BROCHURE

MITEL VIRTUAL SOLUTIONS

WHAT WOULD YOUR IT DEPARTMENT DO IF IT COULD SPEND MORE TIME ON INNOVATION AND LESS TIME WORKING JUST TO "KEEP THE LIGHTS ON"?

Founded on a tightly integrated partnership with virtualization leader VMware®, Mitel® Virtual Solutions let you do just that.

Mitel was the first in the industry to deliver best-in-class, virtualized unified communications and collaboration (UCC) applications that can reside alongside other enterprise business applications in mainstream data center environments. We have continued that industry leadership as the first to bring unified communications to the virtual desktop.

A recent commissioned study, conducted by Forrester Consulting, found a Mitel Virtual Solutions customer's three-year risk-adjusted ROI to be 84 percent, with a payback period of less than 8 months[1]. Hundreds of other customers have deployed Mitel Virtual Solutions, and are experiencing a tangible return on their investment with:

· Enriched communication and collaboration
· Lower capital and operating expenses
· Streamlined administration and management
· Stronger business continuity and security
· Increased productivity for IT and users alike

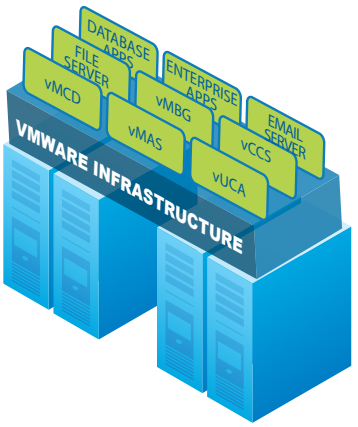
UNITING THE WORLDS OF DATA AND VOICE

Mitel Virtual Solutions offer all the functionality and features of Mitel's award-winning unified communications solutions delivered as a complete package of virtual appliances that can be deployed alongside other virtual applications in your VMware-enabled data centers. This delivers an innovative way to manage and converge real-time applications cost-effectively, so you can leverage both voice and data communications to maximum advantage.

KEY BENEFITS

- FEATURE-RICH UNIFIED COMMUNICATIONS TO IMPROVE PRODUCTIVITY AND COLLABORATION
- STREAMLINED ADMINISTRATION AND MANAGEMENT
- SIMPLIFIED AND STRONGER BUSINESS CONTINUITY
- LOWER COSTS, HIGHER PRODUCTIVITY

COMMUNICATION AND COLLABORATION WITH FEATURE-RICH UC



With Mitel Virtual Solutions, voice and business applications now run together in a virtual environment.

[*]Source: A commissioned study conducted by Forrester Consulting on behalf of Mitel, "The Total Economic Impact of Mitel Virtual Solutions", January 2012

MITEL®

With a complete and rich set of unified communications features, Mitel Virtual Solutions enhance your users' ability to communicate and collaborate, by ensuring they have access to the right people at the right time, regardless of the communications device they are using or where they are working from.

Virtual Mitel Communications Director (vMCD). The foundation of the Mitel Virtual Solutions, vMCD is a virtual telephony services platform. It provides call control features for small to large enterprises with powerful call handling, a profusion of unified communications features, including mobility and conferencing, and simple management – enabling faster, more effective communication.

Virtual Mitel Applications Suite (vMAS). An easy-to-use and -manage unified communications applications suite. It delivers capabilities such as unified messaging; speech-enabled auto-attendant; mobility; teleworking; sophisticated audio, video, and web conferencing; and business reporting.

Virtual Mitel Unified Communicator® Advanced (vUCA). A client for desktops and mobile devices that provides a single access point for all business communication and collaboration needs. vUCA provides real-time access to everyone in the organization, on or off the premises, and enhances the effectiveness of "in the moment" communications. Its rich feature set includes presence and availability, deskphone and softphone integration, corporate directory access, visual voice mail, secure instant messaging, and point-to-point video.

