Complete Virtual Infrastructure Performance Visibility

Standardize Your Virtual Infrastructure Operations

With virtualization and cloud services adoption increasing, the network and server operations teams need to expand and standardize their monitoring and troubleshooting capabilities to include virtual server infrastructure and cloud services. Existing virtualization tools are either not available to the operations teams or the specialized tools lack the standard operations center functionality required to proactively ensure application performance and reliability. With SevOne, IT Operations teams get complete and immediate visibility into their virtual infrastructure and reduce their costs and improve service levels through consolidation and standardization of monitoring and performance management tools.

All-in-One Solution

The SevOne Performance Appliance Solution (SevOne PAS™) gives IT Operations complete visibility into both virtual and physical environments, through one integrated platform. No matter the data collection source, SevOne builds a dynamic baseline of normal behavior for all performance indicators, and sets threshold-based alerts for when actual performance levels deviate from their historical norms. This enables IT operations staff to monitor and proactively manage their virtual infrastructure using the same reporting consoles and workflows used to manage their network and servers. Furthermore, SevOne addresses the main limitations of specialized virtualization vendor's tools by monitoring what is happening inside virtual machines (VMs) and across all devices at the network traffic level.

The SevOne PAS can scale to millions of objects and monitor the entire network, server, and virtual infrastructure, with no practical limits. Based on a peer-to-peer architecture, each appliance is both a collector and a reporter. This provides linear scalability in collection, monitoring, and reporting, as proven by our largest customers who manage over 40,000 devices. Any user, whether a network operations center (NOC) engineer or a specialized VM administrator, can log into any one of the SevOne peer appliances and get exactly the same dashboard and reporting interface. This all-in-one solution approach facilitates a rapid troubleshooting workflow and efficient communication amongst the NOC and virtualization teams to ensure service levels are proactively met.
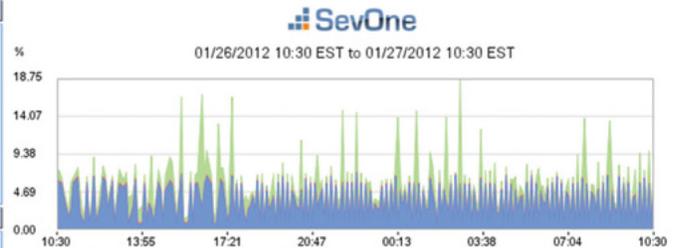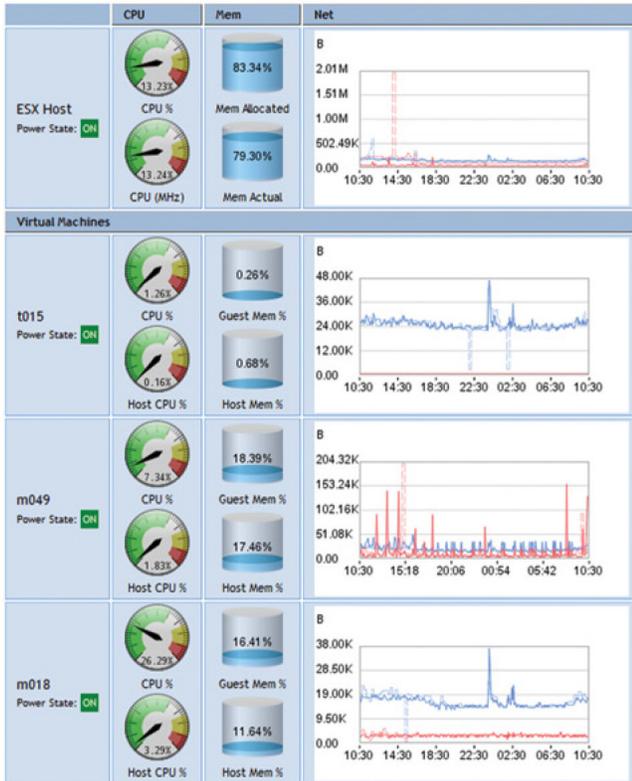
Integrated VM Monitoring Capabilities

