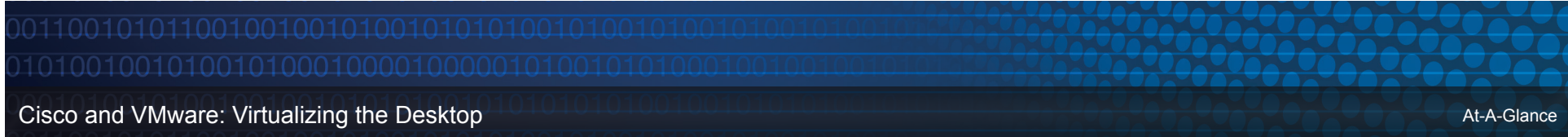




# Regain Control of the Corporate Desktop Environment: Cisco Desktop Virtualization Solution with VMware View™



Cisco and VMware: Virtualizing the Desktop

At-A-Glance

## Transform the Desktop

Successful businesses are extending their reach to address the global marketplace, potentially sending corporate data across the world. This extension is forcing IT departments everywhere to juggle two competing requirements: the needs of users to access their desktops with responsive performance and flexibility, and IT's need to protect mission-critical data while avoiding the loss of customer and employee personal information. Corporate desktop data is too important to be located anywhere except in the corporate data center.

In addition, the cost and complexity of managing desktops distributed across a global enterprise is rapidly increasing. IT departments are challenged with deploying and constantly updating hundreds, or even thousands, of desktops. With the introduction of Microsoft Windows 7, IT departments now are also challenged with migration to the new operating system, including the need to consider application and hardware compatibility for this new environment.

The need to regain control over data and to rein in the ever-increasing cost of maintaining a personal computer for each employee has made desktop virtualization a top priority in many companies. Cisco® Desktop Virtualization Solution with VMware View centralizes the components of the desktop in the data center to enable exceptional control of applications and data while improving IT's capability to manage and deliver desktops. This solution helps reduce IT costs and enables flexible access and an improved experience for end-users (Figure 1). The Cisco Desktop Virtualization Solution with VMware View is delivered as part of Cisco's Virtual Experience Infrastructure (VXI), providing an open end-to-end service-optimized infrastructure for workplace virtualization.

**Figure 1.** Cisco and VMware Deliver a Comprehensive, Centralized Virtual Desktop Solution That Gives Companies Superior Control Over Security, Infrastructure, Migration, and Total Cost of Ownership While Maintaining an Outstanding User Experience



## Take Control of Desktop and Data Security

Securing traditional desktop and laptop computers is at best difficult and often impossible. Cisco Desktop Virtualization Solution with VMware View provides greater control over desktop and laptop environments while adding an exceptional level of security to the end-to-end infrastructure.

Centralization of desktop data enables consistent data management across the enterprise, protecting the data to comply with business, industry, and government regulations. Integration between Cisco UCS Manager and VMware View provides consistent security policies for virtual desktops, regardless of the location and movement of the virtual

desktop. At the network level, Cisco virtual interface cards (VICs) provide complete data segregation between all virtual desktops running on the same host. This exceptional level of security dramatically reduces the risk of compromised corporate data.

The solution helps IT departments gain control over mobile, campus, remote-office, offshore, and consultant environments while centralizing the location and management of desktops and applications and their data. Management integration between VMware View and the Cisco Unified Computing System™ improves control and security of user data, increasing desktop uptime and improving data availability.

Cisco Desktop Virtualization Solution with VMware View provides templates that speed desktop provisioning and help ensure consistent, compliant, error-free deployment. In addition, the solution provides exceptional backup and recovery capabilities through centralized data repositories and a high-speed 10-Gbps unified fabric.

## Gain Superior Control and Agility of Desktop Operations

IT departments are recognizing that migration to new OS versions gives them an excellent opportunity to transition to a virtual desktop solution. This solution from Cisco and VMware supports the natural process of migrating users to a new environment while radically simplifying the deployment of a new virtual infrastructure and the virtual desktops that run on it. After the solution is implemented, deploying additional virtual desktops to new users is accomplished in minutes rather than weeks.

Cisco Desktop Virtualization Solution with VMware View helps organizations keep up with the changing user landscape, whether to address growth, mergers or acquisitions, migration to Microsoft Windows 7, or the need to reduce outages to meet service levels. The solution is easy to provision, deploy, manage, troubleshoot, and update, enabling exceptional agility. It offers integrated,

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single-pane management and support for both virtual desktops and the underlying hardware infrastructure, resulting in simplified, policy-based desktop management and significantly fewer help desk service calls.