Virtual Contact Center Solutions (vCCS). Mitel's Virtual Contact Center Solutions ensure delivery of superior customer service that nurtures relationships. Agent and supervisor tools drive productivity in your contact center, and real-time and historical reporting ensure operational efficiency.

Virtual Mitel Border Gateway (vMBG). vMBG enables you to securely extend the corporate voice and data network through your firewall to virtually any location via a broadband connection. Establish secure workspaces with comprehensive threat protection, strict access control, and privacy, and enable teleworkers to work and collaborate productively from any location.

STREAMLINED ADMINISTRATION AND MANAGEMENT

Mitel Virtual Solutions enable you to deploy and manage unified communications like any other application in your virtual data center, instead of maintaining a separate set of processes, tools, and staff for voice communications. With Mitel Virtual Solutions you can take advantage of VMware vCenter™ advanced management tools for:

- Virtual machine creation and configuration, health monitoring, performance reports, and more
- Live migration of virtual machines from one physical server to another with zero downtime – even calls in process aren't dropped when you move vMCD
- Automated migration of virtual machines to balance workloads and optimize the use of physical server resources

VMware virtualization brings many other advantages as well – software-managed security zones, private cloud computing to share virtual resources, distributed power management, thin provisioning, and built-in NIC failover.

SIMPLIFIED AND STRONGER BUSINESS CONTINUITY

IT managers used to laboring over two plans for business continuity and disaster recovery – one for data, the other for voice – can now encompass their entire IT infrastructure with a single plan. And they can have a common set of service level agreements (SLAs), processes, and tools for their single infrastructure.

Mitel's application layer resiliency / failover coupled with VMware vCenter management tools provide unprecedented business continuity within the data center and across multiple data centers. For business continuity, Mitel Virtual Solutions leverage the following vCenter tools:

VMware VMotion™. Lets you move live, running virtual machines from one host to another while maintaining continuous service availability.

VMware High Availability (HA). Automatically detects physical server failure and restarts virtual applications.

VMware Site Recovery Manager. A plug-in to the VMware vCenter, it enables pre-planned disaster recovery management policies to be enacted should a primary data center or server cluster be put out of service. An entire virtual cluster can be recreated on a backup data center. Storage replication ensures data continuity.

LOWER COSTS, HIGHER PRODUCTIVITY

CIOs know that virtualization technology provides big advantages. By virtualizing UC applications, you can transform infrastructure into an integrated, dynamic, and flexible service that delivers efficiency, control, and choice – and dramatically lowers capital and operating costs.

- Software deployment and provisioning takes hours instead of days
- There is no downtime with virtual machines
- Voice and data integration means there's no longer two sets of hardware, two sets of resources, and two budgets
- A reduction in the number of physical servers in your data center reduces your capital expenditures
- Server consolidation also leads to immediate operational savings, because less real estate is needed to house hardware, and less energy is needed to power and cool the data center

Virtualizing UC in the data center makes you more agile and better able to respond to the changing demands of your business.

EXTENDING UC TO THE VIRTUAL DESKTOP

The benefits of virtualizing unified communications in the data center are clear, but desktop virtualization takes those benefits even further. Operating systems, configuration settings, and applications that even in a virtualized world have traditionally run on individual personal computers, are instead located on virtual servers in the data center. Mitel and VMware have again led the industry in bringing unified communications solutions to the virtual desktop by integrating Mitel Unified Communicator Advanced (UCA) with the VMware's leading desktop virtualization solution, VMware View™.