VM Monitoring adds to the agent-less server and application monitoring capabilities available in the SevOne PAS via SNMP, WMI, JMX, and process monitoring. The SevOne VM monitoring plug-in and VM Browser uses the VMware vSphere API to dynamically discover the ESX hosts associated with a vCenter. An administrative user can view and select the host devices and their guest VM objects for monitoring; new hosts are automatically discovered as they are added to a vCenter. Key performance indicators are then collected from vCenter and the ESX servers.

> *"The ability to monitor and troubleshoot the performance of virtual servers and applications together with the network infrastructure is key to the mainstream acceptance of virtualization and multi-tenant cloud services. SevOne enables service providers and enterprise IT operations staff to consolidate disparate tools into an all-in-one performance management system."*
>
> Bernd Harzog
> *Analyst at The Virtualization Practice*

Feature/Function	Benefit
vSphere API integration	Auto discover and collect metrics from vCenter and ESX host servers
Multiple vCenter support	Global view of your entire virtual infrastructure or support multiple tenants
vMotion Support	Maintains history of VM metrics when moved
Plug-in architecture	Proven high frequency collection, baseline and threshold-based alerting
Alerts console	Integrated alerts and troubleshooting workflow across entire infrastructure
Dashboard view	Single console view of multiple graphs and tabular reports
Instant graphs	Real-time (last poll) graphical reports of multiple performance indicators
Detachable and scheduled reports	Increase productivity and communication by distributing reports to stakeholders
All-in-one solution	Monitor all layers - OS and processes, application (J2EE, .Net) and network
Appliance solution	Lowest TCO - no separate database or collection and reporting servers required

By leveraging the SevOne plug-in architecture, all of the SevOne capabilities for polling, monitoring and reporting are available for ESX hosts and VM guest, object or performance indicators. A Quick Status view as shown below can be created with the click of a button, and custom dashboards can be generated from the SevOne Report Manager.
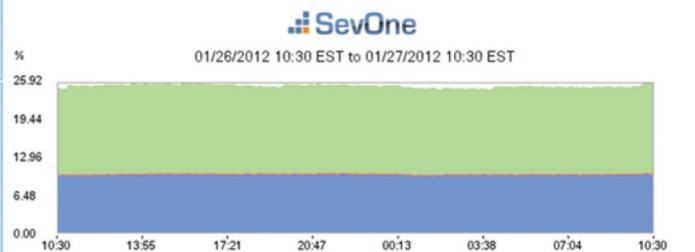
Quick Status of an ESX Host and Guest VMs

Through SNMP or WMI monitoring, SevOne can provide an OS-level view inside virtual and physical servers. Users can drill down into the guest OS and see statistics about the OS as well as the processes running on the guest. Using the SevOne JMX and WMI .NET monitoring capabilities, users can also monitor and troubleshoot the response times of individual application components and servlets, as well as server resource utilization. SevOne stores raw performance metrics for 12 months to provide complete historical accuracy when needed to review and trend past performance levels.

Platform Requirements

The SevOne PAS is delivered as a turn-key hardware or virtual appliance solution. No additional software or hardware is required, other than purchasing and deploying VMware vSphere vCenter. The SevOne PAS footprint is one third that of comparable solutions, supporting your green IT initiatives.

About SevOne

SevOne, Inc. delivers the industry's fastest, most scalable, and comprehensive real-time network monitoring, troubleshooting and performance reporting solution. SevOne created a proprietary, next-generation distributed technology, called the SevOne Cluster™, that combines the cutting edge principles behind peer-to-peer sharing and big data clusters to scale smoothly so that millions of network elements, across all monitoring technologies, can be monitored and provide a single view to the user. Hundreds of customers, including the top cable companies in North America, wireless network and managed service providers, and top financial services institutions rely on SevOne.