

Information

**OpenScape Office MX, OpenScape Office LX
and OpenScape Office HX**

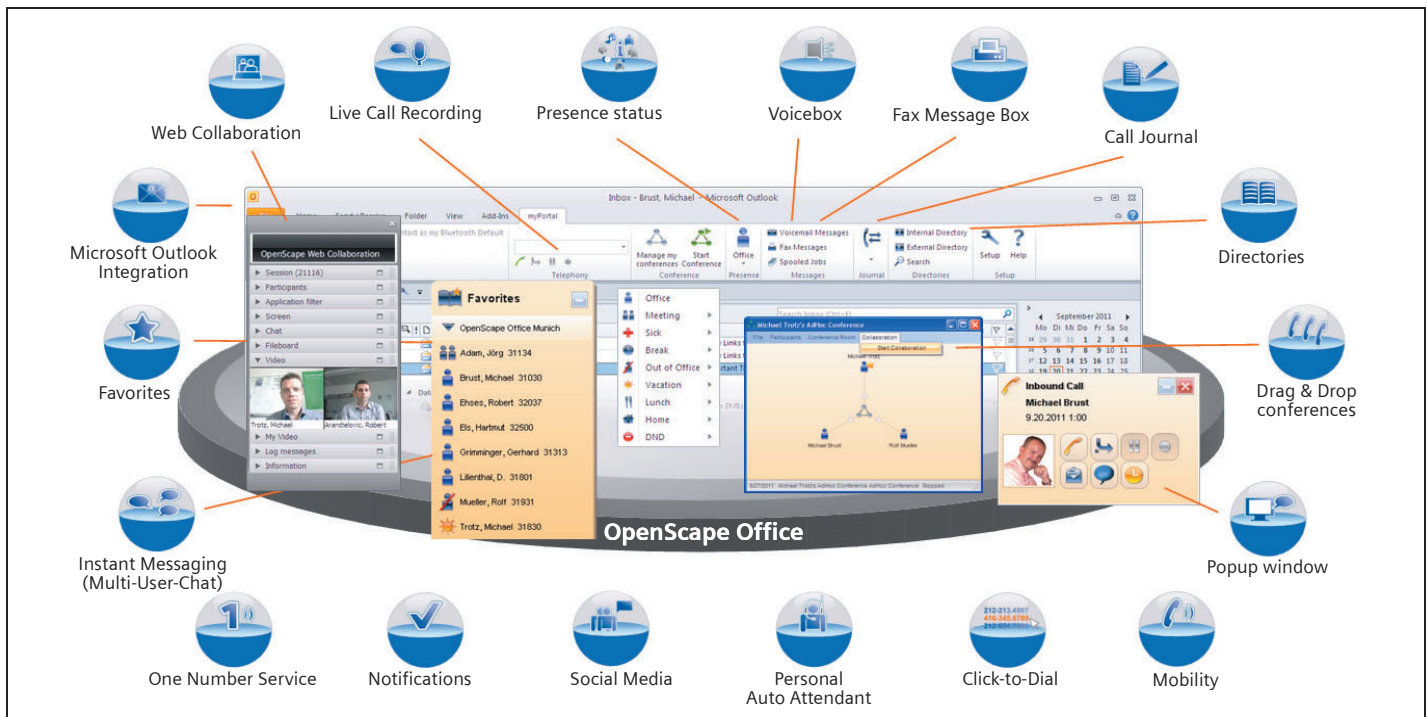
**The Unified Communication and Collaboration Solution for small
and medium-sized enterprises with one or more locations.**

OpenScape Office offers enterprises integrated voice and conference services, Web Collaboration, voice and fax message boxes, notification service, mobility, a Multimedia Contact Center and presence status functions. In standalone systems, up to 500 subscribers and, in networked systems, up to 1000 subscribers can be connected.

Unified Communication & Collaboration (UCC)

Information technology has revolutionized the exchange of information and ideas between companies. A deluge of calls, e-mails, voice messages and faxes arrive each day, reducing your productivity. Working with numerous different communication media can lead to inefficiency, customer frustration and an increase in business costs.

OpenScope Office is a Unified Communication & Collaboration solution that consolidates all types of communication and makes them available anywhere and anytime. This applies to multi-location and standalone communication types such as direct calls, presence status, conferences, Web Collaboration, e-mail, instant messaging, voicemail, fax and social networks. This does away with the need to tediously change between different programs, contact lists and e-mail accounts. As a result, enterprises can dedicate more of their energies to customers, improve their teamwork, increase their productivity and further reduce communication costs.



OpenScope Office – The all-in-one UCC solution for your communication needs

Unified Communication & Collaboration Features

Presence

The presence status of other users – even at different locations – is shown by various symbols that indicate whether the user is in a meeting or on vacation, for example. Users can also announce their own status, including additional personal information.

The presence status also determines which announcement a caller hears when the user is not present. Since customers are informed about a contact's presence, this feature enables a more effective workflow.

Users can change their current presence status on their OpenScope Office client or on the telephone.

They can decide which contacts in the internal directory can view their presence status and receive status-based voice mailbox messages and which contact details are visible to other users.

The link with the Outlook calendar automatically sets the presence status if certain keywords such as "Meeting" or "Vacation" have been entered in the Outlook calendar. The Outlook calendar is searched for new entries at regular intervals and the presence status updated accordingly.

