

VDI Vs. Desktop Virtualization: Which Is The Better Choice?

Understanding the key differences between these two technologies will help ensure you're providing your customers with the best resources.

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Computer virtualization is becoming a major consideration in the technology field. With all the talk about clouds, VPN, and mobile computing, do you wonder if your company is employing the best resources? Maybe you are concerned about getting the greatest return on investment or best value for your dollar.

Through this four part series on virtual infrastructures, you will understand several types of virtualization, benefits and limitations, hardware and software requirements, and how to become part of virtual computing.

First, virtualization is the separation of the physical and logical. It is building something that doesn't have a physical footprint, and is easy to understand if you think of a chat room. Chat rooms provide a gathering place for people to engage in conversations over the Internet, but the room has no physical location. I will show you how computer hardware and software can be used similarly.

What is Desktop Virtualization?

Desktop virtualization, sometimes called client virtualization, allows an application to run an operating system. Through desktop virtualization, you access and operate a virtual OS, which completely changes the way desktops are managed and delivered.

As certain types of desktop virtualization may ease some aspects of desktop management, no specific type of desktop virtualization is 100% able to manage Windows issues.

Virtual machines also are much easier to build and rebuild. Reimaging a physical system might take several hours, whereas creating a new virtual machine takes minutes. Consider that there are many different conceptual models. They can be broadly divided into two categories, depending upon whether the operating system is executed locally or remotely. Not all forms of desktop virtualization involve the use of virtual machines.

Because desktop virtualization is a host-based protocol, users can view and interact with their desktops over a network via remote display. All processing takes place in a data center from client devices that include thin clients, zero clients, smartphones, and tablets. When using a host-based virtual machine, users can connect to individual

virtual machines that are hosted in a data center, and they may connect to the same virtual machine every time. This allows for personalization, or they may be given a random VM from a pool.

There also is a shared host where users connect to a shared desktop or individual applications from a server — also known as a remote desktop.

Another use for desktop virtualization is in smaller businesses where companies allow employees to utilize their personal devices. This alternative works well for situations where employees aren't sitting at their PCs all day. They can access the company system through their laptops or other devices.

What is VDI?

Virtual desktop infrastructure (sometimes called interface) also is a server-based computing model. In this model both the operating system and the applications, are hosted on a server, creating a central control point. This allows users to access the data from many locations and using many types of devices.

There is also a great cost savings to this model. You can invest more in your server equipment because it will be stored in a secured server room. Because the power and speed of the system is inside the server room, thin clients or simpler, less expensive devices can be used in place of traditional desktops.

Desktop virtualization is a solution that enables one user to access many operating systems, which opens up a greater array of applications as well. VDI allows many users to access one mainframe or server. Because of the central control, system updates and patches, data storage, and the most expensive hardware are all in one location — the server room — where the climate can be controlled and secured.

The selection of virtualization solutions lies in understanding the user needs and providing the tools best suited to their productivity. In part two of this series, I'll explore which end user customers make the best candidates for a virtualization solution. ●



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