



A WHITE PAPER BY  
**TANDBERG**  
JANUARY 2009

TANDBERG INTEROPERABILITY  
WITH MICROSOFT® OFFICE  
COMMUNICATIONS SERVER 2007

JANUARY 2009

**TANDBERG**

**See: performance**



## EXECUTIVE SUMMARY

TANDBERG's mission is to change the way people communicate. TANDBERG's vision of the future anticipates a world in which all communication is completely natural and unencumbered by technology. Natural communication is the ability to interact with someone — a co-worker, customer or supplier — as if you were in the same room. In this spirit, TANDBERG is delivering interoperability to Microsoft Office Communications Server 2007. The interoperability combines the best of the TANDBERG standards-based video communication with Office Communications Server 2007.

TANDBERG is the industry leader in video communication and offers the highest quality and widest range of video communication products. TANDBERG solutions range from the desktop, boardroom and telepresence systems, and are available end-to-end in high definition. TANDBERG solutions are also capable of communicating via several protocols, including SIP, H.323 and H.320. In short, TANDBERG is committed to delivering the ultimate in business-quality video communications to Microsoft's expansive unified communications platform. In addition to current interoperability, TANDBERG has a long-term roadmap to continuously deliver best-of-breed video conferencing and telepresence interoperability with Office Communications Server 2007.

### Overall Interoperability Enhancements:

- **Easy to use** — Office Communicator users are now able to make video calls to TANDBERG devices directly from their familiar Office Communicator interface. The user simply clicks on the contact from their Office Communicator contact list and they are connected to that room-based or telepresence system. Likewise, making a call from a TANDBERG video endpoint to an Office Communicator client will be just as simple. Users select from a directory list of contacts on the TANDBERG MXP endpoint to connect.
- **Flexible** — Through the use of the single identity capabilities of Office Communications Server 2007 (also known as Multiple Points of Presence), Office Communicator 2007 users can accept video calls on the device of their choice — either their TANDBERG device or their Office Communicator 2007-enabled web cam. It's the user's choice how they want to answer. Callers will only need to click one time to reach the individual, rather than attempting to reach them by trying multiple devices; reach the person, not the device.
- **Wider availability of video communication** — Interoperability will make video available from the PC, to desktop, to conference room and TANDBERG telepresence systems.
- **Easy and efficient deployment** — The TANDBERG Video Communication Server enables seamless interoperability between video communications networks and Office Communications Server 2007 through one simple connection. This allows users to take advantage of the best features of a video communications network, such as bandwidth management, SIP proxy and H.323 gatekeeper services as well as Office Communications Server 2007.



- **Greater value in investment** — Combining TANDBERG’s industry-leading business quality high-definition video solution to the greater unified communications offering of Office Communications Server 2007 allows customers to leverage their investment in the TANDBERG solution as well as other standards-based visual communications devices with Microsoft’s unified communications platform.

#### MICROSOFT OFFICE COMMUNICATIONS SERVER 2007

Introduced in October 2007, Microsoft provides a platform that delivers instant messaging, presence, web collaboration and the capability of audio and video together in one communication system. For the end user, two clients, the Microsoft Office Communicator Client and the Microsoft Live Meeting Client can leverage the Office Communications Server 2007 infrastructure and services.

Office Communications Server 2007 includes Live Meeting web collaboration capabilities, as well as multipoint video conferencing capability delivered through the Microsoft Audio Video Multipoint Control Unit. Microsoft also introduced a conference room device called Round Table, which acts as a 360 degree web camera as well as an audio conference phone. The Microsoft Audio Video Multipoint Control Unit, Roundtable and Microsoft Live Meeting client support Microsoft Real Time Audio and Video Codecs (RTA and RTV).

#### TANDBERG AND MICROSOFT

TANDBERG has been a long-standing interoperability partner with Microsoft, including Microsoft’s Unified communications as well as Microsoft Exchange Server 2007, Microsoft Live Communications Server 2005, and now Microsoft Office Communication Server 2007. TANDBERG has also developed innovative solutions that leverage Microsoft Share Point as a portal for video content captured from standards-based video communication systems. The TANDBERG approach to interoperability with Microsoft’s Unified Communications platform is based on the concept of providing holistic solutions that enable more effective and natural communications, building the link between Microsoft’s Unified Communications solutions and TANDBERG’s robust video communication Total Solution.

