



## A Technical Overview

*By The Goliath Technologies Technical Team*

*"Administrators have the ability to monitor and report on the storage components of our VMware environment easily and quickly from one dashboard. Administrators can now have a truly proactive and real time approach to monitoring and reporting on the performance of our entire VMware infrastructure with Goliath Performance Monitor."*

-Jarian Gibson  
Virtualization Practice Manager, Choice Solutions



## Goliath Performance Monitor for VMware vSphere Features:

- ▶ Out-of-the-box plug-in to vCenter
- ▶ Real-Time Dashboards and Historical Reports
- ▶ Daily Health Check Reports
- ▶ One product for VMware vSphere ESX and ESXi Host, VM's, Applications, OS, and Hardware
- ▶ Comprehensive alerting on thresholds, events and faults
- ▶ Proactive remediation sequences
- ▶ Advanced troubleshooting with application > user > server correlation

### Host

- ▶ CPU Utilization
- ▶ Memory Utilization
- ▶ Active, Granted, Overhead, Ballooned, Shared, and Swapped Memory
- ▶ Storage Throughput, Latency, and IOPS
- ▶ Network Throughput
- ▶ Virtual Infrastructure Inventory

### VM

- ▶ VM Started, Off, or Paused Status
- ▶ CPU Utilization and Ready
- ▶ Memory Utilization
- ▶ Active, Granted, Overhead, Ballooned, Shared, and Swapped Memory Storage
- ▶ Disk Throughput, Latency, and IOPS
- ▶ Network Throughput and Utilization

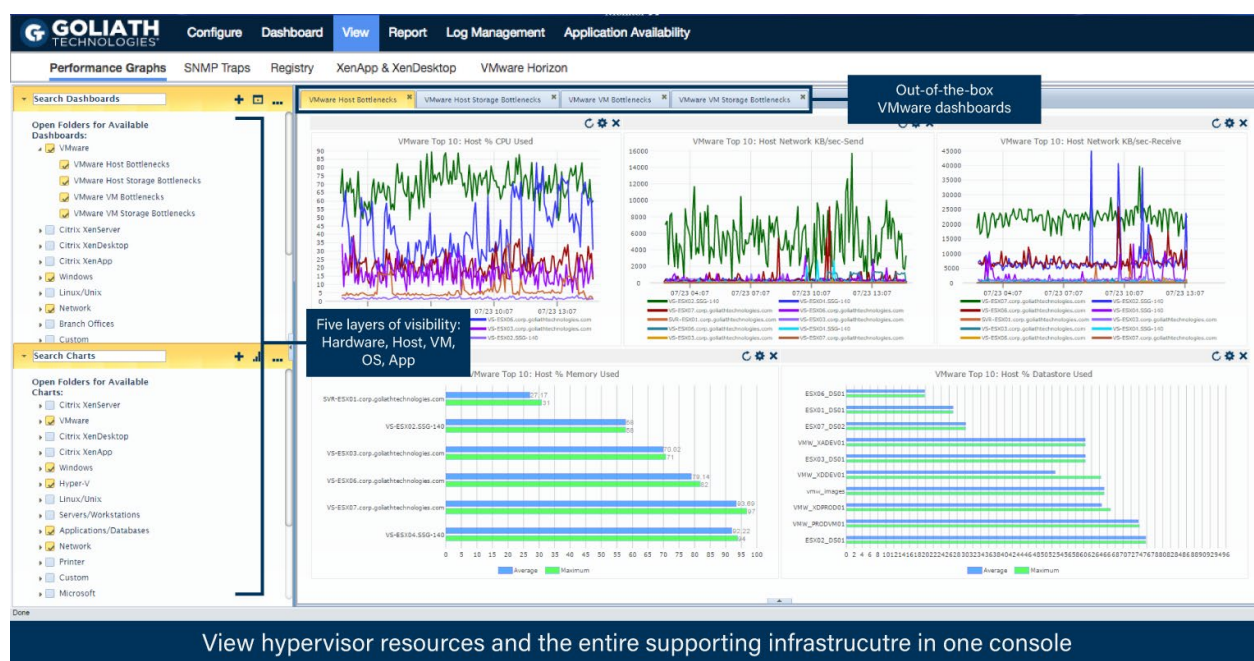
### Storage

- ▶ Utilization
- ▶ Virtual Disk Size
- ▶ Snapshots, Orphaned VMs, and Wasted Space
- ▶ Provisioned, Consumed, and Free Space

