

Preparing for Successful VDI Implementation

A Business Perspective



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Introduction

Welcome to the “Preparing For Successful VDI Implementation” from Virtual Bridges. This assessment offers a business perspective on moving from physical to virtual desktops. We have assembled and refined a set of core best practices based on our experience helping organizations of all sizes, from small offices to FORTUNE 100 enterprises, prepare for and deploy desktop virtualization. In particular, we highlight key topics to consider in the pre-deployment phase of a desktop virtualization initiative.

The assessment takes you through a series of questions, each of which has a specific context and addresses key considerations. We also provide additional resources in case you want a deeper dive on a given topic.

Using this assessment to evaluate your organizations interest in desktop virtualization, and as a foundation for further investigation into potential areas of sensitivity, will significantly increase the likelihood of a successful desktop virtualization project for your organization.

Organizational Readiness

These questions will help you assess where you currently stand in terms of both your overall PC environment and your organization's preparedness for desktop virtualization in general.

The appetite for desktop virtualization at my organization is...

- High
- Mixed
- Low

Things to Consider

Past experiences with desktop virtualization directly affect administrative and end-user appetites today. If a previous foray into desktop virtualization did not meet your needs or the needs of your end users, it is worth noting that the technology has matured greatly since its inception. Enabling technologies have advanced as well. Today, faster networks, improved storage systems and faster disk drives help improve the end-user experience, and servers are more powerful and less expensive. Because of all these changes occurring in a very short time, it is likely that any preconceptions relate to issues that no longer apply. This leads us to a few words about setting expectations.

If your organization's desktop virtualization appetite is high because you have not previously used the technology, expectations may prove unrealistic. While a high appetite shows good enthusiasm, it might

be helpful to level-set within your organization with some practical desktop virtualization education.

At the other end of the spectrum, appetite may be low due to misconceptions that can ultimately inflate the risk of project failure. If so, consider putting additional effort into education and training around change management. Whether you have direct experience with desktop virtualization, or none at all, your organization's interest is an important factor in deciding how best to move forward.

Additional Resources

- "Change Is Good. Now, How to Get Employees to Buy In." Entrepreneur.com
- "VDI Technology Guide for Managers" Techtarget.in

70% of mobile professionals will conduct their work on personal smart devices by 2018
– Gartner

Across the United States, the professions with the highest rates of personal smartphone use at work are in education (95%) and tech (90%). The profession with the lowest rate is retail.

– New York Post

The primary benefits driving our interest in desktop virtualization include...

- Lowering costs
- Improving data security
- Simplifying application management / migration
- Improving IT efficiency, management
- Performing operating system upgrades
Handling legacy applications with performance challenges
- Enhancing compliance
- Enabling BYOD (i.e., flex-time, telecommuting or other growth initiatives)
- Driving innovation
- Enabling mobility
- Other

Things to Consider

No matter the technology project, establishing clear goals and articulating the expected benefits will provide a beacon for the entire initiative and a target for measuring success. Desktop virtualization offers numerous benefits to the enterprise, so zeroing in on those of particular interest to your stakeholders will help you position the

recommended change effectively and with a higher likelihood of achieving buy-in up front. It will also improve the odds of delivering a positive ROI post-deployment.

Additional Resources

- “Driving Business Value with Desktop Virtualization” IDC

51% connect to unsecured wireless networks with their smartphone.

– Cisco

Security is biggest BYOD objection worldwide: it's viewed as the #1 BYOD concern in the USA, Germany, South Korea and Australia

– readwrite and Intel

We would describe our use case definitions as...

- Clearly defined (user segments established with roles, access, behavior, expectations)
- Somewhat defined (perhaps the highest user groups are established, but many are still taking shape)
- Not defined (ideas for segmentation, but nothing is currently in place)

Things to Consider

Having your use cases (the set of possible sequences of interactions between systems and users in a particular environment, related to a particular goal) clearly defined is important when determining the scope of a desktop virtualization project. Ill-defined use cases could lead you to size your storage needs incorrectly, or could skew user expectations. It can be helpful to begin with use cases for groups that have a higher appetite for desktop virtualization and pose

a lower risk, then move on to other segments as they take firmer shape.

Additional Resources

- “Four Desktop Virtualization Use Cases” (free, but requires registration) Techtarget.com
- “To VDI or Not to VDI?” Ecommercetimes.com

Our comfort level with server virtualization is...

- Very comfortable (we have fully deployed and are using it, we are mostly virtualized, we have several years experience being virtualized)
- Somewhat comfortable (we just launched, we are going through a server virtualization initiative, we have done it in a smaller environment, we have been doing it for a limited time, we are partially virtualized)
- Uncomfortable (we are just beginning to look into it, we have only started virtualizing our non-production environment, this is new territory for us)

Things to Consider

Server virtualization began, in part, as a means to reduce the data center footprint. If you have server virtualization in place, your organization has already demonstrated a level of comfort with virtualization technology and terminology. Desktop virtualization is the next step.

The good news is that teams familiar with server virtualization will not have to enter an entirely

new tech arena when installing a desktop virtualization solution. The groundwork is already set, and desktop virtualization will be more intuitive to adopt.

If, on the other hand, your organization is considering desktop virtualization without prior experience in server virtualization, ramp-up will require more education to familiarize everyone with the concept.

Additional Resources

- “10 Key Differences Between Desktop and Server Virtualization Deployments”
eWeek.com
- “The Difference Between Server and Desktop Virtualization”
Webopedia

Technical Readiness

This section considers some of the technical aspects of your organization—still from a business perspective—that will prove critical to an accurate evaluation of desktop virtualization readiness. These questions will help you identify signpost characteristics that will affect a desktop virtualization environment. Some questions in this section may require further research within the organization.

