

Planning Server Virtualization

Virtualization involves more than just converting multiple servers onto a more robust platform. Once you've made the decision to virtualize your IT environment, don't pull out your credit card until you've taken the time to properly plan your virtualization architecture. Creating a well-crafted virtualization plan will ensure that your business maximizes every dollar spent and realizes the best that virtualization technology has to offer. This article focuses on server virtualization architecture—assessing business needs and planning implementation—which many IT experts consider the foundational level of any virtualization plan.

Server virtualization architecture

As you draft your server virtualization plan you should consider the following:

- **Multiple host servers-** If your business has only one host server and that fails, your business just lost access to every server—virtual and physical. Your business should have at least two or more host servers so the virtual servers can be moved from one server to the other if needed. If uptime is essential to your business, consider the high-availability options found in **Hyper-V**, **VSphere** and **Essentials for XenServer**. These solutions will automatically move virtual servers from one host to another in the event of a physical server failure.
- **Processor capacity-** Make sure that your physical servers have the processor capacity needed to run SQL servers and mail servers during peak business hours—a system slowdown can cost your business money. In high-utilization environments, consider solutions such as **VSphere** or **Essentials for XenServer** that can automatically move the virtual server to another host with spare processor capacity.



- **Storage capacity-** Instead of spending money on high capacity hard drives for your host servers, All Covered recommends investing in a SAN or NAS device that is connected through a high-speed fibre channel. This will maximize your investments in storage hardware and provide your company flexibility around hosting and storing virtual systems. Essentials for XenServer is recommended for easy configuration of storage devices, and many SAN devices are pre-configured for use with Hyper-V
- **High-speed connectivity** Host servers need hi-speed connectivity to the network to ensure that computer users have a “real-time” virtualization experience—slow connectivity creates problems when users can’t quickly access the servers. Host servers should have multiple gigabit connectors that are attached to a gigabit switch on the network. In addition, host servers should be connected to NAS and SAN devices through a fibre channel to ensure that high-speed connectivity.
- **Peripheral devices-** Unfortunately, virtualized servers are not compatible with USB devices such as drives, peripherals and fax modems. In addition, devices with external SCSI connectors may not work well with virtualized servers. This means that some of your current hardware such as tape libraries may not work with your virtualization solution. Do your research before spending any money—make sure that you are choosing the right solution for your business.
- **Rapid recovery-** While server virtualization makes it possible to backup entire virtual servers for rapid recovery, keep in mind that you will need to have available storage space at that is at least one and a half times the size of the server you are backing up—while expensive, rapid recovery from previously made backups may make it worth the cost.



Get help from the experts

Drafting a server virtualization plan is easy when you work with experienced professionals.

To speak with the virtualization experts, please contact All Covered.

Contact All Covered Toll-Free Nationwide at (866) 446-1133 or at www.allcovered.com

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