usage

Nutanix Prism

- Report on availability and responsiveness of Nutanix Prism

- Auto-discover storage pools and containers managed by Prism and report on health, latency, IOPS and I/O performance

- Measure resource usage by clusters and pinpoint the cluster that is not sized correctly

About eG Innovations

eG Innovations is dedicated to helping businesses across the globe transform IT service delivery into a competitive advantage and a center for productivity, growth and profit. Many of the world's largest businesses use eG Enterprise to enhance IT service performance, increase operational efficiency, ensure IT effectiveness and deliver on the ROI promise of transformational IT investments across physical, virtual and cloud environments.