

# SPI for VMware Sales Guide



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# SPI for VMware Value Proposition

HP OpenView Operations provides business service-driven operations from Windows and Unix. The SPI for VMware extends OVO business service-driven operations to your ESX Server environment maximizing the return on your ESX Server investment. This is accomplished by providing performance, configuration, and event monitoring services allowing you to visualize your ESX Server farms. The SPI for VMware complements and works with the ESX Server tools for complete ESX Server farm management.

## **Service-driven Operations Management**

The SPI for VMware lets you manage your operations center from a traditional event-management console, but also includes a unique way to visualize, manage and report on your business services. This means you can provide innovative value to your customers by helping them understand the business impact of IT infrastructure availability and performance issues.

## **Integrated Performance and Availability Management**

At its core, the SPI for VMware provides central operations and performance management letting you auto-discover the ESX Servers, auto-deploy management rules and policies, collect and automatically respond to events, view and handle ESX Server events and messages, generate reports and graphs, and view business critical services in a color-coded topology map for efficient root cause drill-down and troubleshooting. Using the combined event and performance agent monitors, the SPI for VMware monitors ESX Servers throughout your enterprise reducing downtime, maintenance, and configuration effort.

## **A Scalable Solution**

The SPI for VMware implements a distributed monitoring architecture that is capable of supporting hundreds of ESX Servers and thousands of VMs. Enhanced flexibility in the management model allows you to configure manager-of-manager hierarchies and establish follow-the-sun, backup server and competency center policies. You get in-depth intelligence for managing ESX Server systems and applications

# SPI for VMware Key Features

## **Service Mapping**

- Dynamic ESX Server to Virtual Machine mapping
- Dynamic Virtual Machine guest to ESX Server dependency mapping

## **Monitoring**

- No software is loaded on the ESX Servers themselves
- All connections are SSL
- Over 100 ESX Server and Virtual Machine metrics monitored
- ESX Server & VM statistics monitored such as: CPU, Disk, Network, I/O
- ESX Server and VM events

## **Event Monitoring**

- Performance / configuration driven events
- Suspended Virtual Machines
- Powered off Virtual Machine
- Powered on Virtual Machines
- Moved Virtual Machines
- New Virtual Machine
- Stuck Virtual Machine
- Service Maps / Root Cause

## **Reporting**

- 25+ reports
- ESX Server resource utilization
- Breakdown of resource per VM – CPU, Disk, Network, I/O
- ESX Server system configuration information
  - Max number of VMs seen
  - VM operating system type
  - VM availability

## **Graphing**

- Near real-time ESX Server data visualization and analysis
- Near real-time VM data visualization and analysis
- Graph directly from OVOW console and Service Map
- ESX Server and VM Configuration Monitoring

## **Tools**

- SPI for VMware configuration and control
- VMware MUI launch to ESX Server from Service Map
- VMware vmkusage launch from Service Map

## SPI for VMware Key Benefits

- Automatically reports on changes in ESX Server farms and their impact on IT service delivery
- Enables rapid response to incidents detected in ESX Server farms, ESX Servers, and VMs
- Integration of ESX Server configuration, performance, and alarm events into OVO Service Management infrastructure
- By analyzing performance information gathered by the SPI for VMware, You can understand resource usage patterns of the ESX Server farms, ESX Server, and the VMs yielding better resource utilization and capital planning
- ESX Server farm event capture and storage in OVO supports post incident forensic analysis
- Better operational execution by reducing false alarms or working on previously solved indents through extensive use of message auto-acknowledgement
- Enables the creation of standard responses to known events reducing the need for direct human intervention
- Simple licensing. One license per ESX Server. Unlimited VMs. No OV Agent software on the ESX Servers eliminating all ESX Server and monitoring software conflicts that could potentially impact 100s or 1000s of VMs.

# SPI for VMware Cookbook

## SPI for VMware Value Proposition

The SPI for VMware extends OVO business service-driven operations to your ESX Server environment maximizing the return on your ESX Server investment. This is accomplished by providing performance, configuration, and event monitoring services allowing you to visualize your ESX Server farms

### **SPI for VMware helps to:**

- Maximize the availability of ESX Servers
- Maximize utilization of ESX Server hardware
- Visualize your ESX Server configuration – Host to VMs and VM to Host
- Decrease problem resolution times

### Target Customer

SPI for VMware target customers are companies with a significant investment in or planned investment in VMware technologies. This type of customer is higher on the IT maturity curve, understanding the need for service management of their ESX Servers. CIOs, IT department managers, Ops center managers, ESX Server Administrators, and Service managers.

