



# VMware Update Manager

## Manage and Automate Virtual Infrastructure Tracking and Patching

### AT A GLANCE

VMware® Update Manager manages and automates patch management and tracking of VMware ESX Server hosts and select Microsoft and Linux virtual machines. This component of VMware Infrastructure 3 enables automatic enforcement of compliance to mandated patch levels making data centers more secure against vulnerabilities.

### BENEFITS

- Secure the data center against vulnerabilities
- Reduce time spent patching virtual machines and ESX Server hosts
- Reduce risks associated with patching of virtual machines
- Enforce higher levels of compliance to patch standards
- Minimize or eliminate downtime related to host patching

### What Is VMware Update Manager?

VMware Update Manager is an automated patch management solution for VMware ESX Server hosts, as well as for select Microsoft® and Linux\* virtual machines. This component of VMware Infrastructure 3 scans the state of the physical VMware ESX Server hosts, as well as select guest operating systems, compares them with baselines set by the administrator and then applies updates and patches to enforce compliance to baselines.

VMware Update Manager is fully integrated with VMware Dynamic Resource Scheduler (DRS) for non-disruptive ESX Server and ESX Server 3i host patching. VMware Update Manager scans and remediates online, as well as offline/suspended virtual machines and online ESX Server hosts. The software also reduces the risk of virtual machine patch failures with a snapshot feature that can rollback a patched virtual machine to a known working state if there are any problems.

### How Is VMware Update Manager Used in the Enterprise?

Operating systems and applications require patching, reconfiguration or other solutions to stay secure, perform well and protect against vulnerabilities. Maintaining a consistent set of operating systems and applications with particular patch levels helps reduce the number of vulnerabilities and issues in an IT environment. Reducing the complexity and variation systems in the data center eases management burdens and reduces security risks.

VMware Update Manager is used to make data center environments more secure and manageable by helping IT administrators:

- Track vulnerabilities within virtual infrastructure comprising ESX Server hosts as well as Microsoft and Linux virtual machines
- Bring any vulnerable ESX Server host or virtual machine into compliance automatically, with user-defined patch standards

### How Does VMware Update Manager Work?

VMware Update Manager enforces compliance to patch standards in four steps:

- **Step 1: Gather latest patches.** VMware Update Manager automatically gathers the latest patch data via the Internet from VMware, as well as third-party application vendors such as Microsoft, Adobe® and Mozilla®.

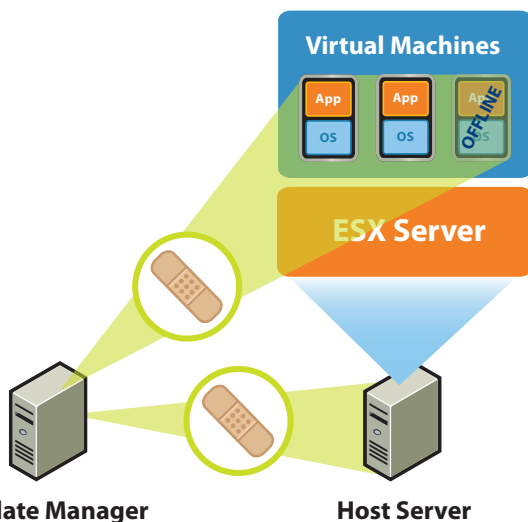


Figure 1: Patching ESX Server hosts, online as well as offline virtual machines with Update Manager.

\*Linux virtual machines can only be scanned, not remediated.

## KEY FEATURES

- **Step 2: Set baselines.** The information collected by Update Manager is used to set baselines. Baselines contain one or more service packs, patches and /or updates. The baseline data that Update Manager gathers gives IT administrators granular control in defining patch levels. These baselines updates can be static baselines defined manually or dynamic baselines that are set automatically depending on the significance of the patch data from the system vendor.
- **Step 3: Compare physical hosts and virtual machines against the baselines.** VMware Update Manager scans the state of the physical VMware ESX Server hosts as well as select Microsoft and Linux guest operating systems and compares it with baselines set by the administrator. Scans can be initiated on entire data centers, clusters, resource pools, templates, folders or individual hosts and virtual machines. They can be run immediately or scheduled as necessary. After a scan is complete, non-compliant machines are flagged for patch updates.
- **Step 4: Remediate the selected set of virtual machines and ESX Server hosts.** VMware Update Manager supports either manual or scheduled patching of the non-compliant virtual machines. If a reboot is required on a manual patch or update, the administrator has the option to reboot immediately or delay system restart by up to 60 minutes.

### Virtual machine patching\*

To reduce the risk of virtual machine patching failures, VMware Update Manager automatically takes a snapshot of the virtual machine state prior to applying a patch. Snapshots are stored for a user-defined period so administrators can rollback a patched virtual machine to a known working state if there are any problems. VMware Update Manager also patches offline or suspended virtual machines. When remediating offline or suspended virtual machines, VMware Update Manager disables their NICs during the patching so the network is not exposed to non-compliant virtual machines.

### ESX Server host patching

VMware Update Manager also enables non-disruptive patching of ESX Server hosts in conjunction with VMware DRS. VMware Update Manager puts hosts in maintenance mode, one by one and live migrates virtual machines to other hosts while patching. On completion of host patching, the virtual machines are migrated back and VMware Update Manager then moves on to patch the next host in the cluster.

\*Remediation is applicable to Microsoft virtual machines only. Linux virtual machines can currently not be remediated by VMware Update Manager

## Key Features of VMware Update Manager

- Automated patching of VMware ESX Server hosts, select Microsoft and Linux virtual machines as well as applications such as Adobe and Mozilla
- Automated scanning of virtual infrastructure for compliance to static or dynamic IT standards
- Automated snapshots prior to patching to enable rollback in case of patching failures
- Secure offline virtual machine patching to reduce the risks associated with non-compliant systems joining the corporate network
- Integration with VMware DRS for non disruptive VMware ESX Server host patching

## How Can I Purchase VMware Update Manager?

For more information on how to purchase, refer to the "How to buy" page <http://www.vmware.com/products/vi/buy.html>

## Product Specifications and System Requirements

Please refer to the product documentation for system requirements.

*"VMware Update Manager is going to be the most significant new feature of the ESX Server 3.5. Update Manager will dramatically reduce our patching management manpower requirements and in doing so, will improve the overall management of our infrastructure. Ultimately, by enabling us to automate the process of tracking and updating patches to our ESX hosts from a single console, Update Manager will let us be more responsive to business needs."*

Faan DeSwardt, Director of Enterprise Architecture, Wyse Technology