

Hyper*fast* Setup: The Sentry Power Manager (SPM) Virtual Solution – APPV

Welcome to SPM and Virtualization! This document is a *fast start* for using SPM's option for support of VMware in a virtualized infrastructure.

See: [Configuring Static IP Address](#)

Resource Requirements

Note: The following brackets [] indicate VMware Server options that are not present in the VMware Player options.

- The VMware Player and/or VMserver must be configured to allow for 64-bit Operating Systems. For VMware Player, this could mean turning on a BIOS setting to allow for 64-bit virtualization.
- 2 network ports
- [connect at power on]
- [automatic MAC address]
- [Adaptor = E1000]
- 250 GB disk space – may be set to grow as needed, especially for smaller installations
- 2 or more processors (2 or more total processor cores\virtual processors)
- Virtualization Mode = Automatic
- [running 2.3 GHz or better]
- Recommended 2GB or more RAM
- Default video settings are acceptable as is
- CD ROM is not needed
- No other special resource rules are specified for CPU, memory, disk, or advanced CPU/memory

About 64-Bit Support

If you get the message "Processor not supported or not enabled in BIOS", you will need to reboot your computer and enter the BIOS settings. This configuration layout is different for every computer, so you will need to search for it, probably in the "CPU" section of the BIOS settings. You must look for and turn on EM64T, VT, and/or Virtualization Support. If it is not there, and your OS is not 64-bits, it is not likely that you can run SPM on a VMserver.

You may be able to run SPM on a VMserver without these settings only if you have a 64-bit OS running – it appears the option was implemented for Windows. Some laptops apparently require a total power discharge to enable VT extensions (remove the battery and turn on the computer to drain capacitors). Some systems require a BIOS update. Find out more with a free account and login at the VMware website www.vmware.com

vSphere 5 has more information about enabling “nested” 64-bit virtualization available at: www.virtuallyghetto.com

Supported VM Formats

SPM supports these VM formats:

- VMware Server 7 format: Runs on VMware Server 2; vSphere 4, 5; and VMware ESXi 4, 5.
- VMware Player 3.X format: Runs on VMware Player 3.x (and possibly VMware Workstation 7).
- Server 7 is deployed as an OVA or OVF file format.
- OVA is a single file (ova).
- OVF is a directory of 3 files (mf, ovf, and vmdk).
- VMware Player is deployed as a directory of 2 files (vmdk and vmx file).

What is Open Virtualization Format (OVF)?

OVF is a platform-independent, efficient, extensible, and open packaging and distribution format for virtual machines. OVF enables flexible and secure distribution of enterprise software, facilitating the mobility of virtual machines and giving customers vendor and platform independence. You can deploy an OVF-formatted virtual machine on the virtualization platform of your choice.

What is Virtual Machine Disk (VMDK)?

VMDK (Virtual Machine Disk) is a file format that only encodes a single virtual disk from a virtual machine. A VMDK does not contain information about the virtual hardware of a machine, such as the CPU, memory, disk, and network information.

How Does OVF Compare to VMDK?

A virtual machine might include multiple virtual disks or VMDKs. An administrator deploying a virtual disk must configure all this data, often manually, using incomplete documentation. In contrast, the OVF format provides a complete specification of the virtual machine, which includes the full list of required virtual disks, plus the required virtual hardware configuration – this includes CPU, memory, networking, and storage. An administrator can quickly provision the virtual machine into a virtual infrastructure with little or no manual intervention. In addition, the OVF is a standards-based, portable format that allows deployment of the virtual machine in any hypervisor (virtual machine manager) that supports OVF. OVF can be converted to VMDK using one of two different methods. For the necessary conversion download, you must have a VMware account, which is available for free.

VMware Server Downloads

The servers for ESXi4 and VMware Player 3 are available for free download from VMware. You will need to create a free account on the VMware website www.vmware.com and login to access the current server downloads and additional information.

Configuring Static IP Address

✉ **NOTE:** This configuration uses a static IP address – SPM was not designed for DHCP.

1. At the “STI-SPM login: *restarting web server apache2” prompt, press **<Enter>**.
2. At the “STI-SPM login: username” prompt, type **adm**n **<Enter>**.
3. At the “STI-SPM password” prompt, type **adm**n **<Enter>**.
4. At the “STI-SPM>” prompt, type **eth0 static** [IP address] [subnet] [gateway]**<Enter>**.
Example: sti-spm>eth0 static 192.168.1.254 255.255.255.0 192.168.1.1.<Enter>
5. To verify that the network settings are correct, type **eth0 <Enter>**.

Contacting Technical Support



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The Server Technology technical support team is available from 8 a.m. to 5 p.m. PST, Monday through Friday. After-hours service is provided to ensure your requests are handled quickly no matter what time zone or country you are located in.

Server Technology, Inc.

1040 Sandhill Drive
Reno, Nevada 89521 USA

Tel: 775.284.2000
Fax: 775.284.2065

Web: www.servertech.com
Email: support@servertech.com

For Sales, please contact sales@servertech.com