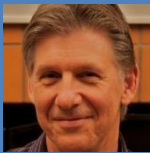


Proactive Performance Monitoring for Citrix XenServer

“The way it is architected separates it from the pack”



“We needed a product that offered the ability to monitor, analyze and report on the performance of XenServer, XenApp and XenDesktop at remote customer sites. Goliath Performance Monitor manages the required virtual server, application, and desktop elements, but the way it is architected to accomplish these elements separates it from the pack. Their Intelligent Agent, for instance, will save hours of setup time because of automated deployment. It also provides extensive data collection; and reporting, remediation, and log management; all essential to meeting our SLA’s.”

Frank Jones
President, CPU Inc.

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Proactive Performance Monitoring for Citrix XenServer

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

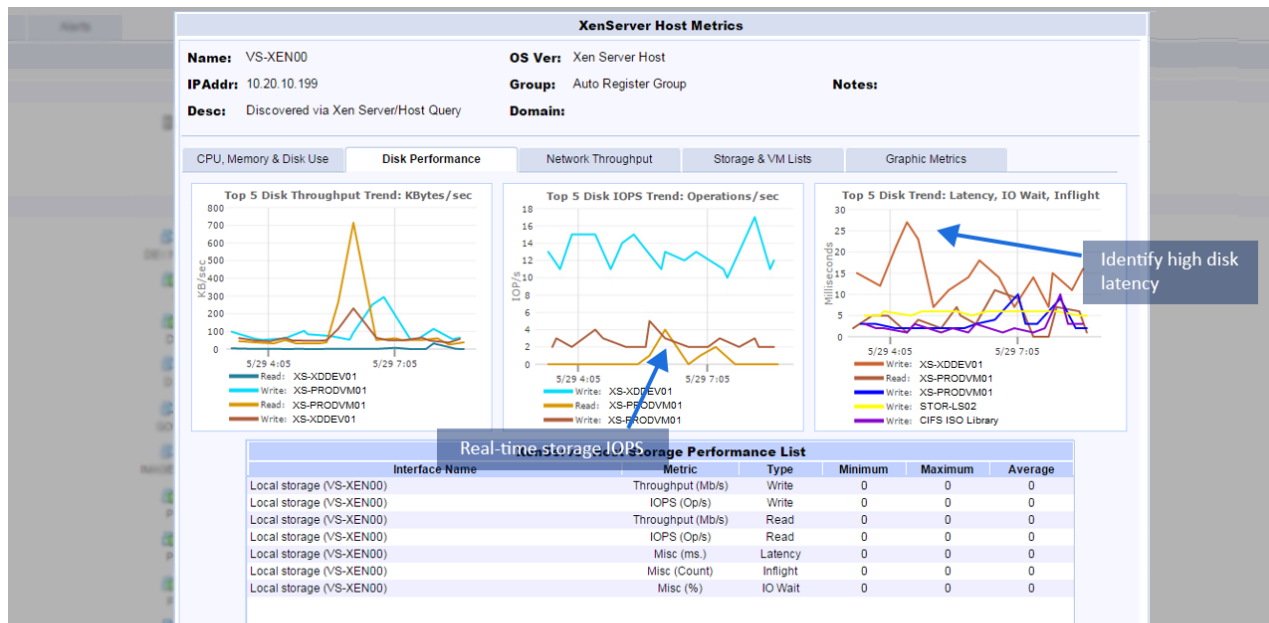
Five Layers of Visibility – Hardware, Citrix XenServer, VM, OS and Applications

The screenshot displays the Goliath Performance Monitor interface. At the top, a banner reads "Goliath Performance Monitor integrates into XenCenter". The main window shows a tree view on the left with folders for "Open Folders for Available Dashboards" and "Open Folders for Available Charts". The central area features several performance graphs, including "XenServer Top 10: Host % CPU Used" and "XenServer Top 10: Host Network KB/sec-Receive". A callout box points to the dashboard area with the text "5 Layers of Visibility: Hardware, VM, OS, and App". Another callout points to the top navigation bar with the text "Out-of-the-box XenServer dashboards". At the bottom, a blue bar contains the text "View Citrix XenServer and the entire supporting infrastructure from one console".