The solution enables deployment of desktops as a managed service on an internal cloud, allowing users to access desktops from a variety of locations and devices while maintaining central control over desktop provisioning and management. User workloads are dynamically balanced across the server and network infrastructure with policy-based resource access and priority. Additionally, the virtual desktops can be taken offline for continued user productivity when a network is not available.

The combined solution supports rapid scaling of virtual desktop computing, with industry-leading memory capacities that support higher desktop consolidation ratios. Policy-based tiered storage and deduplication is standard, providing optimal desktop storage capacity management, keeping active user data instantly available for cost-effective data access.

## Provide an Exceptional User Experience

Balancing user needs with the need for IT department control, Cisco Desktop Virtualization Solution with VMware View enables users to access their desktop environments consistently across locations and devices, regardless of network availability. High desktop and application responsiveness and smooth graphics performance is provided by network quality of service (QoS) optimized on a per-virtual machine basis and the efficient PC-over-IP (PCoIP) display protocol. The PCoIP display protocol was designed specifically to enhance remote desktop performance and provide a superb user experience. In addition, integration between the Cisco Unified Computing System and VMware View allows network QoS policy to be set for each desktop or for groups of desktop virtual machines.

## Regain Control over Total Cost of Ownership

Cisco Desktop Virtualization Solution with VMware View, with its radically simplified architecture and integrated management, enables just-in-time provisioning of desktops,

lowering the total cost of ownership (TCO). The solution reduces the number of components that need to be purchased, powered, cooled, configured, managed, and secured as compared to other centralized and decentralized desktop deployments. For example, the solution supports VMware best practices for traffic segregation with a single high-performance Cisco VIC instead of the multiple discrete network interface cards (NICs) and host bus adapters (HBAs) required by other solutions.

The combined solution streamlines desktop operations with integrated policy and role-based management, reducing the operating costs associated with desktop management. Moving from a decentralized to a centralized, virtual desktop environment increases operational efficiencies, control, compliance, and security. Desktop availability is increased through automation, increasing employee productivity. In addition, by centralizing management of virtual desktops, organizations do not have to negotiate and purchase high-priced maintenance agreements in every location in which the company does business, reducing operating costs.

Virtual desktop computing increases utilization of the associated infrastructure and automates the powering off of virtual desktops when they are not being used, providing a greener and cost-effective solution. Cisco Extended Memory Technology and hardware-accelerated, virtualization-aware networking further increase desktop consolidation ratios to reduce costs.

## Make the Move Today

Whether you are planning a migration to Microsoft Windows 7 or trying to regain control over the current desktop environment, moving to Cisco Desktop Virtualization Solution with VMware View will enable you to easily make these transitions. This solution from Cisco and VMware delivers an exceptional level of control and security over the desktop infrastructure, enables rapid, policy-based deployment of desktops to help ensure regulatory compliance, and provides new levels of flexibility to end users while helping IT departments regain control of desktop management and costs.

High-performance servers and end-to-end networking—LAN, WAN, security, mobility—are essential for any successful virtual desktop solution. This can dramatically improve the cost-effective, bandwidth-efficient delivery of high-quality concurrent virtual desktop sessions over the enterprise-wide infrastructure. Cisco Application Networking Services such as Cisco Wide Area Application Services (WAAS) and Cisco Application Control Engine (ACE) along with Cisco Adaptive Security Appliances (ASA) can enhance and complete the solution for scalable, end-to-end delivery of virtual desktops. Customers can leverage Cisco's networking industry leadership in providing best-in-class end-to-end connectivity for fast, scalable, and secure virtual desktop solutions across distance and a variety of network media.

## Why Cisco and VMware?

Cisco and VMware are market-leading, innovative companies with a long history supporting the virtualization of data center resources. By combining their visions and capabilities, the two companies provide customers with powerful allies for designing and implementing next-generation virtual desktop capabilities. Together, Cisco and VMware deliver a standards-based, cohesive, unified environment that easily scales to meet the needs of the business while reducing TCO.

The collaboration between these two companies offers customers scalable desktop capacity and resource reuse through management automation, increasing both human and resource efficiency while reducing errors and downtime. With Cisco and VMware, new desktops can be securely brought online in minutes rather than hours, days, or months, and desktop resources can automatically scale up or down to meet business requirements. The combination of Cisco and VMware delivers an infrastructure that gives IT departments outstanding control over desktop security, infrastructure, and operating costs.

## For More Information

Cisco Desktop Virtualization Solution with VMware View visit <http://www.cisco.com/go/vmware>.

Cisco VXI visit <http://www.cisco.com/go/vxi>