### Key Selling Points

- Out of the box service maps linking Hosts to VMs and each VM to the current host
- Agent-less architecture eliminates risk of ESX Server monitor agent conflicts that can negatively impact 100s or 1000s of VMs
- Availability and performance monitoring in the IT infrastructure insure business services and SLA performance
- Improved ESX Server and VM availability
- Increased IT Staff productivity
- Centralized control of ESX Servers
- Complements ESX Server administration tools such as VMware VirtualCenter.



### GreenLight Deal (Ideal Deal)

- Wants to manage ESX Server farms
- Has bought into the HP OpenView value proposition
- Is higher on the IT Management maturity curve and understands the potential benefits of portfolio integration points.
- Has implemented OVO for Windows
- Wants to leverage investment in Windows expertise in IT



### Yellow Light Deal (caution Deal)

- Has limited implementation of OVO for Windows
- Has a tactical approach to operations management
- Have many in-house written tools
- Is very hardware focused using tools such as Systems Insight Manager or IBM Director

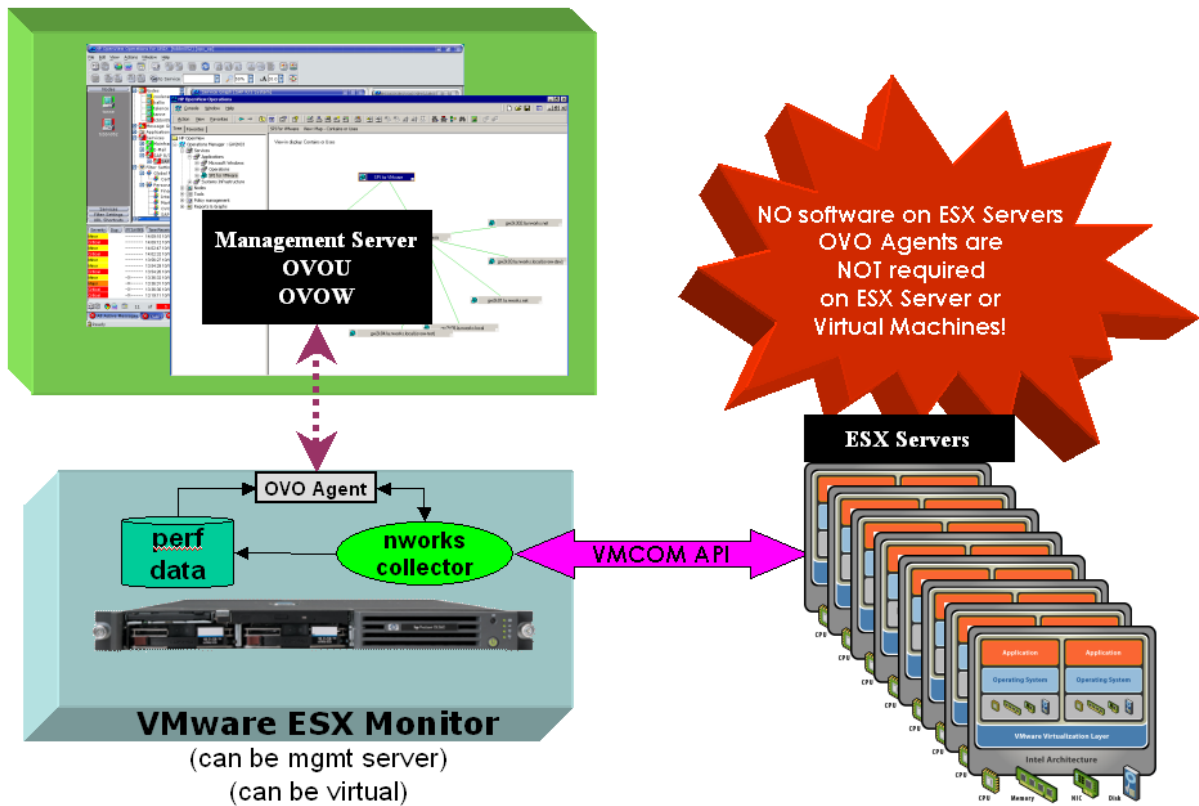


### Red Light Deal (avoid deal)

- Small customer < 4 ESX Servers in a non-enterprise environment
- Low or no operations management
- Virtually no IT staff
- Not mature with regards to IT Management, or thinks management should be free
- Thinks they can 'write a few tools' to manage their environment

# Architecture

The SPI for VMware implements an ESX Server Monitor architecture leveraging the innate capabilities of the OpenView Operations management infrastructure. Operators don't have to learn a new management interface to manage the ESX Servers. One key benefit of the SPI for VMware is that no monitoring software is installed on the VMware ESX Servers themselves; instead, the SPI for VMware Collector is runs on a VMware ESX Monitor (VEM) gathering and evaluating ESX Server data remotely. This design ensures the continual operation of the ESX Servers by avoiding conflicts between the monitoring software and ESX Server kernel. The diagram below shows an overview of the SPI for VMware architecture.



