



VMware Server Tips & Tricks

VMware Server software allows you to optimize and manage your IT infrastructure from the desktop to the data center, by virtualizing your computing, storage and networking systems. VMware products let you create enterprise-class virtual machines that increase server and other resource utilization, improve performance, increase security and minimize system downtime, reducing the cost and complexity of delivering enterprise services. And by leveraging your existing technology, VMware software lets you roll out of new applications with less risk and lower platform costs.

To help you get even more value from your VMware software installation, VMware developers and engineers have compiled a set of tips and tricks that will enable you to optimize your software infrastructure. The following sections will highlight just a few of these helpful methods.

Using the VMware Server Web-Based Management User Interface

The Web-based management user interface is an optional install for VMware Server. This interface can be accessed from a browser on a remote PC. The interface enables you to control (power on, suspend, resume, reset, and power off) the virtual machines on that host.

You can also connect the VMware Server Console to a given virtual machine for hands-on management. This will enable you to:

- View details about each virtual machine, including system summary, hardware information, any connected users, and a log of recent events
- Secure console and management interface sessions with SSL (by default this is set to "ON")
- Download the VMware Virtual Server Console to a PC
- Control the start order and start/stop delay time of auto-start between virtual machines

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Tips for Using VMware Command Line Utilities

There are many command line utilities available with VMware Server, including:

vmware-vdiskmanager

You can use the virtual disk manager command for the following tasks:

- Creating virtual disks with a particular disk controller type, size, type of virtual disk, for example, pre-allocated, growable, split in to 2GB files. (Code Example: `vmware-vdiskmanager.exe -c -s 8Gb -a lsilogic -t 2 myscsiDisk.vmdk`)
- Switching the virtual disk type from pre-allocated to growable, or vice versa. When you change the disk type to growable you reclaim some disk space. You can shrink the virtual disk to reclaim even more space. (Code Example: `vmware-vdiskmanager.exe -r sourceDisk.vmdk -t 0 destinationDisk.vmdk`)
- Expanding the size of a virtual disk so it is a larger size specified when you created it. (Code example: `vmware-vdiskmanager.exe -x 36Gb myDisk.vmdk`)

- Defragmenting virtual disks. (Code example: `vmware-vdiskmanager.exe -d myDisk.vmdk`)
- Preparing and shrinking disks without powering on the virtual machine for Windows hosts. (Code example: `vmware-vdiskmanager.exe -k myDisk.vmdk`)
- VMware Server Console log file locations
- Management User Interface log file locations
- Virtual machine log file tips

vmrun

There are many command line options that can be used with the `vmrun` utility. One of the most popular is snapshot feature, which lets you take a snapshot of a virtual machine. Tips for using the `vmrun` command include:

- Be sure to list all running virtual machines
- In a development / QA environment, automate taking snapshots before installing the test application
- Automate the snapshot of all virtual machines before applying Windows updates
- Automate the revert to snapshot or deletion of a snapshot
- Code Example: `vmrun snapshot /var/lib/vmware/VirtualMachines/Windows 2000/w2k.vmx`

vmware-cmd

The most common use of the `vmware-cmd` command is in a pre- and post-backup script. It is recommended that you don't back up a virtual machine that is running. If you have a machine that needs to be running 24x7, it is better if you install a backup agent in the operating system.

More Tips and Tricks

For more helpful tips and tricks, watch the VMware Tips and Tricks Webinar at: www.vmware.com/servertipsandtricks or visit us on the Web at www.VMware.com. The VMware Tips and Tricks Webinar covers:

- Best practices for backing up virtual machines, including tips for backing up virtual machines with the power off and backing up virtual machines that require constant uptime
- Securing VMware virtual machines and the host: Dedicating a physical host network adapter for the virtual machines on a different subnet than the host.

The Webinar concludes with a variety of VMware Server troubleshooting tips, including: