MOVING VIRTUAL DESKTOPS TO THE CLOUD

WHITE PAPER

TetherView

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A comparison of on site and hosted solutions.

EXECUTIVE SUMMARY

Physical desktop computer infrastructures no longer make sense for the corporate world. Not only are they expensive, insecure and maintenance-heavy, they also cannot effectively support the changing business IT landscape. The ground- swell of Windows 7 migration plans, expanding virtual workforce, growing popularity of mobile devices, and tighter IT budgets all point to the need to reevaluate desktop strategies. While virtual desktop infrastructure (VDI) seems like a promising alternative, in reality, is too costly and complex for most companies to implement. By moving virtual desktops to the cloud, instead of an internally deployed and managed data center, companies can realize all the promised benefits of virtual desktops— centralized management, improved data security and simplified deployment— without the exorbitant cost, limitations or hassles of VDI. Why move the complexities and costs of managing physical desktops to another complex and expensive infrastructure?

This white paper will explore the reasons for changing traditional desktop computing strategies, why cloud-hosted virtual desktops are a compelling solution for many businesses, and how to leverage cloud-hosted desktops for Windows 7 migrations, mobile and departmental workers, and disaster recovery scenarios.

DESKTOPS: RIPE FOR CHANGE

Desktop computing has become a millstone for IT departments. While it is essential for delivering must-have applications and services to end users, IT managers are burdened by the tremendous amount of time, complexity and cost inherent in managing and securing physical PCs.

And, a progressively tech-savvy user base is becoming increasingly frustrated because their computers don't have the flexibility and capabilities that they have come to expect. Businesses have been aware of these issues for years, but it is only now that the tipping point for change

has arrived. The trifecta of Windows 7, increased mobile access devices, and tighter IT budgets has created the perfect storm for desktop computing change.

Migration to Windows 7: With MS dropping support for Windows XP, most companies are looking at a Windows 7 refresh. According to IDC, nearly 90 percent of businesses plan to move forward with Windows 7 by mid-2012.* However, many older PCs are not equipped to run Windows 7—which means that businesses need to purchase new computers in order to migrate workers. In fact, Gartner estimates that many businesses will end up replacing about 25 percent of their PCs before the end of their lifecycle to accommodate Windows 7 migrations.* Organizations that decide to upgrade existing computers instead of replacing them won't save much money because of the new parts and labor needed for memory, hard disks and/or video adapters.

Expanding mobile access: IDC estimates that 1 billion workers will be mobile at least part of the time or remote from their firm's main location by the end of 2011. These workers will be accessing business applications and services from a variety of devices, including increasingly popular iPads, Android-compatible tablets, and smart- phones. Companies need a way to enable anywhere, anytime access.

Tighter IT budgets: PCs can consume 7-10% of IT budgets, yet provide no competitive advantage. With continued economic volatility, businesses are keeping a closer rein on IT expenditures. Wholesale PC refreshments and Windows 7 upgrades are no longer feasible, and the cost of supporting an increasingly dispersed user base needs to be reduced.

IS VDI THE ANSWER?

The need to reevaluate desktop strategies is driving many companies to consider virtual desktop infrastructure (VDI)— and with good reason. VDI has promised to solve many traditional challenges of physical desktops. Because virtual desktops are centralized onto virtual machines that run on corporate data center servers, VDI makes day-to-day tasks such as deploying new desktops and applications, and supporting distributed workers, much easier and less labor-intensive. Users access their virtual desktops via PC remoting technology, making it possible for IT to finely control the movement of data into and out of the data center. Because data is not stored on the local device, companies are at much less risk if PCs or mobile devices are stolen or lost.

However, even with all of these benefits, VDI hasn't taken off. The question is what are the barriers to VDI adoption?

Costs: In a recent TechTarget survey, more than 32 percent of IT professionals said that implementing VDI in-house is too expensive. Although VDI is billed as being less expensive than fleets of physical computers, companies actually end up spending much more than anticipated. The upfront CAPEX required to start a VDI deployment is tremendous. This shouldn't be surprising since the data center is optimized for hosting servers, not desktops. For instance, simply moving hard drives from the desktop to the data center can increase storage costs more than 100 times. When combined with compute density challenges and increased data center expenses for power, cooling and floor space, the cost of moving desktops to the data center can be prohibitive.