# Proactive Monitoring for VMware vSphere

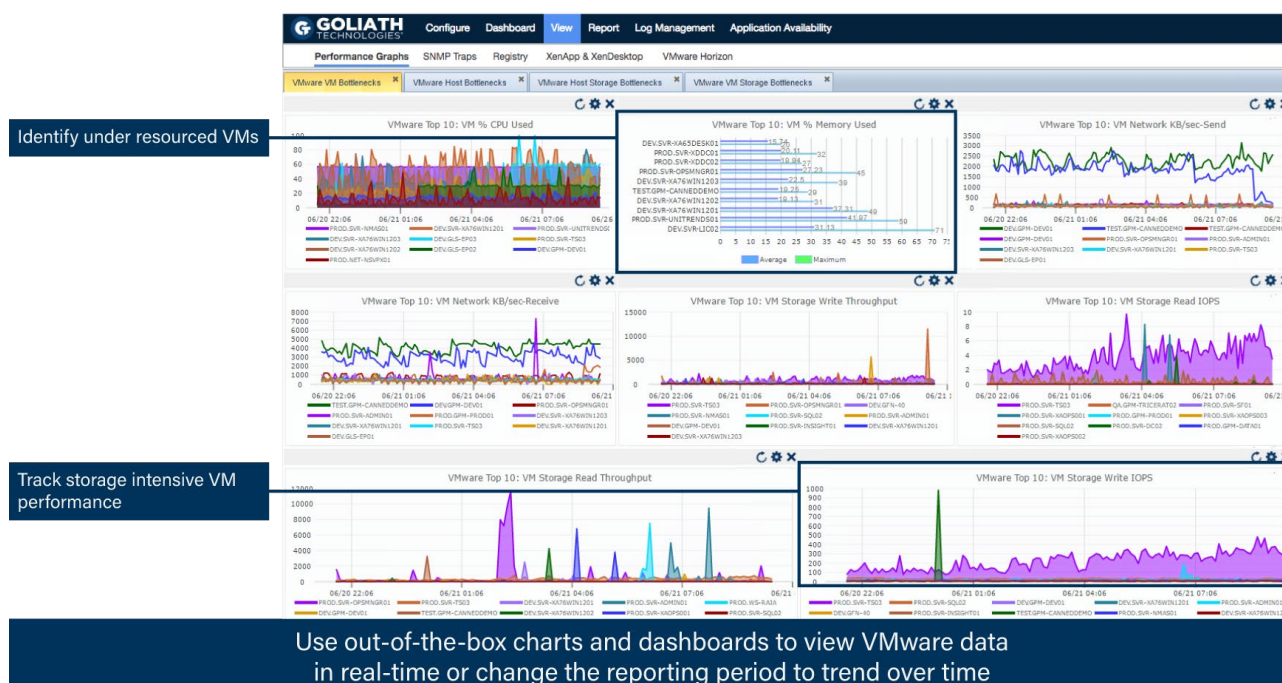
You can now improve application availability, and eliminate blind spots and false positives, while reducing the complexity of your VMware vSphere virtual environment by using one product to monitor your Host, VM's, Application, OS, and Hardware.

