Turning OS Migration into a Modernization Opportunity

World Wide Technology combines the best technologies from Microsoft, Cisco, and Intel for successful Windows Server* 2003 migrations—and more

With Microsoft ending support for Windows Server* 2003 in July 2015, organizations that have not migrated to a new operating system by then will be out of compliance with existing business standards—possibly exposing themselves to vulnerabilities. But for forward-looking organizations, the Windows Server 2003 end of support is an opportunity to transform the data center and lay the foundation for growth.

Global systems integrator World Wide Technology (WWT) is helping organizations take advantage of this opportunity. In collaboration with Microsoft, Cisco, and Intel, WWT has put together a flexible, cloud-enabled platform designed to reduce IT costs, improve service delivery, and help ensure successful integrated migration projects (Figure 1).

The High Price of Inaction

When it comes to Windows Server 2003, staying put is likely to cost more in the end. Lack of security patches can quickly put an organization out of compliance with standards and regulations, with potentially costly consequences. For example, Payment Card Industry Data Security Standard (PCI-DSS) noncompliance could mean companies such as Visa and MasterCard will no longer do business with an organization. Or the new cost of doing business could include paying extremely high transaction fees.

Also, with no updates for any new threats, both virtualized and physical instances of Windows Server 2003 are vulnerable and would not pass a compliance audit. Many applications, once they are running on an unsupported OS, may no longer be supported as well. Custom support agreements (CSAs) to replace standard support are expensive, and maintenance costs for aging hardware will increase over time.

Organizations face additional costs for intrusion detection systems, more advanced firewalls, network segmentation, and other security measures—all simply to isolate Windows Server 2003 servers.

Many organizations choose to avoid these problems by migrating to a new operating system. To be successful, they require a robust, agile platform and a migration process that is cost-effective and minimizes risk. At the same time, they need to continue driving the revenue-generating side of the business.

Cloud-Enabled Platform

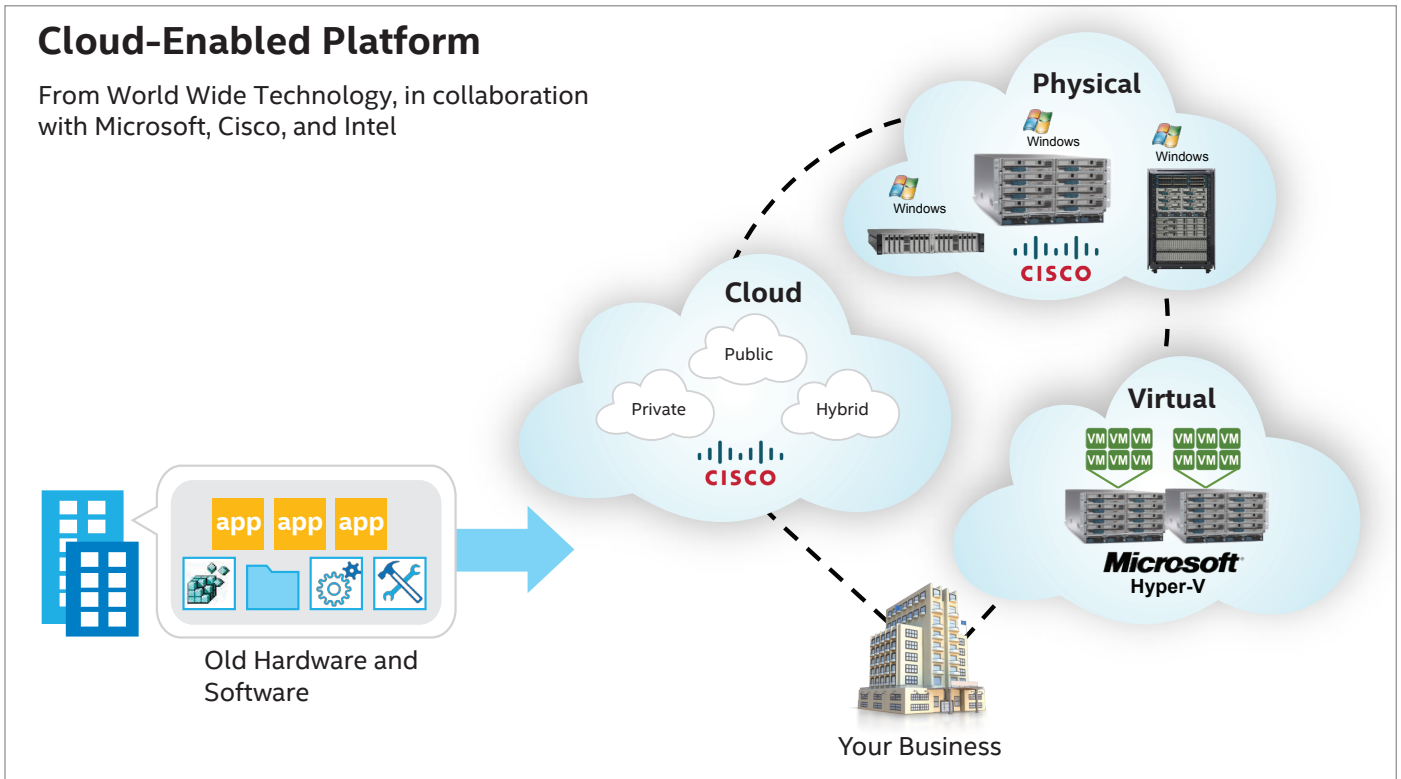From World Wide Technology, in collaboration with Microsoft, Cisco, and Intel

Figure 1. WWT, Microsoft, Cisco, and Intel platform

Elements of a Successful Solution

As organizations migrate to a new operating system, it makes sense to deploy up-to-date hardware. In fact, many older servers cannot support a new OS. With the right hardware and software platform, organizations can fundamentally begin to transform how they deliver IT—enjoying significant economic benefits in the process.