Correlate CPU and Memory Utilization

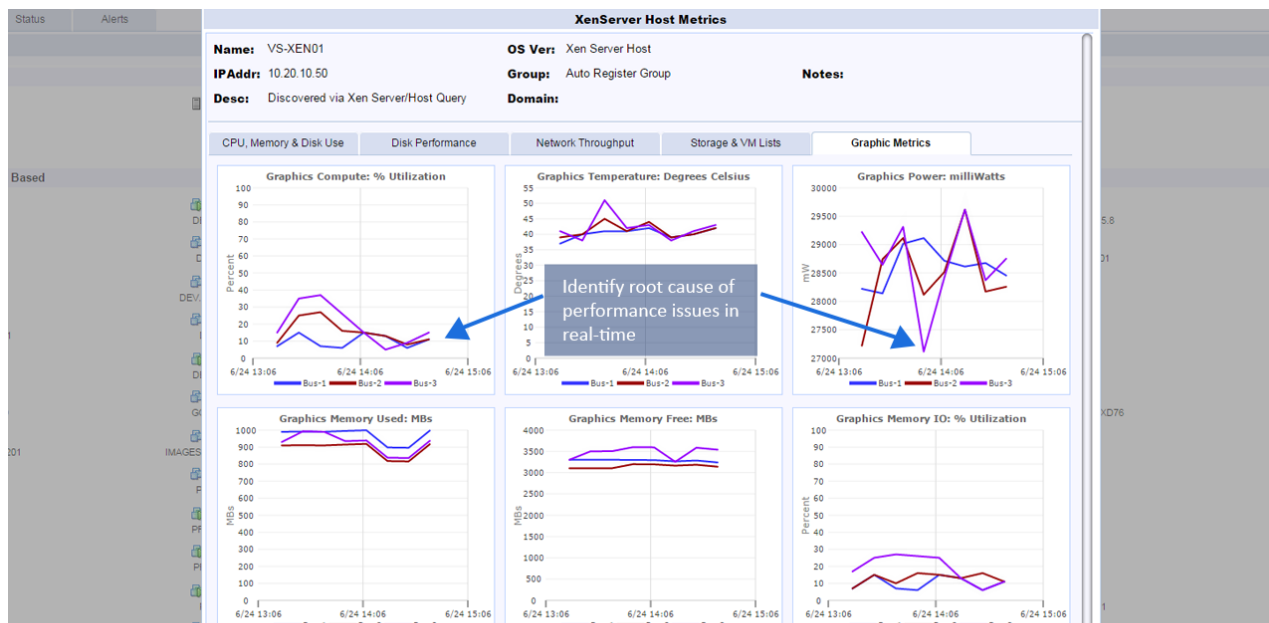
The screenshot shows the "XenServer Virtual Machine with Agent Metrics" dashboard for a VM named "DEV.SVR.XA76WIN1201". The dashboard includes a metadata section with fields for Name, OS Ver, IPAddr, Desc, Group, and Domain. Below this are several performance gauges and trend charts: "% CPU Use" (23%), "% Memory Use" (35%), and "% Disk Space Use" (36%). Trend charts show "CPU Trend: % Used", "Memory Trend: % Used", "CPU Trend: Context Switches/sec", "CPU Trend: Processor Queue Length", and "Memory Trend: Pages/sec". A callout box on the right says "View the XenServer host the VM is running on". Another callout on the left says "Quickly view metrics with tabbed display". A central callout says "Track real-time and trending CPU, memory, and disk utilization". At the bottom, a blue bar contains the text "View real-time and historical CPU, memory, storage and network performance for VMs".

Real-Time Storage IOPS & Performance



View host disk performance metrics and see how they trend over time

NVIDIA GRID Card Metrics



Real-Time GPU CPU, Memory, Power & Temperature Trends

Storage Utilization

The screenshot displays the 'XenServer Storage Repository Metrics' window. It includes a metadata section with fields for Name, Desc, Type, Group, and Hosts. Below this are three tabs: 'Storage Trend', 'Storage Allocation', and 'Storage Usage'. The 'Storage Trend' tab is active, showing a gauge for '% Datastore Use' and a line chart for 'Datastore Use Trend: % Space Used'. A callout box points to the tabs with the text 'Quickly view Datastore metrics with tabbed display'. Another callout points to the gauge and chart with the text 'Datastore usage trending and in real time'. At the bottom of the screenshot, a blue banner reads: 'Drill into Datastore metrics to view utilization, allocation, and how these metrics trend over time'.

Real-Time Heat Map

The screenshot shows the 'Physical/Virtual Category Status' dashboard. It features a grid of icons representing hosts and virtual machines. A callout box points to the 'Alerts' tab with the text 'View all alerts for the environment'. Another callout points to a host icon with the text 'Drill into host metrics'. A third callout points to a VM icon with the text 'Identify powered off VMs at a glance'. A fourth callout points to a red icon with the text 'Click the red icon to view alerts specific for that machine'. A fifth callout points to a green icon with the text 'Confirm the agent is connected'. At the bottom of the screenshot, a blue banner reads: 'Real-time heat map turns hosts, VMs, and storage red if an error or fault condition takes place'.

Threshold-Based Alerting

Specify Monitoring Rule Parameters and Properties

*Rule Name: Citrix XenServer Host Alert
*Description: Host reaching thresholds for CPU, Memory, and Local Disk
*Severity: Critical

Xen Host CPU, Disk and Memory Parameters Define custom thresholds

CPU Performance Thresholds:
CPU C-State (Percent): 2 CPU P-State (Percent): 2
CPU Load Average (Percent): 20

Disk Performance Thresholds:
Throughput (MBytes/sec): Read: 2000 Write: 2000 Total:
IOPS (Operations/sec): Read: 250 Write: 250 Total:
Latency Average(ms): 200
IO Wait (Percent): 5
Inflight (Count): 10

Memory Performance Thresholds:
Reclaimed (MBs): 1230 Reclaimed Max (MBs): 1230

Apply Cancel

Proactive notifications on CPU, Storage and Memory performance

Customize alert threshold appropriately based on your environment

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:

Set notification intervals and escalation conditions to eliminate alert storms

Out-of-the-Box Monitoring Rules

Alert Resolution

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

Goliath Performance Monitor for Citrix XenServer Features:

- Out-of-the-box plug-in to Citrix XenCenter
- Real-Time Dashboards and Historical Reports
- Daily Health Check Reports
- One product for Citrix XenServer 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