## Five Layers of Visibility – Hardware, OS and Applications, Virtual Machines, and Host

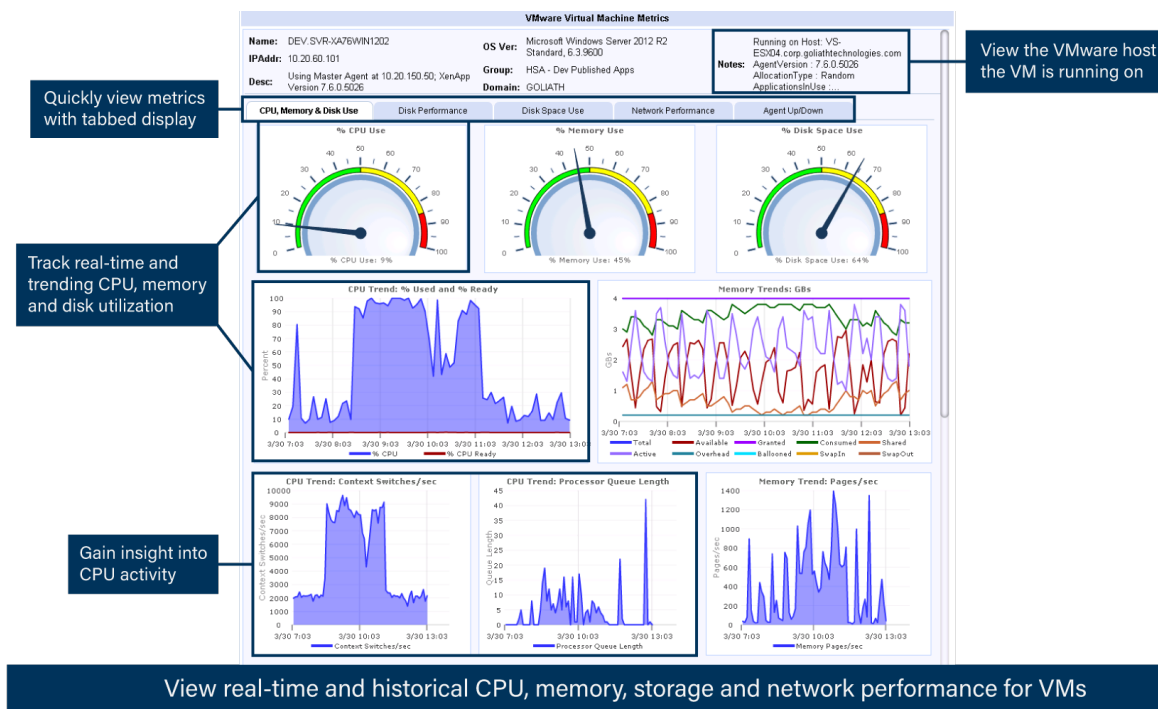


View hypervisor resources and the entire supporting infrastructure in one console

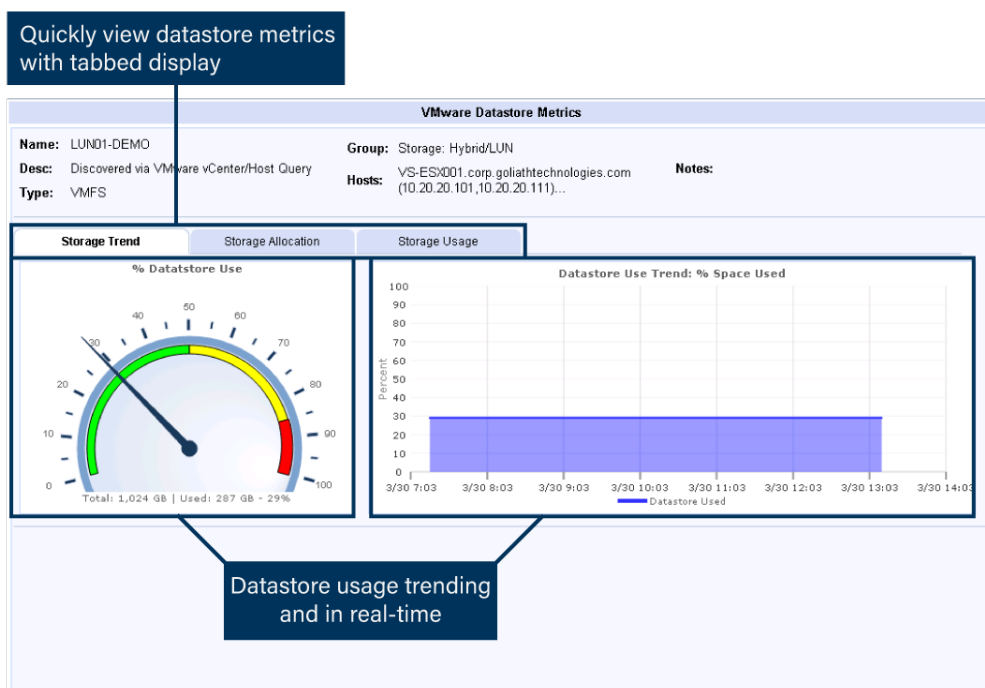
## Quickly Correlate CPU, storage and Network Bottlenecks at a Glance