## SPI for VMware Architecture

The OVO Management Server is responsible for distributing monitoring policies to the VEMs. The OVO Management Server receives configuration information, alerts and performance data from the OV Agent installed on the VEMs. Centralization supports standardization.

One or more VEMs can be configured. The number of ESX Servers, the location of the ESX Servers, and the number of VMs hosted on the ESX Servers typically determines the number of VEMs required. This provides the scalability required by YOU to manage tens, hundreds or thousands of ESX Servers.

# VMware Terms Defined

**ESX Server** – A virtual infrastructure software product for partitioning, consolidating and managing systems in mission-critical environments. ESX Server and VMware Virtual Infrastructure Nodes provide a highly scalable virtual machine platform. ESX Server is VMware's strategic datacenter product.

**GSX Server** – A virtual infrastructure software product built on top of a Windows or Linux Operating System for partitioning, consolidating and managing systems in mission-critical environments. ESX Server and VMware Virtual Infrastructure Nodes provide a highly scalable virtual machine platform.

**Guest** – Also referred to as a Virtual Machine. An operating system such as Windows NT, Windows 2000, Windows 2003, Linux, or Netware running in the ESX Server virtual environment. From the perspective of the VM, it appears that it has complete command of the hardware components it is running on when, in actuality, these hardware components are virtual. VMs and the applications running on them can be managed just like a physical server using the OV Agent coupled with the appropriate SPIs

**Host** –The physical system such as a Proliant DL560 or DL585.

**VirtualCenter (VC)** – VMware VirtualCenter is a virtual infrastructure element manager. It provides provisioning of servers and other key management features, but it is not directly integrated into OVOW. The SPI for VMware works with and leverages VC into OpenView Operations.

**Virtual Machine (VM)** – Also referred to as a Guest. An operating system such as Windows NT, Windows 2000, Windows 2003, Linux, or Netware running in the ESX Server virtual environment. From the perspective of the VM, it appears that it has complete command of the hardware components it is running on when, in actuality, these hardware components are virtual. VMs and the applications running on them can be managed just like a physical server using the OV Agent coupled with the appropriate SPIs.

**VMotion** –Using VMotion, live servers can be moved from one ESX Server to another providing a zero-downtime maintenance cycle and continuous workload consolidation.

**Workstation** – A virtual infrastructure software product built on top of a Windows or Linux Operating System for testing or development environments.

# Differentiators & Probing Questions

When it comes to mission critical business transaction and service management in heterogeneous distributed environments, our target customers concerns will be about enabling business-driven intelligence, instant intelligence, and active intelligence.

## Differentiators

- Service driven operations management – competitors don't provide the service link between IT infrastructure and business services.
- Ability to interact with ESX Servers to resolve issues using Tools and Operator actions.
- Management by exception, limited network utilization.
- Complements and extends VirtualCenter and Systems Insight Manager VMware Management Pack

## Probing questions – it's this easy!

- Do you need to maximize the utilization of your ESX Server hardware?
- Do you have the need to your ESX Server farms from a single pane of glass?
- Do you want the ability to visualize the business impact of ESX Server resource issues and events in your IT environment through service views, reports and graphs?
- Do you want to manage your ESX Servers, the servers hosted on the ESX Servers and the applications from a single integrated point?
- Would you like to manage business services, not just elements and events?
- Do you need to manage across both your traditional IT and you e-business infrastructures?

## The SPI for VMware and OV Operations for Windows meets the challenge!

- **service-driven** - manages your business in addition to your ESX Servers
- **end-to-end paradigm** - manages from the h/w chassis to the business transaction
- **comprehensive** - manages ESX Servers, Windows *and* Unix, SQL *and* Oracle, IIS *and* Apache, .NET, Active Directory, *and* J2EE
- **scalable** - 1000+ servers from a single console; advanced mgr of mgr architecture
- **integrated** - allows to seamlessly link your Windows mgt into your enterprise mgt

## Additional Resources

- SPI for VMware product documentation including presentations and Administrator Guide are available at the nworks web site:  
[nworks.net/vmware](http://nworks.net/vmware)
- SPI for VMware videos are available  
[nworks.net/vmware/videos.php](http://nworks.net/vmware/videos.php)  
They include product presentations and installation procedures
- Evaluation copies of the SPI for VMware are available by sending email to:  
[nworks\\_sales](mailto:nworks_sales)
- Information on HP OpenView for Windows is available at: [openview.hp.com](http://openview.hp.com)
- Information on VMware is available at: [vmware.com](http://vmware.com)
- PreSales support is available at: [nworks\\_sales](mailto:nworks_sales) or call +1 310 567-6903
- Technical support is available at: [nworks\\_support](mailto:nworks_support)