

Virtual Desktops Provide Real Benefits

How Cloud-Based Solutions are Revolutionizing IT Management

On average, companies spend \$3 in operational expenses for every \$1 of PC hardware they purchase. These expenditures go to provisioning, setup, maintenance, updating, backup, security and other items that are essential for effective IT management. Beyond the cost, overburdened IT departments find it difficult keeping up, while end users typically lack the time, expertise and discipline necessary to effectively manage their own PCs. And even in the best situations, maintaining adequate security is a struggle. So what is the answer? For many companies, hosted virtual desktops are an excellent solution. In addition to offering significant potential cost savings, cloud-based virtual desktops free up IT staff for other priorities, improve efficiency, enhance security, extend the useful life of PCs and provide a superior user experience. It is a tool you need to know about.

WHAT IS VIRTUAL DESKTOP?

Put simply, a virtual desktop is when your desktop resides on a computer or server other than your own. In this discussion, we are referring to a remote or hosted virtual desktop, where a cloud-based service maintains your desktop on their server and makes it available to you through an Internet connection. When you log on, you are actually seeing an image of your desktop, sent to you from the host.

It looks identical and operates with the same mouse and keyboard commands, but the instructions are being sent back to the host to be executed on their remote server. All of your software programs and data files reside there. That is why an older, low-tech computer or “thin client” can have all the functionality of a high-power device when using a virtual desktop. Remotely managing your files and data also offers superior security because it is consistently, centrally administered, rather than relying on many different devices, which can be lost or compromised.

Multi-User Virtual Desktop

Multiple users from your organization can be hosted together, each with a unique desktop, just as would be the case with individual PCs. Each person can have the applications and data files they want or are authorized to access, but they will all be managed as one unit by the hosting company. Resources and files can also be easily shared by some or all users, in any way you wish.

Virtual Desktop Access

Virtual desktops can be accessed from any computer or location that has a basic Internet connection. Because your desktop(s) exist in a cloud, there are no barriers except proper authorization and access information. For times when no Internet access is available, some hosting services offer the ability to download a mirror image of your desktop and files to



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your PC. They sync with the hosted virtual desktop the next time you connect.

Device Independent

You can use any device to access your virtual desktop as long as it can connect to the Internet and has modest browsing capabilities. It is almost functioning as a “dumb terminal” to use old terminology. New or advanced hardware is not necessary. PCs, laptops, smartphones and tablets – regardless of the operating system – are all able to perform the same functions you could on your office computer.

Centralized Management

Your individual users’ virtual desktops will reside together on the host’s server or servers, so management of all your software, backups, security and other maintenance functions can be centralized and handled by the host company.

Redundant Hosting

High-quality hosting companies have multiple server locations so they can maintain redundant copies of your virtual desktops, including all your data files. This facilitates secure storage and backups. In addition, the hosting company can also back up your content to your company’s onsite server or to a third-party service, providing an extra level of reassurance.

Other Hosted Services

While the focus of this discussion is hosted virtual desktops, it is important to know that other associated services can also be hosted, such as virtual servers, email servers and more. Some cloud-based companies can provide all the hosting services you need.

WHY SHOULD YOU CONSIDER VIRTUAL DESKTOPS?

There are many advantages of utilizing virtual desktops for your business or organization. Features differ from one hosting company to another, so you need to do your homework. Following are key benefits to look for:

Lower Total Cost of Ownership – up to 70% lower according to an IDC (International Data Corporation) research study. Savings come from:

- Extend the Useful Life of Computers – working on virtual desktops only requires the most basic capabilities, so you can keep your computers longer and purchase low-cost thin client hardware when additional users are added.
- No Server Maintenance and Replacement Cost – hosting company is responsible for these costs.
- Shared Resources – all of your users’ desktops are efficiently managed in one place.
- Efficient Scalability – adding users and applications is quick and easy, with minimal or no additional hardware required.
- Remote Management and Troubleshooting – the hosting company efficiently provides all these



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- services, relieving a significant burden on your IT department.
- Software Licensing and Updates– software provided by the hosting company comes with perpetual licenses and updates, saving staff time and costs.

Simplified Desktop Management – benefitting all users and the IT department.

- Deployment – remotely adding users and applications is much faster and more efficient than performing a complete setup on local PCs.
- Easy for Users – all applications, data files and shared folders are automatically set up and customized for each user’s individual needs and preferences.
- Ongoing Maintenance – upgrades, backups, virus protection and other maintenance functions are initiated and handled remotely by the hosting company.

Increased Productivity – virtual desktops enable users to work uninterrupted and IT staff to focus key priorities instead of PC management.