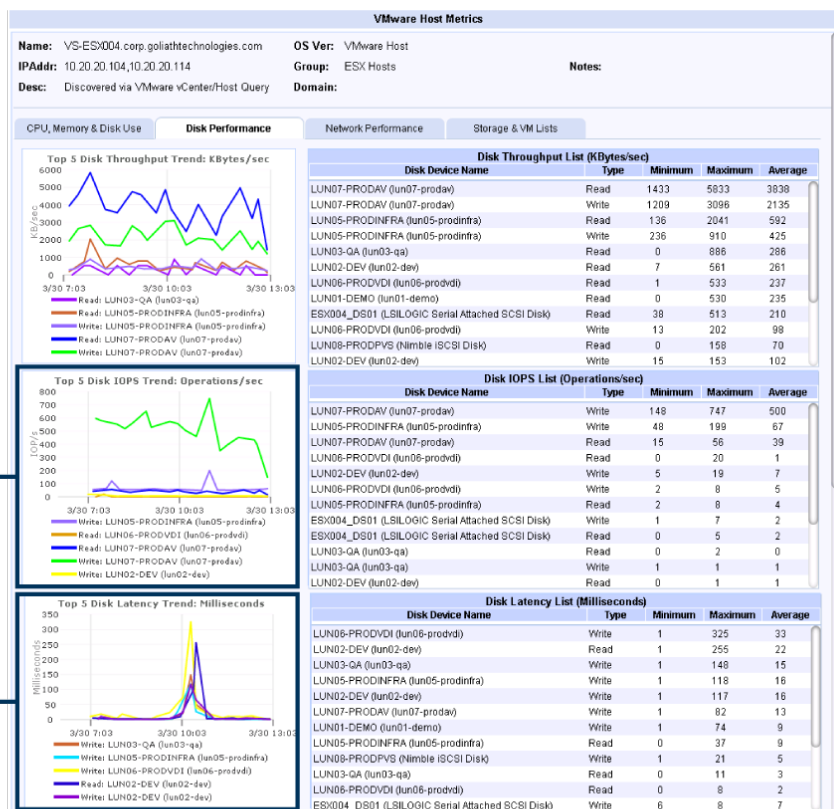
## Correlate CPU and Memory Utilization



## Breakdown of Storage Utilization



## Real-Time Disk Performance Trends for Hosts and VMs



View storage IOPS trends

Identify disk latency spikes

View disk performance metrics and identify bottlenecks over time

## Real-Time Heat Map



## Threshold-Based Alerting

**Specify Monitoring Rule Parameters and Properties**

\*Rule Name: VMware Host Alert

\*Description: Host reaching thresholds for CPU, Memory, and Network resource levels

\*Severity: Critical

**VMware CPU, Disk and Memory Parameters**

**CPU Performance Thresholds:**  
CPU Ready (Percent): 2

**Disk Performance Thresholds:**  
Throughput (KBytes/sec), Read: 2000 Write: 2000  
IOPS (Operations/sec), Read: Write:  
Latency (Milliseconds), Read: 200 Write: 100 Total:

**Memory Performance Thresholds:** ☒ Percent ☐ GB  
Active: 60 Consumed: 90  
Shared: Granted:  
Swap-in: Swap-out:  
Ballooned: Overhead:

Apply Cancel

Proactive notifications on CPU, storage and memory performance

Define custom thresholds

## Eliminate Alert Storms

**Specify Monitoring Rule Parameters and Properties**

\*Rule Name: Group Policy Failure - Folder Policy Exception

\*Description: Client side extension caught the unhandled exception

\*Severity: High

EventLogWatch **Schedule** Notifications Remediation Suspend Rule: ☐

Uncheck 'Alert Every Time' and set the 'Minimal Notification Interval' to inhibit being alerted too frequently for the same condition from the same server/device. Click the 'Help' link above, to the far right, for description of all these 'Schedule' options

Alert Every Time: ☐

Minimal Notification Interval: 15 Min(s)

When Any Single Event Occurs: 5 Times In 120 Seconds ☒ Combine All Events

☒ Include Description ☒ Log Only When Criteria Match

Active Only if Server 'Owns' ... ☐ ...This Cluster Group:

Save Cancel

Set notification intervals and escalation conditions to eliminate alert storms.



