



Delivering desktops and applications through a simple platform

The Challenge

Many small and medium-sized businesses along with large enterprise organizations are faced with issues when they have to support desktops, both locally and remotely, but don't have the manpower to manually access each desktop image. Updates to applications and changes made by the end users can cause a hardship for an organization's IT department.

The Solution

Virtualization and virtual desktop infrastructure (VDI) are solutions that solve the management and service challenges faced by IT departments of any size organization.

VDI involves creating one or more "master templates" of Windows 7, Windows 8, or Windows 10 and then installing all of the applications and configurations on devices. This ensures desktop images are "just the way that you want them."

The "master template" is used as the standard image to automatically create from 50 to 1500 virtual desktops all identical to the original. "Master templates" are ideal for organizations that require varying desktop images for departments based on their specific software application requirements.

Challenge:

Support and maintain desktops, both locally and remotely.

Solution:

Virtual desktop infrastructure (VDI) solutions from VMware and Microsoft

Results:

- Automatic system updates
- Data security and integrity
- Organization-wide software versioning
- Rollback to original state or current image
- Streamline local and remote management

The Solution *(continued)*

According to the Zones engineer working on VDI projects, “the advantages of using this method is that IT departments can add applications or update software to the one “master template,” and then have all of the VDI images based off of that template automatically updated.”

How VDI works

The secret to how VDI is possible is that all of the desktop images are running on a pool of servers located in the data center or main office.

Each of the users access the VDI images using a remote access method. It appears to the end users that their desktops are running locally, but all of the processing and resources are actually being run on the servers themselves. The only thing traveling across the wire is the video, mouse, and keystrokes that the end users enter.

All of the data that makes a personal workstation unique is actually stored on a different server – so that when a user logs onto a different VDI Image, all of their documents, desktop backgrounds, and favorites are automatically placed on the new desktop.

If there is ever a problem with a local workstation, users can simply log onto a new computer or a thin client, and they are all ready to go, with all of their applications and data in front of them.

The Results

What follows are some examples of how Zones solution engineers have helped our customers across industries leverage VDI technology to address their unique challenges.

Healthcare with HIPAA concerns

In the case of a non-profit organization with HIPAA concerns, using VDI means patient data actually never leaves the security of the data center. When a therapist or a counselor wants to review patients’ records, they can securely access the network and view data, whether they are in the office or accessing patients records remotely. If by chance a tablet or notebook gets lost or stolen, none of the patients’ records are actually on the device – they are still securely located on the organization’s main servers.

Software application standards

A service company was originally looking at a cloud solution to host all of their desktops, but their Internet connectivity was prone to failures. By bringing VDI in-house, the IT department is able to make a change once to their “master template,” and then rollout the updates and changes overnight to more than 50 computers at once.

There is no longer an issue of some people having a new software version and the rest of the users having to wait before they can access the newly updated line of business applications. And the IT department avoids the long weekends and evenings worked by a limited IT staff.

Desktops with multiple users

Maintaining computers in a school environment presents challenges when students alter systems and applications in ways that lead to performance and technical issues. With the VDI “master template,” the school now has a solution in place that enables the IT staff of two people to quickly and effortlessly update 50 or more computers at one time. If one of the students makes changes to a computer, the system can be rolled back to its original state or the current image with a touch of a button.

VDI, using either VMware or Microsoft, solves the challenges many organizations face when making all of their computing resources available internally or remotely. Any size IT department can use the automatic image updates to maintain standards. Organization also benefit from VDI’s ability to maintain the security and integrity of information by keeping it stored in the data center.

Infrastructure, the Services Company of Zones

While many organizations may want to try implementing VDI on their own, there are multiple advantages when using Zones as your IT partner. Zones ensures success by engaging with you from pre-deployment planning to post-deployment support services:

- > Strategy sessions for requirements gathering
- > Evaluation of VDI deployment options
- > Project planning and assessment of the existing IT environment
- > Experienced engineers to mitigate deployment risk
- > Onsite services, pre- and post-deployment
- > Complete knowledge transfer and site documentation

Let Zones show you how a VDI solution can be implemented, even with limited IT staff, to get you up and running in no time.