- Anywhere, Anytime Access – users can have full access to applications, data and shared files anywhere they can connect to the Internet.
- One Desktop, All Devices – with virtual desktops each user can work on all their applications on any available device . . . desktops, laptops, smartphones and tablets.

- Work Offline – some hosts enable you to download a mirror image of your virtual desktop to your PC to work offline when an Internet connection is unavailable.
- Centralized Administration – the hosting company will remotely manage all your users’ virtual desktops so your people and IT staff don’t have to; they can focus on other key priorities.
- Collaboration – virtual desktops make it easy for your people to use shared files, which facilitates coordination, collaboration and shared ideas.
- Mobile Support – users always have access to application support in or out of the office.

Stability – providing dependable desktop functionality and access.

- Multi-Carrier Connections – multiple carriers are used to ensure uninterrupted Internet access for your users.
- Multiple Servers – servers in different locations provide redundant hosting of your virtual desktops.
- Redundant Backups – multiple backups ensure that your virtual desktops data will not be lost. You can choose to have an additional backup on your company server or at a third-party service.
- Location-Independent – using virtual desktops ensures that you will always have access, regardless of conditions or occurrences at your locations.



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Scalability – to accommodate your company’s changing needs.

- Easy to Upgrade – seamlessly add capabilities, users, applications and bandwidth.
- Remote Management – everything is handed by the hosting company.
- Economic Scalability – no need to purchase expensive additional servers or costly high-end user hardware; basic PCs and devices are all that is required.

Performance – cloud-based desktops offer reliable performance at lower cost.

- Continuous Monitoring – the hosting company provides ongoing management and maintenance to ensure optimal performance.
- Troubleshooting – most issues are easily addressed by simple remote restarts or reimaging.
- Compatibility – fewer conflicts and issues.
- Minimized Downtime – hosted desktops offer a near 100% uptime.

Superior Control – manage your devices more effectively.

- Point-and-Click – control of desktops and applications.
- Access and Monitoring – complete management capabilities.
- Single Point of Control – no need to manage desktops on many devices.

- Desktop Size Control – limiting capacity requires users to store data and files on virtual servers, rather than desktop, which means better management, backup and security.

Security – superior capability to protect your business’s data.

- Compliance – the high level of security in private, firewalled, cloud-based systems offers compliance with HIPAA, PCI, governmental agencies and many others.
- Lost Devices – critical files and information do not reside on PCs and other devices, so they are not compromised when equipment is lost or left unsecure.
- Redundant Remote Backups – ensures that your data is secure.
- Consistent Security – all security is centralized with the host and is standardized across all users and devices, making it easier to enforce security standards.
- Custom Control – access to desktops, folders and shared files can be individually controlled for each user.
- Location-Independent – all security and backups are remote, so local catastrophes and conditions do not affect your data and applications.

Energy-Efficient – better use of resources to save cost and benefit the environment.



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PRACTICAL CONSIDERATIONS

What Does Virtual Desktop Cost?

One of the advantages of virtual desktops is that they can be fully customized for your organization's needs and users. This flexibility also makes it difficult to assign a cost without knowing variables, including:

- Number of Users
- Applications
- Bandwidth
- Storage Space Requirements
- Backup Preferences
- Many Other Factors

To determine the cost for your company you will need to gather some basic information and then an estimate can be generated. When considering costs it is important to make sure that you are doing an "apples-to-apples" comparison. There are many hidden and indirect costs that can easily be overlooked. This applies when considering different hosting companies and when comparing virtual desktops to traditional in-house desktop management.

Five Ways to Achieve Virtual Desktop Success

1. Make a Plan and Set Expectations – switching to a virtual desktop is a significant paradigm shift that requires careful planning. This is essential

for addressing all of the issues involved in setting up, transitioning to and managing a virtual desktop.

2. Effective Data Migration – the timing and process are critical.
3. Address the Needs of Mobile Users – off-site and mobile users are most vulnerable to "falling through the cracks" if you do not have a good plan.
4. Good Support – your hosting company will provide support that keeps applications operating smoothly but they do not provide a call center for users who have questions about how to use the applications. You still need to arrange for this kind of support.
5. Accurate Evaluation – when selecting and measuring the success of your virtual desktop program, make sure to include all hidden and indirect costs of the traditional approach. Otherwise, metrics will be skewed and misleading.

SUMMARY

There is little doubt that cloud-based hosting of virtual desktops and other services will be the future of IT. The real cost savings, efficiency, security, user experience and effective utilization of IT staff make it all but inevitable. The question is when to make the transition. The answer is now, if you want to stay on the leading edge of IT management and get a real competitive advantage. At the very least, begin considering the process. The benefits will rapidly become clear.

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