## Out-of-the-Box Monitoring Rules

Configure > Monitoring Rules

VMware specific alerts

Multiple alert types

Rule Name	Type	Severity	Description
VMware Virtual Machine Alert	ServerWatch	Critical	When this takes place ALL servers unreachable
VMware View - Web Component	WinServicesWatch	Caution	VMware View - Web Component (wstomcat)
VMware View - User Unable to Login	EventLogWatch	Caution	
VMware View - USB Arbitration Service	WinServicesWatch	Caution	Supports connectivity to attached USB devices
VMware View - Snapshot Provider	WinServicesWatch	Caution	VMware Snapshot Provider Service
VMware View - Security Gateway Component	WinServicesWatch	Caution	VMware View - Security Gateway Component (wstunnel)
VMware View - Script Host	WinServicesWatch	Caution	VMware View - Script Host (WSSH)
VMware View - PCoIP Secure Gateway	WinServicesWatch	Caution	VMware View - PCoIP Secure Gateway (PCoIPSG)
VMware vCenter Single Sign On	WinServicesWatch	Caution	VMware vCenter Single Sign On (ssotomcat)
VMware vCenter - VMwareVCMSDS	WinServicesWatch	Caution	VMware vCenter - VMwareVCMSDS (ADAM_VMWareVCMSDS)
VMware vCenter - VMware View Composer	WinServicesWatch	Caution	VMware vCenter - VMware View Composer (svid)
VMware vCenter - VMware Universal Access	WinServicesWatch	Caution	VMware vCenter - VMware Universal Access (vmware-ufad)
VMware vCenter - VirtualCenter Server	WinServicesWatch	Caution	VMware vCenter - VirtualCenter Server (vpxd)
VMware vCenter - Thread Ordering Server	WinServicesWatch	Caution	VMware vCenter - Thread Ordering Server (THREADORDER)
VMware vCenter - Snapshot Provider	WinServicesWatch	Caution	VMware vCenter - Snapshot Provider (vmvss)
VMware vCenter - Single Sign On	WinServicesWatch	Caution	VMware vCenter - Single Sign On (ssotomcat)
VMware vCenter - Inventory Service	WinServicesWatch	Caution	VMware vCenter - Inventory Service (vimQueryService)
VMware vCenter - Converter Standalone Worker	WinServicesWatch	Caution	VMware vCenter - Converter Standalone Worker (vmware-converter-worker)
VMware vCenter - Converter Standalone Server	WinServicesWatch	Caution	VMware vCenter - Converter Standalone Server (vmware-converter-server)
VMware vCenter - Converter Standalone Agent	WinServicesWatch	Caution	VMware vCenter - Converter Standalone Agent (vmware-converter-agent)
VMware Host Resource Availability	ServerWatch	Critical	Monitor VMWARE for CPU, Memory, Disk, Network and Virtual Storage Thresholds
VMware Host Alert	ServerWatch	Critical	
VMware DataStore Alert	ServerWatch	Critical	DataStore monitoring for available Storage threshold
VMware Datastore - Low Space	ServerWatch	Critical	

View real-time and historical CPU, memory, storage and network performance for VMs

## Alert Resolution

Specify Monitoring Rule Parameters and Properties

Alert Resolution Notes

A program, the Csid displayed in the message, tried to start the DCOM server by using the DCOM infrastructure. Based on the security ID (SID), this user does not have the necessary permissions to start the DCOM server

RESOLUTION

Verify that the user has the appropriate permissions to start the DCOM server.

To assign permissions:

1. Using Regedit, navigate to the following registry value HKCR\Csid\clsid value\localserver32
2. In the right pane, double-click Default. The Edit String dialog box is displayed. Leave this dialog box open.
3. Click Start, and then click Control Panel.
4. Double-click Administrative Tools, and then double-click

Save remediation instructions in Alert Resolution feature.

OK Cancel

Open All Select All Unselect All Close All

Save Cancel

Include remediation instructions with alerts to ensure consistency of fix actions and reduce resolution time.

# To see how Goliath can help you improve VMware vSphere end user experience:

Register for a demo: <https://goliathtechnologies.com/schedule-demo/>

Send us an email: [techinfo@goliathtechnologies.com](mailto:techinfo@goliathtechnologies.com)

Give us a call: 855-465-4284