KEY BENEFITS

- UNIFIED ACCESS TO A RICHER COMMUNICATION AND COLLABORATION EXPERIENCE
- HIGH-QUALITY AUDIO, WITH OR WITHOUT A DESKPHONE
  UNHINDERED MOBILITY
- MEETS THE NEEDS OF GENERAL BUSINESS USERS AS WELL AS CONTACT CENTER AGENTS
- STRONGER SECURITY AND DATA INTEGRITY, LOWER COSTS, AND CENTRALIZED ADMINISTRATION

UNIFIED ACCESS TO A RICHER COMMUNICATION AND COLLABORATION EXPERIENCE

Integration with VMware View enables voice and data to be deployed together in a single unified solution for the virtual desktop. Now users can access all of Mitel's unified communications and collaboration tools from their VMware View client, including:

- Voice
- Audio and web conferencing
- Presence and availability
- Document sharing
- Secure Instant Messaging (IM)
- Voice mail

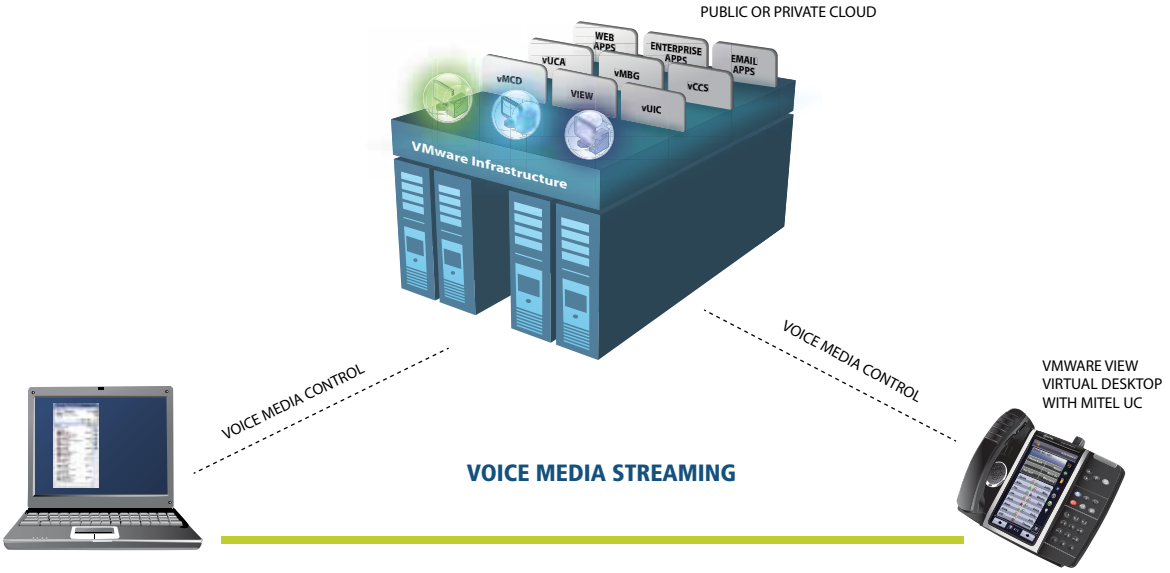
A seamless user experience is ensured with Single Sign-On (SSO), so that when users sign on to a View workstation, they are automatically signed into the deskphone associated with the workstation and the UCA client. They are enabled with their personalized user profile for automatic access to all of their applications, speed-call list, and extension number. They have the same experience regardless of where they sign on to their View workstation.

HIGH QUALITY VOICE, WITH OR WITHOUT A DESKPHONE

Not all users require a deskphone, and Mitel can deliver the same high-quality voice experience with the built-in softphone in UCA. Of course, for those who still prefer a deskphone, Mitel's phones can be integrated in the virtual desktop as well.

The virtual desktop had not traditionally been a friendly environment for voice, since VoIP (Voice over Internet Protocol) is a very demanding application that can easily suffer from quality of service issues. For high-quality voice, once a call is set up, there needs to be direct end-point to end-point connectivity for the streaming media. The architecture of virtual desktops had been at odds with the requirements for high-quality voice because all data and voice traffic was transmitted back through the data center instead of directly to the other endpoint.

Mitel delivers high quality voice by solving the media streaming problem and breaking communications into two pieces — the voice streaming component and the call processing component which sets up the calls. The call processing component is transmitted through the data center, but the media streaming component is transmitted directly between the two endpoints ensuring the utmost of voice quality.