Conferencing

An integrated conference server can be used to convene conferences in the OpenScope Office LX/MX with up to 16 participants. The conference manager can use the conference management of myPortal for Desktop and myPortal for Outlook to initiate and steer a spontaneous or a scheduled telephone conference and to start a Web Collaboration session (MX/LX). He can select the conference participants manually or from the available directories.

Web Collaboration

OpenScape Web Collaboration is a scalable and secure multimedia web conferencing solution that integrates seamlessly into the OpenScape Office MX and LX interface.

OpenScape Web Collaboration improves cooperation within your enterprise and with your business partners. Integrated functions such as desktop/file sharing, chat, whiteboard and video conferences enable you to have project and sales meetings, training sessions and product presentations without costly business trips.

Instant Messaging with Multi-User-Chat

With Multi-User-Chat, a user can exchange texts as instant messages with multiple internal subscribers and with one external communication partner (via the XMPP protocol). Instant messages are displayed as a dialog in a separate window. Drag&Drop functions for selection of the presence status of each communication partner and the display of this status enable an efficient exchange of information, such as when questions quickly need to be clarified during a telephone conference. The function is available for all users of myPortal for Desktop, myPortal for Outlook and myAttendant.

Favorites List

A user can create a favorites list of his preferential contacts from the available directories and administer them in groups and subgroups. Contacts from the internal directory (including contacts of networked OpenScape Office systems) are displayed with their presence status.

Call Journal

All calls are stored in the user journal according to various criteria.

Each call is shown with date, time, call number, last name, first name, company, route (inbound or outbound) and call duration.

Important calls can be scheduled by specifying the call number, the date and the time in advance. Calls in the journal can be set up as Outlook contacts and exported in a CSV file.

Personal AutoAttendant

A user can configure his voice mailbox so that a caller can leave a message or the call can be forwarded. The configuration can be carried out in such a way that the current presence status of the user is taken into account.

The personal AutoAttendant provides a voice recording function that can be used to change announcements in a straightforward way.

Central AutoAttendant

By using schedules and the rules defined in them, the administrator can control how AutoAttendant calls are handled at specific times or on specific days, e.g. which announcement is played or the number to which the call is forwarded. An individual announcement can be played that is customized for the phone number, such as in the language of the caller. In addition, the user can create schedules for day and night, weekends and for public holidays. Existing announcement texts or individually generated announcements in WAV format can be imported.

Status-Based Call Forwarding

Users can redirect callers to their additional call numbers or to their voice box on the basis of their presence status (Out of the Office, CallMe and Do-Not-Disturb). If the presence status changes, OpenScape Office activates forwarding of the call to the destination defined for this particular case. For the "Out of the Office" presence status, call forwarding can be set to a cell phone, for instance.

CallMe

The CallMe service allows every user to use any telephone as his office phone and hence telephone at the same tariff as in the office. The call number of the office phone is always displayed for outbound calls. CallMe gives the teleworker a convenient option for controlling his accessibility.

Click-to-Dial

A myPortal for Desktop or myPortal for Outlook user can select and call a number from a desktop application (standard Microsoft Windows application). The call number can be in an e-mail, Word file or Excel file, for example.

Voicebox

The function of the voicebox is comparable to that of an answering machine, although not every user needs to have his own device.

Voice messages can be accessed via the OpenScape Office clients or a telephone.

Fax Message Box

The fax message box can receive fax messages directly via myPortal for Desktop or myPortal for Outlook without a fax machine.

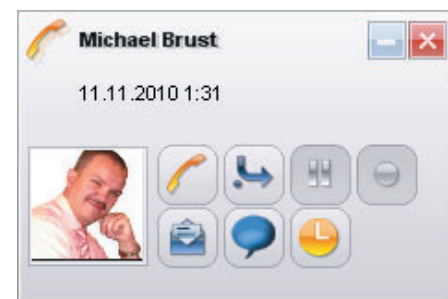
Series faxes can be sent by storing multiple fax address in the fax printer.

Notification Service

A user can be notified of new messages by e-mail, by text message or by telephone. The type of notification can be activated or deactivated separately for each presence status.

Popup Window

Screen pop-ups provide the user with a convenient way of responding to incoming calls, new voice messages, etc., with one click. Other possibilities include call pick-up, explicit call transfer, putting calls on hold, as well as the recording and ending of calls.



During a call, the user can send e-mails and instant messages and plan the next call in the screen pop-up.

Live Call Recording

A user can record calls and, as a conference manager, can also record conferences. The recordings are indicated by a red dot in the voice mailbox and, where available, show the call number of the call partner or the first conference participant.

Access Protection

Use of OpenScape Office clients requires a release via the internal extension. An individual 6-digit password must be assigned for this purpose.

Connection of External Databases

OpenScape Office makes it possible to flexibly connect to different databases in the customer environment via the integrated OpenScape Office OpenDirectory Service. For inbound calls, known subscribers are displayed with their name in the UCC clients. Customer-specific adjustments can be made at any time by means of the implemented field mapping function.

- ODBC connector for connecting to SQL databases:
 - Microsoft SQL server
 - MySQL
 - PostgreSQL
 - Sybase SQL server
- LDAP connectors for external LDAP servers such as:
 - Active Directory

Access to OpenScape Office Directories

Via the integrated OpenDirectory Service, 3rd-party applications or OpenStage phones can now access the OpenScape Office telephone directories via LDAP.

OpenScape Office Clients

OpenScape Office MX, LX and HX offer the following clients:

- myPortal for Desktop
- myPortal for Outlook
- myPortal for Mobile
- myPortal for Tablet
- myPortal for OpenStage
- myAttendant

myPortal for Desktop

The UC functions of OpenScape Office can be accessed via myPortal for Desktop.

The special feature of myPortal for Desktop is that subscribers entered in the internal directory are displayed together with their presence status. For instance, a user can see whether other subscribers are in the office, in a meeting or on vacation at any time. Outlook contacts can automatically be adopted in the personal directory.

Using Multi-User-Chat, multiple internal subscribers and one external communication partner (via XMPP protocol) can exchange instant messages simultaneously.

By individually adjusting the user interface, the favorites list and the "Journal", "Voice-mail", "Fax messages" and "Directories" tabs can be placed in separate windows on the desktop.

myPortal for Outlook

The myPortal functions can be integrated seamlessly in Microsoft Office Outlook. Thus, every user has access to all means of communication. E-mails, voice messages, fax messages and instant messages with Multi-User-Chat can be read, managed and answered in Outlook.

Users can choose whether the Outlook contact window, a screen pop-up or both should open when an incoming call is received.

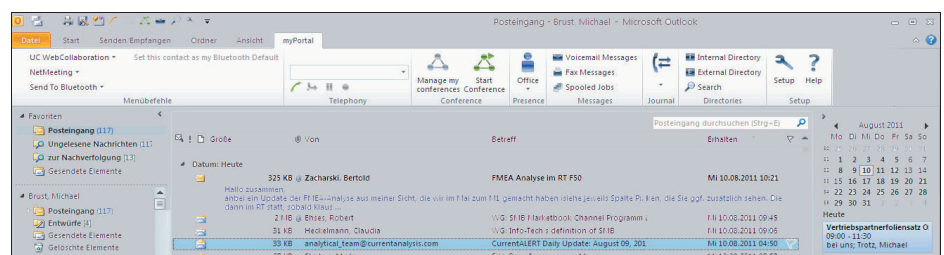
With myPortal for Outlook, users can dial directly from the contacts, receive e-mails in the mailbox and record calls.

Features	myPortal for Desktop	myPortal for Outlook	myPortal for Mobile/Tablet	myPortal for OpenStage
Presence	X	X	X	X
Conferencing	X	X	X	
Multi-User-Chat	X	X		
Favorites list	X	X	X	
Call Journal	X	X	X	
Status-based AutoAttendant	X	X		
Status-based call forwarding	X	X		
Voice messages	X	X	X	X
Fax messages	X	X		
Directories	X	X	X	
Notification service	X	X		
Popup window	X	X		

myPortal for Mobile/Tablet

myPortal for Mobile/Tablet is the web-based OpenScape Office user interface for mobile employees with smartphones and tablet PCs.

It gives mobile employees access to UC functions such as presence or voice messages, regardless of where and when they are on the road. The mobile device is therefore fully integrated into the enterprise communications system. Various adjustable dialing methods (Callback, GSM or call-through) lower communication costs.



myPortal for Outlook in the new Microsoft Office 2010 design

myPortal for OpenStage

myPortal for OpenStage is the OpenScape Office XML application for users of the OpenStage 60 and OpenStage 80 telephones. It enables access to presence status and voicebox.

myAttendant

myAttendant is a comfortable call attendant with telephone function that shows active calls, suspended calls, calls on hold and transferred calls as well as the presence data of all workers in your organization. The presence status of every user can be changed in myAttendant.

Voice, fax and instant messages are logged and administered in the Message Center. Users can manage the messages of co-workers provided they have their permission.

myAttendant provides night, day and emergency services. Up to 20 myAttendant workstations can be set up.

Multimedia Contact Center

Contact Center Features

Intelligent Routing

Inbound calls, faxes and e-mails are automatically and optimally assigned to the next available subscriber (agent) based on the longest idle time station and the highest skill level. Only subscribers with the appropriate authorization receives faxes and e-mails.

- Skills-based routing
- Group-based routing

Agent in Multiple Groups

An agent can be assigned to several queues (groups) with different skills.

Preferred Agent

This function means a customer can always be assigned the same contact partner (agent) in the Contact Center.

VIP Support

For each queue it is possible to individually define whether specific customers are to be given preference and, hence, should reach a free agent faster.

Wrap-Up

The wrap-up time can be defined. Inbound calls for specific subjects (ordering, complaint, service, etc.) can be assigned using wrap-up codes.

Queues

Queues are the basis of every Contact Center. When all agents are busy, calls, faxes and e-mails can be dealt with depending on the skills level, the priority and the wait time. Announcements can be played to callers on hold.

Callback

The caller can leave a callback request if the wait time in the queue is too long for him. This callback request is sent to the agents in a voicemail.

Position Announcements

Callers can be informed of their current waiting position by an announcement.

Authorization Level

A differentiation is made between the roles of Agent, Supervisor and Administrator in the Contact Center through the use of authorizations.