To demonstrate the elements of successful migration projects, WWT has pulled together technologies from Cisco, Microsoft, and Intel at its Advanced Technology Center (ATC), where customers can see and test these technologies. Solutions include:

- **Microsoft Windows Server 2012 R2:** This industry-leading data center server OS provides enterprise server virtualization with Microsoft Hyper-V*, along with data center and hybrid cloud solutions. It is simple to deploy, cost-effective, and application user-centric.
- **Microsoft System Center* 2012 R2:** Microsoft's enterprise-class data center management suite delivers unified management for on-premise and Microsoft Azure* environments, as well as Cisco infrastructure management and automation.
- **Cisco UCS*:** This integrated infrastructure combines Cisco's computing, storage, networking, management, storage access, and security solutions into a unified and cohesive platform that is designed to automate IT as a service across physical, virtual, and cloud environments.

- **Intel® Xeon® processors:** Cisco UCS servers are powered by Intel Xeon processors that combine performance and energy efficiency. Built-in McAfee* security software and support for an array of security services helps protect the data center and cloud.
- **Cisco Nexus* Switching:** The Nexus 1000V automates communication between the network and server administrators and provides full integration with System Center Virtual Machine Manager*, along with support for Windows Server 2012 Hyper-V Extensible Switch*.

Customers can have live or remote access to the WWT ATC for proofs of concept and demonstrations of these technologies and their interoperability.

Key Services for a Smooth Migration

WWT offers professional, specialized IT services to help organizations make the most of their modernization opportunity:

- **Windows Server 2003 migration:** WWT can help plan, design, and implement a migration for customers moving their infrastructure from Windows Server 2003 to a platform combining Cisco UCS, Nexus, Windows Server 2012 R2, and System Center 2012 R2.
- **Transition to private cloud:** Organizations can take advantage of the private cloud capabilities inherent in the WWT Microsoft-Cisco-Intel solution. WWT systems integration, change management, and configuration skills help companies transition to a more agile and cost-effective platform.
- **Server consolidation:** Windows Server 2003 migration is a prime opportunity to reduce costs by modernizing and consolidating server infrastructure through virtualization with the WWT Microsoft-Cisco-Intel solution.

The WWT team of engineers maintains certifications from major manufacturers to ensure the company offers the latest in technology solutions. WWT is Gold Certified for both Cisco Systems and Microsoft.

Cost Reduction and Cloud Enablement

Organizations can use the WWT Microsoft-Cisco-Intel solution to reduce costs and modernize delivery of IT services. Through server consolidation and the economics of cloud computing, they can reduce total cost of ownership at the platform, site, and organizational levels. For example, WWT customers have saved as much as USD 200,000 in VMware* licensing costs and cut the number of rack servers from 25 to six.[1] With fewer physical, on-premise servers, organizations can reduce the costs of power usage, cabling, and physical space.

WWT customers have also seen decreases of 25 percent in operating costs[2] through integrated infrastructure and increased management automation, with Microsoft System Center able to monitor and manage almost every aspect of Cisco UCS infrastructure. IT teams can administer their hardware and software stack through a single pane. Furthermore, Cisco case studies show that an integrated infrastructure offers a 30 percent reduction in customer administration and 80 percent reduction in end-user intervention—while delivering a 25 percent improvement in performance.[3]

The WWT Microsoft-Cisco-Intel solution also lets organizations move easily into a private cloud or a public/private hybrid cloud. With a hybrid environment based on the WWT solution, businesses can combine on-premise and off-premise options to rapidly deploy new applications while supporting developers with one platform. Cisco UCS Director* can deploy and manage virtual machines that reside both on-premise and on remote infrastructure. In addition, Cisco Intercloud Fabric* enables sharing of security policies between private and public clouds.

Beyond these immediate benefits, the WWT Microsoft-Cisco-Intel solution lays the foundation for continuing success by delivering modern application services, virtualizing on the organization's own terms, and automating IT operations to enhance quality and efficiency.

Simplified Route to a Modern Data Center

In migrating off Windows Server 2003, organizations need to deploy and scale their new configuration quickly to keep driving revenue while reducing migration risk. The WWT Microsoft-Cisco-Intel solution is designed to meet these needs, and the WWT ATC makes it easy for customers to try out the solution in advance.

With pre-validated and tested components from Cisco, Microsoft, and Intel, the WWT solution delivers workload optimization and simplifies the design, deployment, and ongoing management of business-critical systems. By evolving the data center with integrated infrastructure, enterprises can deploy and scale applications faster to drive revenue. Professional services from World Wide Technology help speed results and reduce risk at the same time.

Ultimately, WWT's facilities, infrastructure team, and professional services allow customers to focus on their business and mission priorities while taking the next vital step in the evolution of their data center.

Learn More

World Wide Technology: www2.wwt.com

Intel® Xeon® processors: www.intel.com/servers

Cisco UCS: www.cisco.com/go/ucs

Microsoft Windows Server 2012: www.microsoft.com/en-us/server-cloud/products/windows-server-2012-r2/