Mitel and VMware overcame the media streaming challenge to create Mitel Virtual Solutions for the virtual desktop.

UNHINDERED MOBILITY

The days of employees working at their assigned work station are long gone. Employees are now mobile – working at airports, customer sites, and moving between meeting rooms and branch offices within their own corporate walls. Mitel Virtual Solutions free people to work anywhere, yet remain connected and collaborative. UCA is available for all market-leading mobile devices including Apple® iPad® and iPhone®, Android™, and BlackBerry® devices. It can be deployed to all of these devices with or without a virtual desktop environment, bringing several benefits:

In-Office Mobility. With single sign on to any workstation in your organization, users can display their personal desktop and communication tools anywhere in the organization. Session mobility means they can launch a collaboration session in their office, move to a meeting room, and access the collaboration session right where they left off.

BYOD (Bring Your Own Device). BYOD is becoming more common in many businesses, as the division between work and personal becomes blurred. Employees want a single device to support all facets of their life, including work. With desktop virtualization and Mitel Virtual Solutions, users can install a single piece of client software to their device, and then sign in to their personal desktop to get everything they need to work and communicate effectively. When personnel change, access to applications, data, and communications tools can be turned off with a single click in the data center.

FOR ALL USERS, INCLUDING THE CONTACT CENTER

Effective communication in the contact center is critical to developing and maintaining positive, profitable customer relationships. Contact centers, in particular, are an area of strong growth for desktop virtualization, with workstations supporting multiple shifts of agents, high agent turnover and the need for high uptime, strong control and administrative flexibility.

With Mitel Virtual Contact Center Solutions, contact centers can deploy and manage agents anywhere in the world on almost any device, providing a single unified solution in a virtual desktop environment. Agents are no longer tied to the traditional office, where each signs on to their own computer and telephone at the start of a shift, instead they sign into their own personal desktop at the start of a shift anywhere, from any device.

Deploying Mitel Contact Center Softphones instead of deskphones provides a lower cost, more flexible solution in an environment where capacity requirements fluctuate greatly, and temporary and home-based agent are the norm.

ADDRESSING IT'S PAIN POINTS

The benefits of the voice-enabled virtual desktop are numerous for IT managers:

Gain Control and Security. Security issues associated with lost or stolen laptops or retaining corporate data when an employee leaves disappear, because end-user devices no longer have sensitive data and information stored on them – instead, information data is stored in the data center. Access to applications and data can be turned off with a click in the data center. And it can be easily backed up, duplicated, stored, and moved from location to location, so that business continuity and disaster recovery are far easier.

Streamlined Administration and Management. Having all of your business and communications software integrated in a virtualized data center means there is a single infrastructure to set up and manage. You are no longer forced to create elaborate roll-out plans for new software or OS upgrades – that's all managed centrally in the data center.

Capital Savings. You are no longer trapped in a never-ending cycle of upgrading your users' desktops and laptops to the latest and greatest technology. Instead of replacing desktops and laptops on a regular basis to ensure they are capable of performing adequately, end-user devices become access points to centrally located and managed applications, data storage, and communications capabilities.

TECHNICAL SPECIFICATIONS

DATA CENTER VIRTUALIZATION REQUIREMENTS

All Mitel Virtual Solutions are delivered as downloadable software images in a standard Open Virtualization Format (OVF) for installation into a VMware-enabled virtual environment.

MINIMUM SOFTWARE AND HARDWARE

- VMware vSphere™ 4 or 5, with VMware VSphere client (VMware vCenter Server is optional and not required to install and manage Mitel Virtual Solutions).
- Intel-based servers with a minimum Xeon® 55xx Series at 2 GHz or better (supporting Intel® Nehalem architecture), with hyper-threading enabled.