#### **TANDBERG — Microsoft Interoperability**

Microsoft Exchange Server 2003  
Microsoft Office Communications Server 2007  
Microsoft Share Point 2007



### TANDBERG'S INTEROPERABILITY VISION

The TANDBERG vision for interoperability with Office Communications Server 2007 is to bring the best of enterprise video conferencing to Microsoft's unified communications world. Utilizing TANDBERG video systems in this environment should be intuitive for the end user — seamless, transparent and natural. Both TANDBERG and Microsoft users should be able to realize the benefits of interoperability without having to change the way they were utilizing Office Communications Server or a TANDBERG video conferencing system.

TANDBERG's vision for interoperability with Microsoft Office Communications Server 2007 is to facilitate technology transparency. The network should be allowed to resolve signaling, call routing and transcoding, whether the call is H.320, H.323 or SIP. Features such as NAT Firewall traversal should be integrated into an organization's unified communications platform UC world and provide and enable video communications with users outside of the corporate firewall. In its most basic form it is about individuals reaching out to other individuals easily and transparently without the need for knowing anything about codecs, protocols, audio bridges, video bridges, firewalls, etc.

### INITIAL CAPABILITIES

Interoperability is available today, with expanding capabilities delivered throughout 2009. Current interoperability includes the following features and are delivered as part of TANDBERG's interoperability roadmap:

#### **Ad Hoc Communications**

#### **Single Identity**

#### **Telepresence Interoperability**

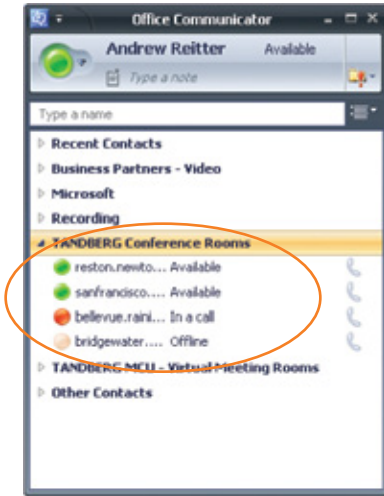
#### **Conferencing**

#### **Standards Interoperability**

#### **Directories and Management**

### AD HOC COMMUNICATIONS

TANDBERG has released an update to the TANDBERG MXP line of software, which allows TANDBERG MXP video devices to authenticate and register directly with Office Communications Server 2007. This enables Office Communicator 2007 users to find and call the TANDBERG video system in the same way that the user calls any other Office Communicator 2007 contact.



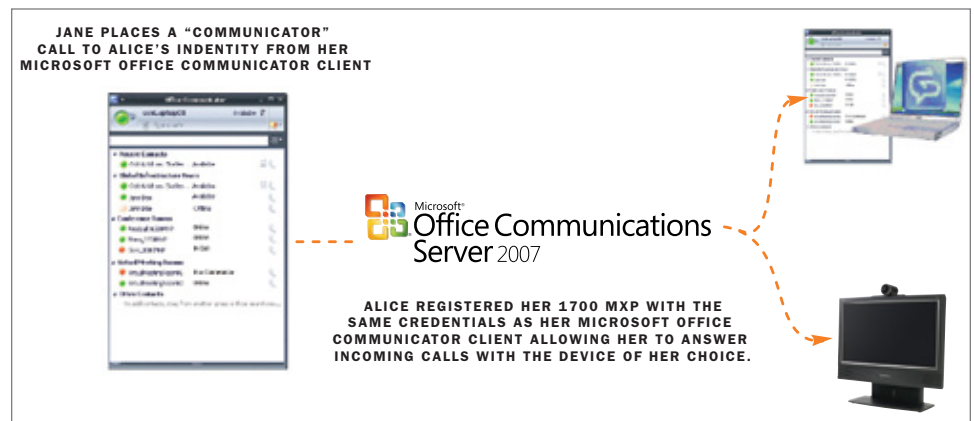
TANDBERG has also introduced a software update to the Video Communication Server (VCS) enabling interoperability with Office Communications Server 2007. Any standards-based SIP or H.323 device can register to VCS and in turn, are registered to Office Communications Server 2007. This enables communications with Office Communicator clients. Devices registered to the VCS enjoy the added benefits of VCS call control and bandwidth management features of SIP proxy and H.323 gatekeeper services. Also, any standards based H.323 or SIP endpoint can connect to VCS. Moreover, Office Communicator clients registered to Office Communications Server 2007 can see online presence status of devices registered to the VCS.