Complexity: The same survey has 21 percent of IT professionals blaming complexity for stalled VDI projects. The technologies needed for VDI (i.e., servers, storage, networking, thin clients and virtualization software) are provided by many different vendors, causing considerable confusion among IT staff about which technologies to adopt. And, once the infrastructure is built, companies are left with vendor lock-in, which can be detrimental in a market where technology changes are fast and furious. Additionally, VDI technologies are often managed by different internal IT groups, which makes coordinating virtual desktop initiatives very difficult. With VDI, organizations need additional dedicated virtualization experts to manage their virtualization infrastructure.

Ramp up: In house VDI solutions are not designed to scale. Although it is much easier to deploy virtual desktops than physical desktops, IT must have capacity to deploy them. In the TechTarget survey, 23 percent of IT workers said their existing servers can't support deploying desktops as virtual machines. This makes it particularly difficult when companies need to scale up quickly to support employees or consultants on time-sensitive or temporary projects. And, because of latency issues, performance is best when users are located near the data centers. However, most companies don't have the geographically dispersed data center footprint needed to ensure optimal, or even adequate, performance.

Strategic or not: With VDI, companies still need to build and manage infrastructure to support desktops, and most IT departments do not want to be in the business of desktop management.

WHY CLOUD-HOSTED VIRTUAL DESKTOPS MAKE SENSE

Cloud computing has been gaining a tremendous amount of attention because of the flexibility and cost savings it can deliver. Just as virtualization started on the server side and then, once proven, began moving to the desktop, the cloud is now ripe for desktop infrastructure.

By moving desktops to the cloud, rather than an internally deployed and managed data center, businesses can realize all the promised benefits of virtual desktops centralized management, improved data security and simplified deployment without VDI's exorbitant costs, limitations or hassles.

THE ADVANTAGES OF CLOUD-HOSTED DESKTOPS AS A SERVICE INCLUDE:

Reduced desktop costs: Because the physical infrastructure powering virtual desktops is outsourced, IT organizations are immediately able to achieve a positive ROI. Not only do cloud-hosted desktops eliminate VDI's huge upfront CAPEX outlay and three-to-four year depreciation schedule, businesses also convert desktop computing CAPEX into OPEX. Virtual desktops can be subscribed to at a set monthly rate, and businesses only pay for the virtual desktops that are needed. All of this translates into reduced desktop total cost of ownership (TCO), achieved at the beginning of a cloud-hosted desktop deployment as opposed to a goal that is 18 – 24 months out. Companies can now budget for a set a monthly fee without any hidden costs or surprises.

Ease of manageability: one-touch support – The complexities associated with designing, implementing and supporting virtual desktops are gone. Cloud-hosted virtual desktops are easy to buy and implement. The physical infrastructure is already available at a moments notice. This also saves a lot of money that was traditionally spent on physical desktop maintenance, while minimizing the technical expertise businesses need to leverage virtual desktops. Additionally, because desktops are delivered by a provider over a secure network and supported by a Service Level Agreement (SLA), end users can expect better availability of their desktops than can be delivered with physical PCs, which often require a desk-side visit when things go wrong.

Device and location independence: Businesses can embrace next gen workers by providing device and location independence.

Location independence: Because the service provider has multiple locations, proximity to the data center challenges are eliminated. Users can work from anywhere – home, office or coffee shop.

FLEXIBILITY

No vendor lock-in: IT no longer has to worry about which virtual desktop-related technologies to select, implementing technologies that may become obsolete, or being restricted to particular vendor roadmaps.

Fast ramp up and down: Businesses can quickly scale up or down by adding or removing virtual desktops to the monthly subscription in minutes. This enables IT to deliver on many challenging types of projects (both short- and long-term), such as scaling up desktop environments for seasonal work or quickly deploying desktops for offices in new geographic markets.

Geographic agility: Corporate data center footprints won't constrain virtual desktop deployments. Cloud- hosted desktops can be deployed by service providers with global scale. This allows users to gain access to their virtual desktop from just about anywhere, and businesses to expand the regions where they source talent, since they are no longer limited to corporate offices and internal infrastructure reach.

