KEY BENEFITS

- Simplified, highly scalable, cost-effective infrastructure for BPO environments
- Uncompromised user experience built on industry-leading collaboration and contact center solutions
- Pervasive security architecture—from datacenter to network to client endpoint
- Integrated workspace solution that brings virtual desktop and collaboration together

Cisco and VMware are uniquely capable of delivering the solution for Business Process Outsourcing, through the functional integration of essential technologies spanning the endpoint to the server. With this solution, datacenter managers benefit from the scalability, performance, and manageability of an integrated solution that also simplifies administration within a common, streamlined management framework. Meanwhile, desktop managers and end users benefit from virtual desktops that deliver the highest fidelity, performance and application responsiveness, integrated with the media-rich collaborative applications they depend on.

Solution Overview

The VXI Smart Solution, a key component of the Cisco Unified Workspace, delivers an uncompromised desktop and application virtualization experience that is collaborative, mobile, and secure. It increases business efficiency, productivity, and agility by enabling an exceptionally flexible and secure workspace to any device in any location.

Cisco VXI enables the VMware View® Business Process Desktop™ by providing an integrated unified communications platform that supports any device, anywhere, while delivering enterprise voice, video, mobility, presence, and session management with security.

Cisco VXI Smart Solution reduces risk and simplifies deployments through a validated and fully tested design that combines datacenter, network, and collaboration architectures. Together with Cisco’s Collaboration endpoints, services, support, and partner technologies from VMware, the Cisco VXI Smart Solution offers a comprehensive platform from a trusted partner.

The VMware Business Process Desktop solution, built with the Cisco VXI Smart Solution, enables organizations to deploy a secure, scalable infrastructure that addresses the challenges associated with Business Process Outsourcing (BPO), providing a secure, collaborative workspace for remote workers. Built on an industry-leading datacenter, network, security, and collaboration infrastructure, Cisco VXI delivers an uncompromised desktop and application virtualization experience that is collaborative and secure.

Architecture and Design

The architecture diagram shows the VMware Business Process Desktop enabled by Cisco VXI Smart Solution architecture.

Key components in the corporate headquarters, the enterprise-managed remote location, and third-party remote location provide secure access and availability to virtual desktops together with high-quality unified communications capabilities.

- UCS – Optimized computing infrastructure for Desktop Virtualization
- Unified Communications (Jabber) – delivers enterprise voice, video, mobility, and presence
- ISE – For consistent security policy enforcement network wide for physical desktops, virtual desktops, and Bring Your Own Device (BYOD)
- ASA – Firewall services for the datacenter
- WAAS – WAN Optimization with context-aware caching, compression, and optimization
Validation Result

WIND, Italy’s leading service provider, offers wireline, mobile, and IPTV services primarily to consumers, but increasingly also to businesses. The service provider’s recent merger with Russian operator VimpelCom has created the world’s fifth largest carrier, with 173 million customers.

For WIND, customer service is a key differentiator within a marketplace that is becoming increasingly crowded. In Italy, these operations rely on 1,200 agents located in four contact centers in Rome, Ivrea, Pozzuoli, and Palermo.

Rapid growth, however, had started to expose the limitations of an aging contact center infrastructure, which had reached capacity and would no longer scale. It was also difficult to manage peaks and troughs in call volumes across the four sites. From an IT support perspective, this environment was a drain on resources. When agents had an issue with their desktops, or a new employee joined the staff (contact centers are renowned for having high staff turnover), a technician would invariably have to visit the site to resolve the problem.

To address these challenges, WIND decided to adopt desktop virtualization as a way of improving efficiency and productivity and reducing capital expenditure. Cisco’s VXI and VMware® View™ provided WIND with a cost-effective approach for managing applications and data, while enabling quick software upgrades, and easy addition/removal of individual WIND agents from the system through centralized control.
Challenge

- Reduce capital expenditure
- Improve efficiency, productivity, and application response time
- Reduce time to implement new contact center site or add agents

Solution

- 1,200 agents supporting 22.7 million customers (20.6 million mobile subscribers and 2.1 million broadband subscribers) with new Cisco Virtualization Experience Infrastructure solution and VMware View

Results

- Average call-waiting time reduced by 40 percent
- Agent productivity increased by 20 percent

Product List

- Cisco Unified Computing System
- Cisco UCS B200 M2 Blade Servers, powered by Intel 2.66GHz Xeon X5650 95W CPU/12MB cache/DDR3 1333MHz processors
- Cisco 2104 Series Fabric Extenders
- Cisco 6100 Series Fabric Interconnects

Design Components

Cisco VXI design components for the Business Process Desktop solution include the following:

- Unified Communications – Provides enterprise-quality voice, video, and rich media capabilities for an uncompromised end-user experience, while enabling easy-to-use messaging, sharing, and conferencing capabilities

- Cisco® Virtualization Experience Clients – For uncompromised virtual desktop experience with voice and video, Cisco offers a variety of zero and thin clients and a software appliance
  - VXC 6215 thin client that unifies voice, video, and virtual desktop in one device that supports high-quality and highly scalable voice and video
  - VXC 4000, a software appliance that supports high-quality, real-time interactive voice on virtualized Windows PCs
  - VXC 2000 “zero-client” devices that integrate with select Cisco Unified IP Phones

In addition, Cisco VXI supports a broad range of thick, thin, and zero clients, and mobile devices such as laptops, ultrabooks, tablets, and smartphones.

- Cisco® Unified Computing System (UCS) – As part of the Cisco Unified Data Center, the Cisco Unified Computing System™ (Cisco UCS™) provides the foundational computing elements for Cisco VXI. Cisco UCS servers provide outstanding scalability, performance, and density for virtual desktops
  - Cisco® Nexus® 1000V Series Switch
  - Cisco® Virtual Security Gateway (VSG)
  - Cisco® ASA 5500 Series Adaptive Security Appliances
  - Cisco® AnyConnect™ Secure Mobility Client
  - Cisco® Wide Area Application Services (WAAS)
  - Cisco® Application Control Engine (ACE)

To learn more about Cisco VXI, visit www.cisco.com/go/vxi.

To learn more about VMware View 5, visit www.vmware.com/view.