We combat malware (such as viruses) through a process that is...

- Manual (i.e. resource-intensive, touching every end point/system to implement updates)
- Somewhat centrally managed (a portion of end users are responsible for their own updates)
- Centrally managed (one-to-many system in place that disseminates updates across the board)

Things to Consider

Your organization's current processes for managing malware in the physical environment may highlight the management benefits of desktop virtualization. If installing updates, apps and tools currently requires physically going from desk to desk or using other labor-intensive means, note that desktop virtualization streamlines such processes.

Conversely, if your organization's processes for updating and patching systems already take advantage of automation, this aspect of desktop virtualization may not be as impactful, but will still bring about certain process changes of which you will need to be aware.

It's clear that BYOD saves a company from the outset, as they no longer need to spend money on employee devices. Employees will willingly spend an average of \$965 on their devices and \$734 on Internet data plans.

– CloudTweaks

49% of U.S. IT managers

"Strongly Agree that
BYOD Improves Worker
Productivity"

– readwrite and Intel

Our standard client operating system environment is...

- Windows for everyone
- Linux for everyone
- Windows for some, Linux for some

Things to Consider

Windows and Linux desktop operating systems differ in terms of the resources require, their security features and their administration characteristics. For example, Windows typically requires more resources (such as disk space and memory) than Linux, which requires more-frequent updates and is more susceptible to virus attacks.

Similarly, if your environment includes or is solely Linux, this will

affect your selection criteria for desktop virtualization solution providers, as different vendors support Linux differently. These differences can be crucial to ensuring that you have the support required to launch.

Additional Resources

- “Managing Linux and Windows Clients Equally”
Virtual Bridges white paper

Analysts have forecasted that, by 2016, worldwide shipments of smartphones will reach 480 million, with 65% being used in bring-your-own device environments.

– Analyst firm IDC

38 percent of companies expect to stop providing devices to workers by 2016.

-- Gartner

The devices we currently support (or plan to support in the future) include...

- Multiple devices (PC, Mac, etc., three or more, not all provisioned by IT centrally)
- Mix of company-owned and end-user owned, multiple
- Two or fewer (company-provisioned)

Things to Consider

If supporting multiple devices (think BYOD and other effects of consumerization) is a factor in your desktop virtualization initiative, it will be beneficial to identify the specific devices most common in your environment. Virtual desktop solutions typically support specific sets of end-user devices, and you want to be sure that your devices appear on your solution provider’s list.

Aside from the issue of vendor support for particular devices, the nature of desktop virtualization will result in your spending less time focusing on end-user devices. Desktop virtualization allows you to manage all

your virtual desktops centrally without worrying about your organization’s data being lost, or vulnerable, on end-user devices, because your organization’s data never leaves your data center.

If your environment includes BYOD and your user community holds a low appetite for migration, the security features of desktop virtualization can be a key selling point for change management and rollout plans.

Additional Resources

- “BYOD is Easy to Manage with Desktop Virtualization”
Virtual Bridges white paper

By 2015 the number of mobile devices will have grown to over 2 billion worldwide, a 300% increase from 2009.

-ABI Research

53% of information users use their own personal devices for work; install unsupported software; or use unsupported Internet based services like Dropbox, Skype, Twitter, or Facebook to help them do their jobs.

—Forrester

The nature of our business (and our data) requires a level of security that is...

- Highly sensitive (financial data, healthcare data; we are audited regularly)
- Important, but not critical (we are not dealing with government data; we have no special regulatory compliance issues, etc., however we do follow rigorous data management guidelines)
- Similar to that of most businesses (our industry is not regulated; we do not answer to a third party)

Things to Consider

Security is a priority and often a challenge for most organizations. Organizations that once struggled with multi-level security, business continuity, and disaster recovery have found that putting the security perimeter back in the data center is a natural and effective solution to the problem.

However, if the security framework you have in place works, and the benefits of connecting your user community with desktop virtualization

do not readily counterbalance the requirement for change, it may be worthwhile to assess your move to virtual desktops with a closer eye on other benefits that virtualization delivers.

Additional Resources

- “The Most Secure Desktop Virtualization for your Data” Virtual Bridges white paper

We provision our PCs centrally on a refresh cycle, with an approaching refresh in about...

- 1 year
- 2 years
- 3 years
- 4 years
- 5 years or more

Things to Consider

Every PC refresh comes at a cost, and each computer asset only has so much usable life. This is where timing is important when considering desktop virtualization, because launching your desktop virtualization initiative within a year of a planned refresh can yield considerable savings. Desktop virtualization extends the life of your equipment by managing all software on the back-end and saving device resources.

On the other hand, if you have recently completed a PC refresh, desktop virtualization can provide benefits related to centralized management, improved support for mobile users and enhanced security. Unlike with a recent refresh, where the financial impact is more significant and immediate, cost savings in this situation will present themselves over time.

Additional Resources

- “The End of the PC Refresh Cycle?” computerweekly.com

Next Steps

We hope this assessment has given you further insight into desktop virtualization technology, as well as a launching point for assessing your organization's readiness. These questions have covered key issues surrounding desktop virtualization installation and management. Based on our many years of experience working with customers globally, we have seen that the likelihood of having a successful VDI implementation has a direct correlation to your organization's readiness for the solution.

These questions only serve as a launching point for thinking through your unique situation, and we are sure you have more questions.

We would like to offer you a free, 30-minute consultation to discuss your particular needs and review the results of this self-assessment document with you individually. If desktop virtualization is the next logical step for your organization, we will help you determine if Virtual Bridges is the right choice.

