

Forward-thinking companies are taking the integral step of implementing virtualized desktops to transform their data infrastructure from an expense to a strategic asset.

Virtual Desktop Infrastructure (VDI) is a rapidly growing trend as more and more companies want to connect with the talented employees they need, anywhere, anytime, while upholding business continuity and saving on operating costs.

“Facts and Figures:
According to ABI Research, the VDI is expected to reach 5 billion users by 2016.”

(ABI Research)

Virtual Desktop Infrastructure (VDI): An Overview

Virtual Desktops essentially offer all the features of a desktop computer, accessible from any machine or device, anywhere. This is accomplished by storing the "virtualized" desktop environment using a data center or remote server and not the individual machine. Users interact with a virtual desktop in the same way they would use a physical desktop in the office. However, virtual desktops let the user remotely log in to access a desktop environment from any location. A virtual desktop infrastructure, or VDI, is desktop virtualization to link multiple virtual machines.

What are some benefits of Virtual Desktop Infrastructure (VDI)

There are several benefits to virtualized desktop infrastructure for today's workplaces. We'll discuss some of the sound reasons why VDI is a step forward and a few things to consider before you implement virtualization in your own company.

- **Supports BYOD Initiatives**



Allowing employees to use their own personal devices, like smartphones, laptops and tablets, to connect to the company network—or BYOD (Bring Your Own Device)—is a growing trend. The idea behind the BYOD concept is



that it enables employees to work from anywhere, increase the collaboration among employees and ultimately increase productivity. With more workforces embracing a BYOD strategy, IT departments are saving money on hardware as well.

IT security teams now have to shift from worrying about where secure information is stored and focus instead on what devices are housing that information. This makes BYOD policies and procedures an integral part of VDI technology. The BYOD practice can complicate governance, risk and compliance management significantly. As protecting virtualized data becomes the focus for IT security, IT teams can provide better security for critical information and adapt to the evolving needs of business users more easily.

- **Centralized Management, back-ups and recovery.**



Centralized management of all devices, BYOD included, allows the company to manage administration, deployment and compliance from a central location. Recovering a virtual desktop to an originally deployed state and conducting backups can be relatively easy in a VDI situation. However, personal settings or changes to the machine's profile may be lost in the process.

Agent-based backups, local backups and synchronization are ways to avoid this situation.

- **Reduced Data Security Threats.**



With virtualized desktops, the actual data rests in the data centers or remote servers, eliminating the loss of data on local machines. Because data is centralized, it is easier to detect and isolate viruses or threats before they cause damage. Further, the virtual machine has no contact with a machine's operating system, so there is little possibility of a program damaging other files or applications.

Also, because the data is centralized and virtual machines are behind strong firewalls, the company's IT team can manage usage and reduce potential risks. This centralized control can better enable application activity monitoring.

- **Better Support and Troubleshooting for End Users.**



Any changes or updates can be implemented simultaneously and instantly across devices companywide. This means the IT team can handle everything from pushing patch updates to deploying an operating system, like Microsoft Windows or Apples OS X to a device safely and easily.

The same goes for troubleshooting. Problems can generally be resolved from within the data center saving the IT team from troubleshooting the actual PCs. Because the desktop's environment and its data can usually be accessed from any connected virtual machine, a user experiencing hardware trouble on their PC can simply go to another device to access their data and applications.

- **Workforce Mobility**



Because desktop environments and the data they use are hosted in a central or remote server, employees have the ability



to work anywhere, anytime, no matter what may happen at the office. Virtualized desktops allow companies to attract talent from any location, by offering the ability to work remotely, while still collaborating with coworkers.

This ability also supports business continuity plans and disaster recovery capabilities companywide. Recent history of weather-related incidents and other events have compromised businesses beyond their control on occasion. Having a virtual desktop infrastructure that supports workforce mobility helps a company get back to business faster should an event impact the physical workplace.

- **Supports Green Initiatives, Saves Power.**



Desktop machines are generally more costly to purchase, set up and maintain, than a virtualized data center. VDI separates the hardware resources from the operating system and applications of a physical workstation. This means that multiple, sometimes under-utilized, computers can be virtualized into a single physical computer. Separating these components and managing them more efficiently and virtually saves on power and the use and disposal of devices.