User Portals

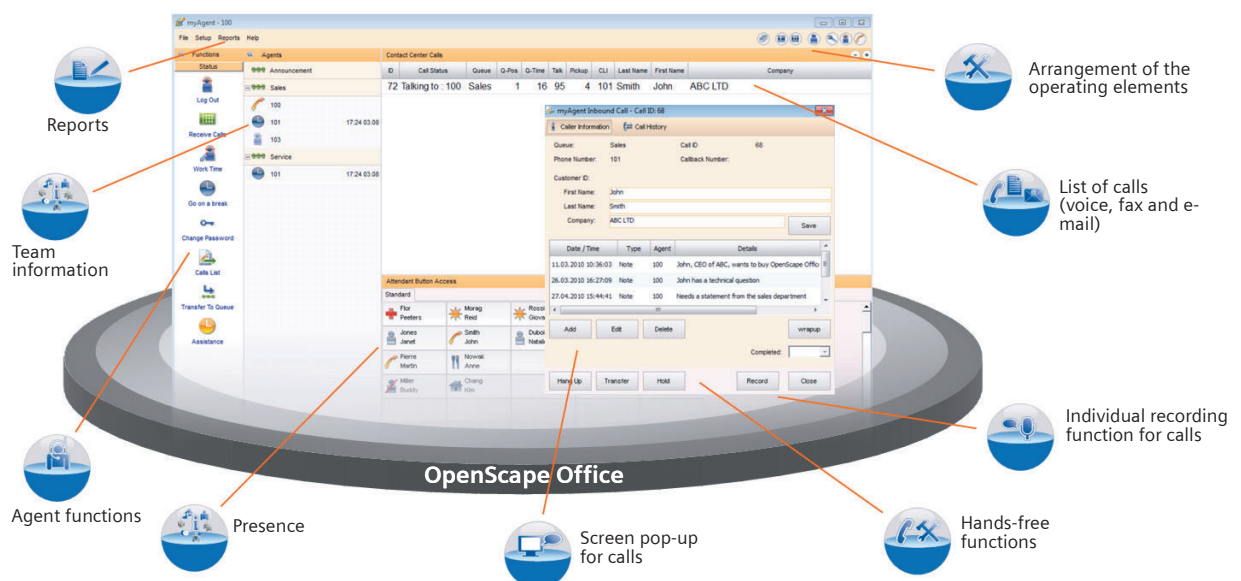
The myAgent user portal provides agents with convenient functions for processing and wrapping up calls, faxes and e-mails.

The myReports user portal makes it possible for users to create statistics on Contact Center resource utilization according to various criteria.

Administration Tool

Depending on the assigned role (authorization level), the user has the possibility to administer the following functions:

- Queues
- Scheduling
- Breaks
- Wrap-up codes
- Announcements



Multimedia Contact Center – improvement of the first call resolution rate and customer service

myAgent Features

The myAgent user portal provides agents with convenient functions for processing and wrapping up calls, faxes and e-mails.

"Agent" Authorization Level

- Logon to OpenScope Office via any myAgent user portal
- Individual language setting during logon
- Free choice of telephone at the workstation
- Display of the agent status of the agents in the calls in queue and of the presence status of the internal subscriber
- Display of the connection status of the agents in the calls in queue and of the internal subscribers
- Display of the features of all agents (agent assignments) in the assigned queues
- Call and contact handling via screen pop-ups and telephone bar
- Selection of defined breaks
- Entry of wrap-up codes for defined subjects and wrap-up times
- Caller list with details of all contacts for the assigned queues over a selectable time period
- Recording of calls for documentation and training purposes
- Access to internal (internal subscribers, including their current presence status) and external directory (contacts from an offline company phonebook)
- Editing of contact data (first name, last name, company and call number) in the external directory
- Exchange of text with internal subscribers in the form of instant messages (chatting)
- Request for supervisor support during a call
- Individual assignment of the phone keys to internal subscribers
- Display of queue details (spreadsheet with statistical information in real-time) for the assigned queues such as the average time of a call in a queue and the average speaking time

"Supervisor" and "Administrator" Authorization Levels

The "Supervisor" and "Administrator" authorization levels offer the following additional functions:

- Display of the features of all agents (agent allocations) of all queues
- Display of the queue details of all calls in queues
- Editing of contact data (except customer ID) in the external directory
- Responding to a request for support

- Activation of an alarm if the number of waiting calls or the wait times of a call in a queue are exceeded
- Override of the call of an agent
- Call-up of the OpenScope Office administration tool for configuring the contact center
- Assigning agents to calls in queue
- Removing agents from calls in queue

Reports

Depending on the assigned role (authorization level), more than 20 predefined reports can be created via myAgent.

Wallboard

If needed, wait queue details can be displayed as a wallboard by means of a large screen monitor or projector.