OPTIMAL USE CASES FOR CLOUD-HOSTED DESKTOPS

Businesses can realize a substantial impact on their operations by leveraging cloud-hosted desktops for key scenarios. Following are ideal use cases for desktops in the cloud:

Cloud savvy organizations: Companies are looking to leverage the benefits of the cloud.

Small and medium businesses: Businesses that don't have the endless IT resources required to deploy and manage physical or virtual desktops.

Remote workers: Whether they are telecommuting, off-shore, or contracting, virtual workers are becoming a larger percentage of the corporate end user population ever year. With cloud-hosted desktops, businesses can support geographically dispersed workers in a very cost-effective and secure manner. Contractors can easily access the corporate environment from their personal devices, employees can access their desktops when they're at home or on the road even when they don't have their own computer. Overseas workers can be granted access to the corporate network without concern that sensitive data will be at risk from loss or theft since it is not stored locally.

Elastic and flexible demands for desktops: Many companies need desktops for unique tasks or one-off projects. For example, developers need environments for building and testing applications. The flexibility of cloud- hosted desktops enables rapid scaling of desktops to accommodate evolving needs.

Migrations: Instead of having to replace or upgrade desktop computers in order to run Windows 7, businesses can use their existing hardware. Not only will they save money that would have spent on near-term PC rerfeshes, with cloud-hosted desktops they can extend the life of their existing fleet beyond what would have been possible and, when they do decide to replace their rich desktops, they can do so with less-costly and more power- efficient thin client devices.

Desktop disaster recovery: Many companies have DR strategies for their server infrastructure but not for their desktops. However, if a disaster occurs, the impact on end users—and the business—can be disastrous. Cloud-hosted virtual desktops provide a cost-effective desktop disaster recovery solution that can be implemented easily and rapidly.

Affordable: Starting at $2/day with no infrastructure investment, businesses only pay for what they need and pricing is consistent to enable predictable IT budgeting.

TurnKey: TetherView works with your team to create a custom built solution and implementation plan. TetherView will work with you on site to deploy and train users simplifying the transition.

Instant 'on' experience: Users can stop working in one location or on one device and pick up where they left off seamlessly.

Any device: Users can access the TetherView Cloud from an iPad, iPhone, iPod Touch and Android-based tablets, Chromebook and smartphones. They can also use thin clients or extend the life of their current PCs for cloud access. The TetherView mobile client makes this access seamless.

Desktop flexibility: Desktops can be set up for different use cases or groups of users quickly and easily. Options include performance, OS, features and location permission.

CONCLUSION

The desktop market is ripe for change. Operating system upgrades, software migrations, new flexible business models, the need to reduce desktop TCO, and demand for mobile device support are driving organizations to reevaluate their desktop strategy. VDI was supposed to address many of these challenges; instead it created formidable new issues. Because of VDI's inherent complexity and large upfront CAPEX, virtual desktop adoption has stalled and is impossible for many organizations.

TetherView eradicates barriers to adoption, delivering a complete desktop from the cloud, providing all the benefits of VDI without any of the hassles. Businesses can eliminate the cost and complexity of deploying and managing desktops, while enabling the flexibility that users require. And, by transforming desktops from the CAPEX outlay inherent in onsite VDI and physical PC refreshes, businesses benefit from a predictable, easy to budget OPEX-based desktop environment. TetherView makes it easy to take advantage a true virtual infrastructure. With the TetherView Cloud, you can accelerate and reduce the costs of migrations, simplify support for mobile and departmental workers, and improve desktop disaster recovery.

ABOUT TETHERVIEW

TetherView provides infrastructure enabling Desktops as a Service (DaaS) – full-featured desktop experience delivered from a private cloud to any device, including a workstation, tablet or smartphone. TetherView's DaaS platform provides all of the benefits of virtualized desktops without any of the hassles. TetherView enables IT businesses to rapidly deploy and manage desktops to users connected on any device, anywhere, without the upfront costs and complexity of traditional desktop virtualization transforming desktops from a CAPEX to OPEX item.

Combined with TetherView's Server Virtualizaiton, businesses can eliminate up to 90% of their hardware costs.

For more information, visit www.TetherView.com.

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