The example below, highlights how the Office Communicator user is able to create a group of “conference rooms” within their contact list, allowing the user to see the presence status of the conference room and easily click and call into the conference room. It is also possible to search for the conference room the same way a user searches for a contact not already in their respective contact list.

### SINGLE IDENTITY

A key benefit to the interoperability leverages Office Communications Server 2007’s support of multiple devices registered with the same credentials as the Office Communicator 2007 client, allowing a single user identity within the Office Communications Server 2007 solution. In the case of an Office Communications Server user that also has a TANDBERG personal endpoint, this person can register both devices to their Office Communicator 2007 identity. Upon receiving a call both devices ring, providing the user a choice of how they want to answer the call. If they are in their office they can easily answer the call with their TANDBERG personal endpoint. If they are out of the office, they can simply answer the call with the Office Communicator Client on their PC and a web camera. Regardless of the scenario, single identity affords users the benefit of only having to dial one identity rather than multiple devices.

### Single Identity





### TELEPRESENCE INTEROPERABILITY

TANDBERG’s commitment to delivering best-of-breed visual communications solutions is demonstrated through the company’s award-winning video conferencing solutions as well as TANDBERG’s Telepresence Systems. TANDBERG T3 is the ultimate immersive telepresence solution, offering an exclusive form for natural communication. With touch collaboration screens, the T3 offers a standards-based, across-the-table experience, and is ideal for any unified communication platform. TANDBERG’s interoperability with Office Communications Server 2007 extends to T3 through TANDBERG Video Communications Server (VCS), enabling Office Communicator users to connect with the telepresence enabled boardroom, from anywhere around the globe.

### CONFERENCING

TANDBERG Multipoint Conferencing Units (MCUs) also interoperate with Office Communicator 2007, providing the ability to bring multiple Office Communicator 2007 users together in a conference along with any other standards-based visual communications equipment. The TANDBERG MCU provides a “virtual meeting room” approach to conferencing in the Office Communications Server 2007 environment. Conferences from the TANDBERG MCU can appear in a contact list, allowing users to click on the virtual conference room in order to enter a meeting.

Example Conference on the MCU



A key benefit of utilizing TANDBERG conferencing capabilities is that video quality is never compromised, no matter who joins the conference. If three participants are holding a high definition (HD) conference and an Office Communicator user joins, HD quality is not compromised for the original three participants.

The Tandberg MCU also enhances the value proposition of Office Communications Server 2007 and the Microsoft AVMCU as it provides seamless interoperability between standards-based room systems and Office Communications Server 2007 using SIP or H.323 protocols.

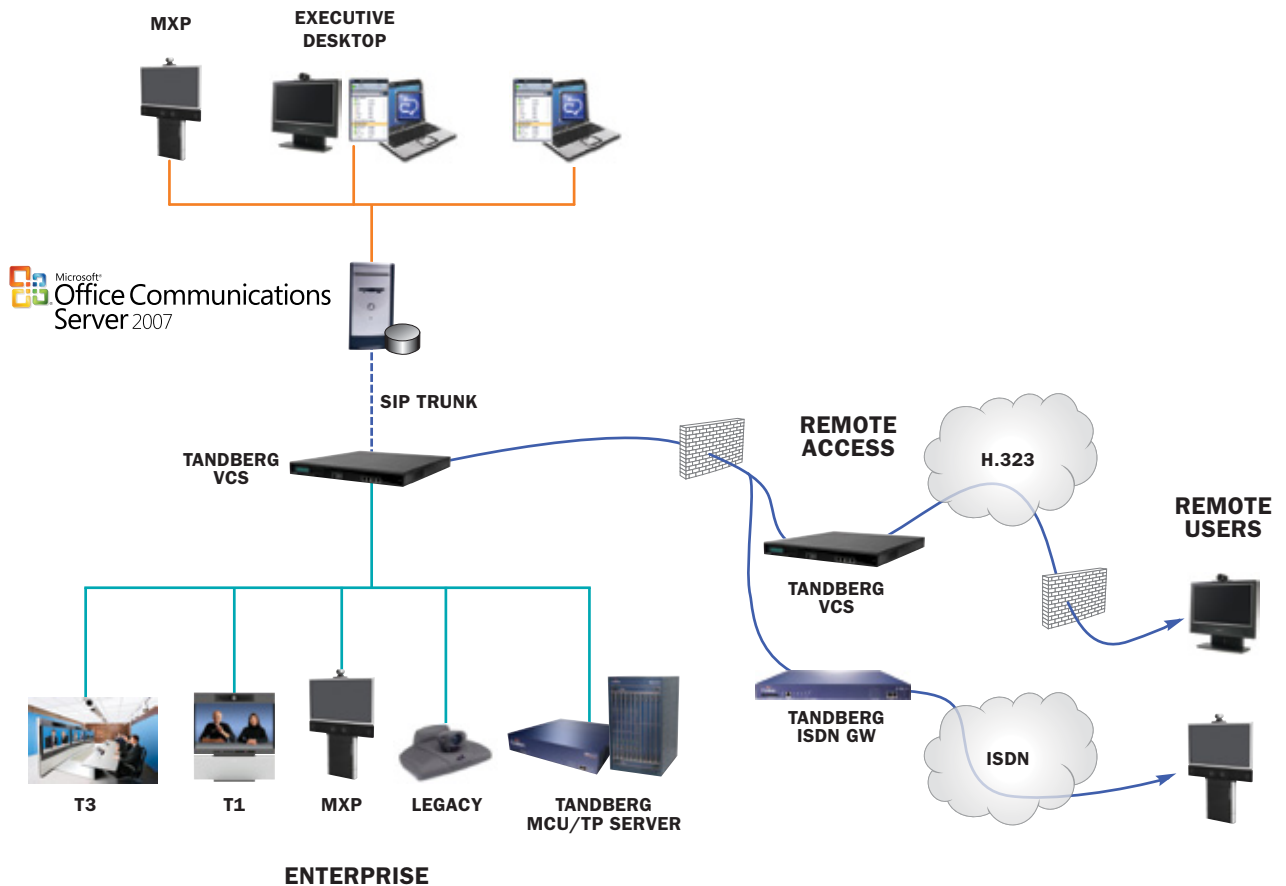
### TANDBERG MCUs and Interoperability with Microsoft Office Communications Server