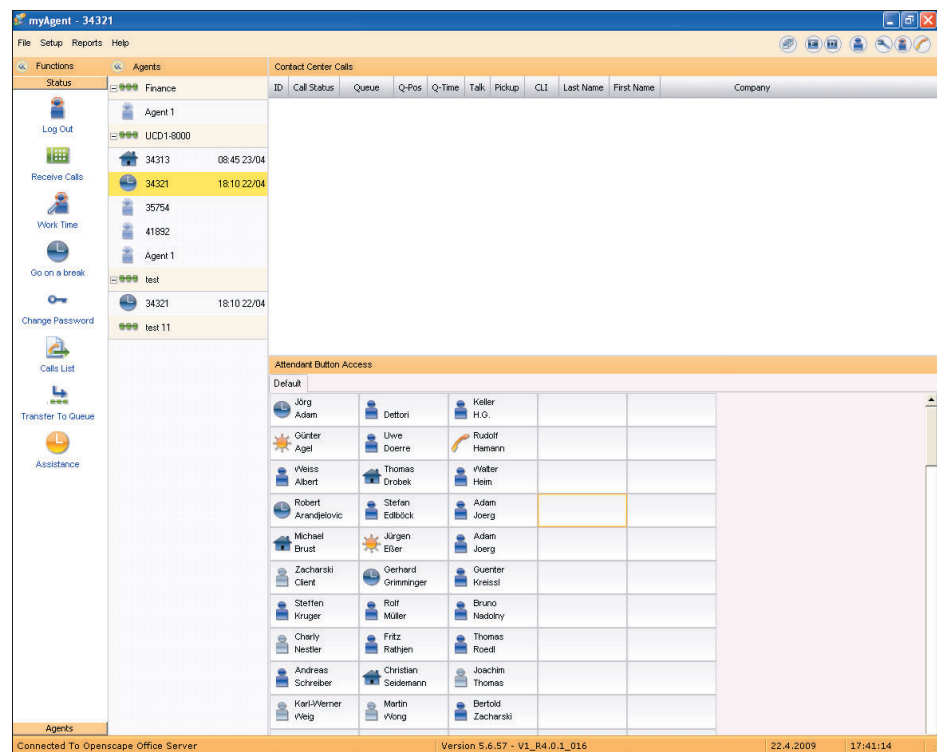
Caller List

Detailed information on all calls made until now, faxes and e-mails for the assigned queues for a selectable time period can be found in the caller list of the contact center.

myReports Features

The myReports user portal offers:

- Report creation via the Schedule Manager with 100 predefined report templates to select from
- Display of all available report templates organized by group in the template explorer
- Management of report templates via the Report Manager with the possibility of regrouping, adding and deleting newly created report templates
- Support of schedules for report creation, incl. periodic creation at defined intervals
- User-specific management of one-time requests as a template for later usage or adaptation
- Individual adaptation of report templates via the integrated Business Intelligence Reporting Tool (BIRT)
- User-related, individual settings for the user interface, password, e-mail templates and call number prefixes for certain analyses



myAgent

Mobility Solutions

OpenScope Office offers integrated mobility solutions for any enterprise. These include, for example, the integration of smartphones, the use of cordless and WLAN telephones and DeskSharing and teleworking. The solution encompasses mobility on the road, mobility in the office and mobility at home.

Mobility on the Road

"Mobility on the road" is achieved via the mobile phone integration of myPortal for Mobile/Tablet or Mobility Entry. The One-Number-Service makes the user accessible

worldwide under a single call number. Additional costs can be saved via dual mode telephony if the subscriber is within range of a WLAN.

Mobility in the Office

"Mobility in the office" takes place via DeskSharing, cordless telephones and WLAN telephones. For DeskSharing, IP Mobility (Mobile Logon and Flex Call) offers features for mobile subscribers who wish to use the telephone at a different workstation than their own.

Mobility at Home

"Mobility at home" is enabled via teleworking and Unified Communication features, such as CallMe. Teleworking is supported by IP Mobility (Mobile Logon) and the connection of teleworkers via VPN. In addition, "mobility at home" is supported by the same features that are used for "mobility on the road" (mobile phone integration and One-Number-Service).

Networking of OpenScope Office

OpenScope Office offers the possibility of building a network with up to 1000 subscribers that consists of OpenScope Office MX, OpenScope Office LX and OpenScope Office HX (with HiPath 3000 V9). In this network-wide Unified Communication solution, users can use features such as presence status, voicebox and conferencing. Supplemented by comprehensive voice networking features, this solution makes a scope of features available to medium-sized enterprises that until now have only been available to large enterprises.

- Integrate external directories with OpenScope Office Directory Services
- Integration in the Microsoft Exchange calendar and in the public directory
- Forwarding of voicemail in the network
- Support of XMPP presence & chat with external partners

myAgent clients are locally connected to an OpenScope Office MX, OpenScope Office LX or OpenScope Office HX system in the network.