MITEL | SIMPLY COMMUNICATING®

MITEL VIRTUAL SOLUTIONS VIRTUAL APPLIANCE RESOURCE RESERVATION

SMALL BUSINESS FOR UP TO 150 USERS

	RESOURCE ALLOCATION			RESOURCE RESERVATION	
Virtual Appliance	Virtual CPUs	RAM (GB)	Hard Disk Space (GB)	CPU (GHz)	RAM (GB)
vMCD	2	1.5	20	1	1.5
vMAS	2	4	45	2	4
vMBG	1	1	40	1	1

ENTERPRISE FOR UP TO 2,500 USERS

	RESOURCE ALLOCATION			RESOURCE RESERVATION	
Virtual Appliance	Virtual CPUs	RAM (GB)	Hard Disk Space (GB)	CPU (GHz)	RAM (GB)
vMCD	4	2	20	5	2
vMAS	4	6	85	4	6
vUCA	2	2	30	2	2
vMBG	3	2	40	5	2
vNupoint UM	4	4	256	6	2
vCCS Bundle	4	4	120	2.5	4

MITEL VIRTUAL SOLUTIONS: MANAGEMENT CAPABILITY SUPPORT

VMWARE VSPHERE ADVANCED MANAGEMENT CAPABILITY	vMCD	vMAS	vUCA	vNUPOINT UM	vCCS / CALL ACCOUNTING	vMBG
vMotion	•	•	•	•	•	•
Storage vMotion	•	•	•	•	•	•
High Availability (Ha)	•	•	•	•	•	•
Fault Tolerance (Ft)	future	future	future	future	•	future
Distributed Resource Scheduler	•	•	•	•	•	•
Distributed Power Management	•	•	•	•	•	•
vStorage APIs	•	•	•	•	future	•
Site Recovery Manager	•	•	•	•	•	•
Virtual Appliance Deployment (Import)	•	•	•	•	•	•
Export Virtual Appliance	•	•	•	•	•	•
Shutdown Guest	•	•	•	•	•	•
Snapshot (Powered Off)	•	future	•	future	•	•
Cloning	•	•	•	•	•	•
Health Monitoring	•	•	•	•	•	•

VIRTUAL DESKTOP REQUIREMENTS

UC SERVER VIRTUAL APPLIANCE – HARDWARE REQUIREMENTS

· Minimum Intel Xeon 55xx/65xx/75xx Series at 2.26 GHz or better with Extended Page Table support and Hyper-threading enabled, or AMD Opteron 2400 series at 2 GHz or better, with Rapid Virtualization Indexing technology.
· Server must also meet VMware vSphere minimum requirements – consult VMware Hardware Compatibility Guide.

RESOURCE ALLOCATION / RESERVATION

· Minimum of 2 Virtual CPUs, 2 GB RAM and 30 GB HDD, 2 GHz CPU.

UC ADVANCED CLIENT – VIRTUAL DESKTOP RESOURCE REQUIREMENTS

CPU	1 GHz or faster
RAM	1 GB recommended
Free disk space	100 MB

See the UC Advanced product documentation for further details.

DESKTOP CLIENT END POINT

UC ADVANCED CLIENT SUPPORTS:

· Refurbished personal computers running Windows XP Professional or better.
· Thin clients from major vendors (for more information on qualified models, please contact your Mitel representative).

UC ADVANCED CLIENT – SOFTWARE REQUIREMENTS

OPERATING SYSTEM	VERSION
VMware View	5

GLOBAL HEADQUARTERS	U.S.	EMEA	CALA	ASIA PACIFIC
Tel: +1(613) 592-2122 Fax: +1(613) 592-4784	Tel: +1(480) 961-9000 Fax: +1(480) 961-1370	Tel: +44(0)1291-430000 Fax: +44(0)1291-430400	Tel: +1(613) 592-2122 Fax: +1(613) 592-7825	Tel: +61(0) 2 9023 9500 Fax: +61(0) 2 9023 9501

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