The Branch Office Dilemma

Today, there are over 11 million branch offices worldwide and centralizing the management of these environments through desktop virtualization is often seen as a good way to reduce costs while ensuring better levels of security and compliance.

However, remote office virtual desktop infrastructure (VDI) deployments have proven difficult to implement for a number of reasons: small branches often have poor network connectivity and may not have sufficient bandwidth to support multiple users accessing a wide range of applications simultaneously; local print and application servers may work more slowly with centralized applications, impeding productivity; maximizing uptime can require multiple WAN connections for redundancy, diluting or even eliminating operational savings; and, in many cases, some users in the branch still need to retain physical desktops so they can work offline or continue to use legacy peripherals.

KEY BENEFITS

- Local performance with fast application response times across the WAN to enhance end-user productivity
- Streamlined remote image management for physical endpoints and virtual clients to deliver just-in-time desktops and drive down operational costs
- Centralized data management with policy-driven access for enhanced data security and compliance

Figure 1: VMware Branch Office Desktop Architecture
This is why finding a better, more cost-effective and reliable way to manage end users working in branch offices has become a priority for customers today.

The VMware View® Branch Office Desktop™ provides a comprehensive approach to addressing multiple requirements within the branch office. With VMware Mirage™, IT organizations can centrally manage OS images for both physical endpoints and virtual desktop environments, while ensuring employees have fast, secure access to applications and data to maximize productivity. With centralized images and layered single image management, the same image can be deployed in a server-hosted virtual desktop, natively to a physical PC, or even on a client hypervisor.

Hosted Virtual Desktop Management

Hosted virtual desktops provide a streamlined, cost-effective and secure way to manage branch users who access their applications and data from remote locations. Where wide area networks are robust and reliable, VMware® View™ together with VMware vShield™ and vCenter™ Operations Manager for View (vCOPs) enable organizations to do more with less and to adopt an automated, policy-driven approach to managing end users in their branches.

Leveraging VMware View physical appliances from the VMware Rapid Desktop Program, IT organizations who opt for a more distributed VDI model, can move virtual desktop infrastructure closer to end users to optimize application response times and improve performance. IT can in turn remotely manage, patch, and back up users in the datacenter.

What's Involved

**VMware View**

VMware® View™ moves desktops and applications into the cloud and delivers them as a managed service. With VMware View and VMware ThinApp™ IT can grant or restrict access to desktops, data, and applications based on endpoint device configuration, network location, and user identity.

**vCenter Operations Manager for View**

vCenter Operations Management for View gives IT administrators broad insight into desktop performance, pinpointing issues and helping optimize resource utilization. This information enables rapid intervention for troubleshooting and proactive management of the desktop environment.

**vShield**

The vShield™ suite of products, including vShield App and vShield Edge, allow IT to robustly firewall virtual machines and partition networks and resource pools. With vShield App, IT can apply policy-based rules to virtual machines based on IP addresses as well as business or application requirements. vShield Edge can segment resource pools and allow IT to provide a common set of services to any VM within a defined perimeter.

Optimizing WAN Performance

Organizations looking to combine VMware View with leading WAN optimization solutions can also improve resiliency, accelerate application response times, and ensure LAN-like performance for View sessions and local peripherals in the branch. This provides end users with uncompromised performance while ensuring IT is better able to patch, manage, and back up desktops centrally within the datacenter using a single instance of View infrastructure.

Central Image Management and Disaster Recovery

For end users with laptops, desktops, or unmanaged virtual machines, where VDI is not a good fit due to sporadic or poor connectivity, IT can leverage VMware Mirage. VMware Mirage centralizes complete copies of endpoint images in the datacenter, where they are protected and managed, while end users continue to enjoy the power of their local PC.

By providing continuous synchronization over the WAN between the local and central copies, Mirage ensures endpoint images are easily managed, maintained, and updated. IT manages a single image across a diverse range of devices that can be easily recovered in case of disaster, moved when hardware is refreshed, or migrated to a newer OS. And by decoupling the individual components of the image into different layers, VMware Mirage ensures IT can easily maintain core images in compliance without disrupting user data or profiles and while allowing branch employees to install applications that personalize their PCs.

What's Involved

**VMware Mirage**

VMware Mirage can distribute a single image to a group of PCs anywhere on the network, quickly and easily. These images are seamlessly merged into a Windows endpoint. With just a few clicks in the Mirage Management Console, IT can initiate a ‘Base Layer enforce’ operation that brings any PC back into full compliance, without impacting user profiles or user data. User-installed applications can be maintained or removed, if the IT administrator wishes, during this operation as well.

For distributed locations, the Mirage solution can send a base layer update to just one machine—the Branch Reflector. But first, the Branch Reflector will find any bits that are in the Base Layer locally, cache them, then download only the remaining bits from the Mirage server. When the Branch Reflector has finished downloading the complete base layer, it then distributes it to the other local machines over the local area network. With just a few clicks and a small download, all branch machines can be updated, patched, upgraded, or brought back within corporate image compliance. The Branch Reflector feature can run on any user’s endpoint and requires no additional cost or infrastructure.
Summary

The Branch Office Desktop from VMware provides a comprehensive and cost-effective approach to managing multiple requirements within branch office environments. The combination of VMware Mirage for image management/disaster recovery and VMware View to deliver virtual desktops as a service ensures network constraints, legacy support, and offline requirements can all be accommodated without impacting performance or productivity.

The VMware Branch Office Desktop is optimized for organizations looking to cost-effectively and reliably support desktops in the datacenter for branch office employees accessing applications and data on physical endpoints and through virtual machines. It is uniquely designed to support centralized image and layered single image management that can be deployed in a variety of ways to best address users’ requirements—including via server-hosted virtual desktops, natively to physical PCs, or even on client hypervisors.

Learn More about the Branch Office Desktop

For additional information about the Branch Office Desktop, read the Branch Office Reference Validation documents that will be forthcoming at vmware.com.

Or call VMware for an assessment today. Our experts will help you determine the opportunity for your organization—and chart your course to a branch office solution. For more information or to purchase VMware products, call 1-877-4VMWARE (outside of North America dial +1-650-427-5000), or visit www.vmware.com/products, or search online for an authorized reseller.