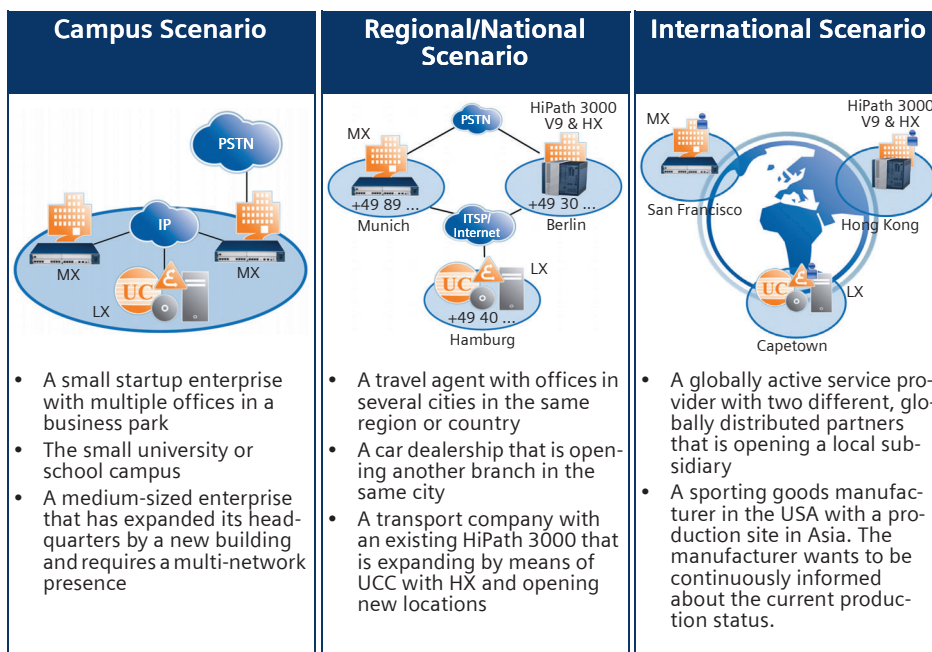
Central Administration in the Network

A centralized administration is available for OpenScope Office MX, OpenScope Office LX and OpenScope Office HX networks. An administrator can access all network subscribers via the central network node. When changes are made, the databases of the individual network nodes are automatically synchronized.

Network-Wide UCC Features

The OpenScope Office clients support the following major functions in the network:

- Presence management with voice support (visibility of presence status)
- Network-wide call status (e.g. subscriber is being called, subscriber has an active call)
- Call pickup via myPortal for Desktop
- Instant messages with Multi-User-Chat
- Drag&Drop conferences in the network
- Network-wide Web Collaboration (for example, desktop sharing and video)
- myAttendant – change the presence status for all users in the network



Use cases and examples of UCC networking with OpenScope Office MX, OpenScope Office LX, OpenScope Office HX

System Technology

OpenScape Office MX

OpenScape Office MX is an all-in-one Unified Communication solution in a 19" housing with pre-installed software. It can be deployed as a standalone system or as a gateway for OpenScape Office LX.

The Internet is accessed via a broadband connection. The broadband connection can be implemented over the DSL connection or via the coaxial cable connection, which means fast data transfer and also IP telephony are possible. The NAT, DynDNS, DHCP methods are used.

The following functions are supported by OpenScape Office MX:

- Stateful Inspection Firewall with selective port release, URL blocker, web blocker and Intrusion Detection System (IDS), NAT, STUN
- VPN-IPSec, functionality for VPN teleworker support
- LAN
 - Gigabit Uplink Port
 - Virtual LAN support (VLAN)
 - Layer 3 routing
 - 802.1p L2 QoS
- WAN
 - Internet access with up to 50 Mbit/s
 - Embedded router
 - Demilitarized zone (DMZ) for the secure integration of mail and web servers in a customer network.

OpenScape Office LX

OpenScape Office LX is the server-based Unified Communication solution that can be operated on a Linux server, independent

of the platform. OpenScape Office MX or HiPath 3000 can be used as a trunk gateway.

With VMware vSphere Virtualization, OpenScape Office LX customers can save costs and time and additionally increase the resilience of their communication solution.

- Reduction in the number of physical server parks
- Reorganization due to a growing server hierarchy
- The need for a central administration due to the high number of applications
- Higher reliability
- Comfortable data backup and restore
- Scalability
- Monitoring capability
- Reuse of older operating systems in a virtual environment
- Ecological advantages (one server requires less power)
- Reduced service times

OpenScape Office HX

OpenScape Office HX is the server-based Unified Communication solution for HiPath 3000. HiPath 3000 supports any combination of TDM, analog and IP phones, PC clients and cordless phones, and offers powerful voice communication. Like OpenScape Office LX, OpenScape Office HX can be operated in virtual VMware environments and offers the advantages stated above.

Connection of Applications

Applications can be centrally connected via TAPI 170 (also in OpenScape Office networks). Workstations can be locally connected to the terminals via TAPI 120. The

CSTA protocol is used for the connection. An integrated accounting solution or TeleData Office V4 is available for the evaluation of call data.

Maintenance and Administration

For the administration of OpenScape Office, web-based administration tools are available for the system management functions. Access to the management functions is user-friendly. This makes administration straightforward without any special knowledge of the system.

The administrator can also centrally administer the user data of the OpenScape myPortal clients and define company-wide or individual subscriber profiles, for instance regarding the visibility of call numbers, call forwarding or the personal AutoAttendant.




The system includes fault management. Automatic testing and diagnosis programs can be used to monitor and check the system components. If faults occur, the system can diagnose malfunctions, remedy them itself and generate system messages that are transferred locally and also to a remote service center.



The administration tools enable remote service and software downloads over the Internet.

Accounting Manager

The Accounting Manager is an integrated application for querying and processing call data records. The system can store up to 20,000 data records.

