

## Virtual Desktop Infrastructure (VDI) – The Next Big Thing

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Virtualization, virtualization, virtualization. At every turn, we are confronted with the term “virtualization” and the talk of the potential it holds for our organizations. In truth, much of the potential is there and the effects of “virtualization” can help many of us get closer to our goal of trimming operating expenses by “going green” (another oft-used buzzword). However, no sooner do we get used to the idea of virtualized servers than we get hit by the next big wave, “virtualized desktops.” What are these devices? How do they help my organization? How do they work? Is there a pot of gold at the end of the virtualization rainbow? Is there an angry leprechaun protecting that pot of gold? (Sorry for that last one, I got carried away). Back on topic, virtualization is an intriguing and promising technology and that requires expertise to employ it successfully.

First, Virtual Desktop Infrastructure (VDI) is actually an overall technology and strategy, not necessarily a product from a single vendor. In fact, there are several vendors on the market. No surprise, the big ones are VMware®, Citrix® and SUN, but also in the mix are smaller companies, such as MokaFive™ and ClearCube. All vendors talk about desktop virtualization, but that term has become ambiguous, because it can mean anything from delivering true software desktops to PC’s and thin clients from a centralized location, to using remotely accessed blade PC’s located in the data center. The best of these approaches is still up for discussion and realistically, will likely depend on the specific technical and political structure of your organization and the individual requirements for the technology.

Not so different from traditional terminal services deployments, VDI takes it a step further and aims to provide users the look, feel and touch of a standard PC, but also to provide IT Departments with the ability to:

- Secure all data in the organization by bringing it back into the data center
- Streamline administrative tasks; such as, software deployment/upgrades, OS patches and new application deployments
- Enhance support capabilities. Imagine, no more desktop technician replacing a PC with a temp while taking the old one back to the shop to rebuild
- Breathe new life into older hardware, or in the appropriate environments, replace PCs with thin clients

So, what do you need to get started? Generally, it is best to start with an assessment of your needs. Questions that will need to be answered during such an assessment include, but are not limited to:

- What types of applications will be delivered and what are their performance characteristics regarding CPU, memory, storage and network utilization?

- What are the Service Level Agreements (SLA) regarding application/service performance and availability?
- What does the storage environment look like and how is everything connected?
- Is the network infrastructure architecture healthy and prepared for VDI?

As the outcome of a complete assessment, a strategy can be built that will lead to a decision upon the right VDI vendor and solution set.

Once the vendor is selected, a Proof of Concept should be planned and managed with a limited deployment of the product into the user community. These users should be selected as potential primary targets for the finalized technology set and fully involved and trained on the product before deployment. The Proof of Concept period should last long enough to ensure the users have utilized the solution thoroughly to either prove or disprove its feasibility within your environment.

A popular, but cautionary, sales strategy among the vendor community is on the upswing. Many hardware/software vendors may offer assessment and design services for free. *Nothing good is ever free.* There are distinct disadvantages to allowing your hardware/software vendor to perform assessment and design work for you. Including:

- Hardware/Software vendors sell hardware and software. Obvious, yes, but the intent of any good hardware/software vendor is to sell their products and to embed themselves into an organization in a manner that makes it difficult to replace them later
- Hardware/Software vendors are interested in the best solution for an organization, so long as that solution is comprised of the products they sell
- Hardware/Software vendors may not have true expertise in the health care industry, which can lead to the misunderstanding of what is and is not acceptable performance within a hospital environment. For example, healthcare organizations characteristically have a very complex and expansive set of applications in use. Far more than most other industries. Hardware/Software vendors rarely appreciate this complexity and therefore, provide highly simplistic assessments and/or Proof of Concepts that aren't reflective of the healthcare setting
- The hardware vendor's typical approach is to virtualize "x" number of PC's regardless of environment, criticality, application, etc. without regard for the idiosyncrasies in the surrounding organization

Accordingly, it is recommended that your assessment and proof of concept be run by a firm that is vendor agnostic and has experience in both virtualization and health care. Advantages to this approach include, but are not limited to:

- Requirements gathering that take into consideration health care organizations, their leadership, patient care, and safety as a priority



- A detailed methodology and project management focus
- A vendor agnostic approach that does not concentrate on one particular vendor or hardware solution, but rather concentrates on an organization's true needs and recommends an appropriately sized solution set

Virtualization is here to stay. Virtualized servers are now widely deployed with more of the HIS vendors testing and certifying their products in virtualized environments. With the potential of VDI, tangible benefits can be realized from a solid virtualization infrastructure implementation and can be measured in savings through “going green”, reducing administrative effort, and tightening data security.

If you would like more information on this topic and the services that Vitalize Consulting Solutions, Inc. has to offer, please contact us at our Corporate Offices at 610.444.1233 or email us at [vcs@getvitalized.com](mailto:vcs@getvitalized.com). We are also always available on our website [www.getvitalized.com](http://www.getvitalized.com).