### STANDARDS INTEROPERABILITY

Today, TANDBERG interoperability with Office Communications Server 2007 allows connectivity between the Office Communicator client and standards-based H.320, H.323, SIP and H.324M devices via a dual registration model. TANDBERG endpoints will be registered to Office Communications Server via SIP, or through the TANDBERG Video Communications Server (H.323 Gatekeeper) via H.323. The same applies to TANDBERG MCUs, which will allow conferencing between SIP based Office Communicator users with standards-based H.323, SIP and H.320 systems. This includes external H.323 participants utilizing H.460 or standards based SIP firewall traversal.





## DIRECTORIES AND MANAGEMENT

Directories are essential for allowing users to easily find and connect with the individuals they are trying to communicate with. As described above, TANDBERG devices are able to register with Office Communications Server 2007 and allow for seamless connectivity from Office Communicator 2007 clients; meaning these users do not have to change the way they make a video call when TANDBERG is added to their solution.

Likewise, the same goes for making a call from a TANDBERG device. Users that wish to initiate a video call from a TANDBERG endpoint to a Microsoft Office Communicator 2007 client can do this in the same fashion they are accustomed. They pull up the directory contact list on the TANDBERG endpoint and call the desired contact. The capability to do this is made possible by the LDAP interoperability capabilities of the TANDBERG Management Suite (TMS).

## DEPLOYMENT

A key advantage of TANDBERG's interoperability with Microsoft is that customers can recognize the benefits without going through a resource-intensive, cumbersome implementation. Existing TANDBERG and Microsoft Office Communications Server 2007 customers will be required to maintain the latest software upgrades on their VCS, MXP endpoints and MCUs, but no major investments will need to be made to make interoperability described in this document happen. Moreover, interoperability between TANDBERG and Microsoft Office Communications Server 2007 does not alter Microsoft existing recommendations for PBX interoperability.

## IMPORTANT DETAILS

- Microsoft Office Communications Server 2007 integration is an on-going development effort and additional functionality will be provided.
- Supported equipment and software includes TANDBERG MXP (F7 Series or later), TANDBERG Codian MCU 4500 Series and TANDBERG Codian MCU 4200 Series (MCU2.3 or later), TANDBERG Video Communications Server (VCS) — version X3
  - No specific Microsoft integration license keys are required, functionality is standard with TANDBERG products.\*
  - TANDBERG VCS does not require interworking keys for SIP to H.323 support.\*

## ADDITIONAL INFORMATION

Please visit [www.tandberg.com](http://www.tandberg.com) for more information on all TANDBERG solutions.

\*Subject to change