Telephones

<p>IP telephones</p> <ul style="list-style-type: none"> • OpenStage 15, 20 E, 20, 20 G, 40, 40 G, 60, 60 G, 80, 80 G Existing optiPoint 410/420 are supported. • Add-on devices: <ul style="list-style-type: none"> – OpenStage key module only for OpenStage 15, 40, 60 and 80 – OpenStage BLF 40 (Busy Lamp Field) only for OpenStage 40 	
<p>OpenStage Gate View: Conveys a camera image from the entrance area to an OpenStage phone or an iPhone.</p>	
<p>WLAN telephone</p> <p>The optiPoint WL2 professional telephone can be operated on the following access points and controllers, as desired:</p> <ul style="list-style-type: none"> • HiPath Wireless Standalone Access Point AP 2630 (cordless with internal antenna) or AP 2640 (cordless with external antenna). Per access point (AP) it is possible to connect six WL2 professional; a maximum of 10 access points can be operated. • HiPath Wireless Convergence Software (WLAN controller solution) for larger configurations. 	

<p>DECT telephones</p> <p>HiPath Cordless IP is a campus-wide mobility solution with the following mobile parts:</p> <ul style="list-style-type: none"> • Gigaset S4 professional • OpenStage SL4 professional • Gigaset M2 professional <p>DECT telephones are integrated via SIP.</p>	
<p>SIP telephones/AP adapters</p> <p>The myPortal for Desktop, myPortal for Outlook and myAttendant OpenScope Office clients can be used with SIP telephones that support RFC 3725.</p> <p>Full functionality of the features depends on the SIP telephone being used and cannot be ensured. The features were successfully tested with an OpenStage 15 S telephone.</p> <p>Mediatrix 4102S: for connecting analog telephones or fax devices.</p>	
<p>PC clients</p> <ul style="list-style-type: none"> • OpenScope Personal Edition (HFA) and OpenScope Personal Edition S Existing optiClient 130 are supported. <p>The PC with headset or handset becomes the communications center for voice, data, e-mail and Internet. A soft client installed on the desktop computer or notebook provides all telephone functions via WLAN – and offers the same familiar user interface at the office and on the move. Video connections can be used with OpenScope Personal Edition S.</p>	
<p>OpenScope Office MX additionally supports analog telephones and fax devices, ISDN telephones and fax devices, and add-on devices such as door/gate intercoms via TFE-S adapters.</p>	

Technical Data

OpenScope Office MX

<p>Mounting options</p>	<ul style="list-style-type: none"> • Free-standing installation (on desk) or installation in a 19" cabinet; space requirement in a 19" cabinet for one system box = 1.5 height units • Standalone system with max. 3 system boxes (multiple box system)
<p>Subscribers</p>	<ul style="list-style-type: none"> • Max. 150 subscribers, of which 148 are freely configurable • Max. 50 subscribers per system box • Max. 1000 subscribers through networking • Max. 150 subscribers with mobile phone integration
<p>Gateway modules</p>	<ul style="list-style-type: none"> • 3 slots per system box for different gateway modules • Optional gateway modules: <ul style="list-style-type: none"> – GMS (not for USA, Canada) = gateway module with four S₀ interfaces for the ISDN trunk or ISDN subscriber line – GMSA (not for USA, Canada) = gateway module with four S₀ interfaces for the ISDN trunk or ISDN subscriber line and four a/b interfaces for the analog subscriber line – GME (not for USA, Canada) = gateway module with one S_{2M} interface for the ISDN primary multiplexer – GMT (only for USA, Canada) = gateway module with one T1 interface for the ISDN primary multiplexer – GMAA = gateway module with four a/b interfaces for the analog trunk connection and two a/b interfaces for the analog subscriber line – GMAL = gateway module with eight a/b interfaces for the analog subscriber line
<p>Standard interfaces (Motherboard)</p>	<ul style="list-style-type: none"> • 1 motherboard per system box with a powerful AMD Sempron CPU and 1 GB main memory • Standard interfaces: <ul style="list-style-type: none"> – 4 internal Gigabit LAN connections – 1 Gigabit DMZ connection – 1 external Gigabit WAN connection (e.g. for Internet access) – 1 USB server – 1 USB control
<p>Operating system</p>	<p>Linux (embedded)</p>
<p>Internet connection</p>	<ul style="list-style-type: none"> • 1 Internet service provider (ISP) • 4 Internet telephony service providers (ITSP)

Dimensions	<ul style="list-style-type: none"> Width = 440 mm Height = 66.5 mm Depth = 350 mm
Power supply	<p>The standard OpenScape Office MX is configured for network operation.</p> <ul style="list-style-type: none"> Rated input voltage: 110 V to 240 V, plus tolerance (+/-10%) -> 99 V to 264 V Rated frequency: 50/60 Hz
Current consumption	Max. 4 A at 99 V
Power consumption	80 W with maximum 250 W per system box (depending on expansion stage)
Battery buffer	<p>UPS for 110 V to 240 V, capacity: 4 Ah (at 110 V)</p> <p>There is no UPS interface as contained in a PC.</p>
Environmental conditions	<ul style="list-style-type: none"> Operating conditions: +5 to +40 °C (41 to 104 °F) Humidity: 5 to 85%
Color	<p>Steel blue</p> <ul style="list-style-type: none"> Front: silver

OpenScape Office LX, HX

Mounting options	Linux server is certified for SUSE Linux Enterprise 11
Subscribers	<ul style="list-style-type: none"> Max. 500 subscribers (LX, HX) Max. 1000 subscribers through networking Max. 500 subscribers with mobile phone integration with OpenScape Office LX Max. 150 subscribers with mobile phone integration per OpenScape Office MX node in a network
Operating system	Linux (LX, HX)
Internet connection (LX)	<ul style="list-style-type: none"> 1 Internet service provider (ISP) 4 Internet telephony service providers (ITSP)
Hardware requirements for server (LX, HX)	<p>The hardware must meet the following minimum requirements:</p> <ul style="list-style-type: none"> Linux server, certified by the PC manufacturer for the SUSE Linux Enterprise Server 11 (SLES 11) operating system, e.g. Fujitsu PRIMERGY TX150 S7 OpenScape Office is the only permitted application on the Linux server 2-core processor, 2.0 GHz per core or higher 2 GB RAM Hard disk with 200 GB Keyboard and mouse DVD drive Screen resolution of 1024x768 pixels <p>Optionally, resilience can be increased by doubling the hard disk (recommended via SLES SW RAID) and the power supply.</p> <p>SUSE Linux Enterprise Server 11 SP1 (32 bit) is included in the scope of delivery of the OpenScape Office LX software.</p>
Hardware requirements for VMware vSphere virtualization (LX, HX)	The hardware requirements of physical servers are the same as those for servers recommended or certified by VMware. Details can be found at: http://wiki.siemens-enterprise.com .

myPortal for Mobile/Tablet

A smartphone/tablet PC must meet the following requirements:

- Touch screen for comfortable operation
- Web browser
- Simultaneous use of voice and data connections is provider-dependent but must be possible.
- A 3G data connection (e.g. EDGE, UMTS, HSPDA) is recommended for connection to OpenScape Office. GPRS data connections can lead to lengthy load times of myPortal for Mobile screen pages.

- Depending on user behavior, a data volume of more than 100 MB per month can accrue for myPortal for Mobile/Tablet. For this reason, a data flat rate is recommended.

Operating system and reference devices that have been tested up to now:

- Apple iOS: iPhone 3GS, iPhone 4
- Android: HTC Desire
- Symbian: N97, C7-00
- Blackberry OS: Storm 9500
- Tablet PC

Changes can be found under:
<http://wiki.siemens-enterprise.com>.

myPortal for Mobile/Tablets is functional on many other smartphones/tablets. Operating comfort and functions depend on the particular smartphone/tablet and operating system in use.

Multimedia Contact Center

- Agents
 - OpenScape Office MX inbox system: max. 10 agents
 - Multiple box system: max. 64 agents
 - OpenScape Office LX max. 64 agents
- Calls per hour to Contact Center
 - Single box system: max. 200 calls per hour
 - Multiple box system: max. 500 calls per hour
- Max. 50 wait queues/groups
- Max. 64 supervisors
The total number of agents and supervisors must not exceed 64.
- Max. 1 myReports

Software and Hardware Requirements

Integration in Microsoft Environments

The clients of OpenScape Office myPortal for Desktop, myPortal for Outlook, myAttendant and myAgent can be easily integrated in Microsoft environments.

Minimum Hardware Requirements (Clients)

- 2 GHz CPU
- RAM: 2 GB
(Microsoft Windows XP SP3: 1 GB)
(Microsoft Windows 2003 Server SP2: 1 GB)
- 100 Mbit/s LAN
- Screen resolution:
 - XGA (1024x768)
 - myPortal for Outlook, myAgent: SVGA (800x600)

OpenScape Office Clients

- Microsoft Windows 7 SP1 (32 bit, 64 bit)
- Microsoft Windows Vista SP2 (32 bit, 64 bit)
- Microsoft Windows XP SP3 (32 bit, 64 bit)

Outlook (for myPortal for Outlook)

- Microsoft Outlook 2010 SP2 (32 bit, 64 bit)
- Microsoft Outlook 2007 SP2 (32 bit)
- Microsoft Outlook 2003 SP3 (32 bit)

Supported Web Browsers

- Microsoft Internet Explorer V7, V8 and V9
- Mozilla Firefox V4 or higher

Exchange Server Environments

- Microsoft Exchange 2010
- Microsoft Exchange 2007
- Microsoft Exchange 2003 SP2

Additional Software

Min. Java 1.6 (32 bit)

Use in Terminal Server Environments

- Software requirements:
 - Microsoft Windows 2008 R2 Server SP1 (64 bit) with Citrix XenApp 6.0 Server
 - Microsoft Windows 2008 R2 Server SP1 (64 bit) with Citrix XenApp 5.0 Server
 - Microsoft Windows 2008 R2 Server SP1 (64 bit) as Microsoft Terminal Server
 - Microsoft Windows 2008 Server SP2 (32 bit, 64 bit) as Microsoft Terminal Server
 - Microsoft Windows 2003 Server SP2 (32 bit, 64 bit) as Microsoft Terminal Server

Hardware requirements

The number of installable OpenScape Office clients depends on the terminal server performance and the amount of main memory available. If other applications are used on the terminal server, their main memory requirements must also be taken into account.

Supported Standards

Ethernet

- RFC 894 Ethernet II Encapsulation
- IEEE 802.1Q Virtual LANs
- IEEE 802.2 Logical Link Control
- IEEE 802.3u 100BASE-T
- IEEE 802.3X Full Duplex Operation

IP/Routing

- RFC 768 UDP
- RFC 791 IP
- RFC 792 ICMP
- RFC 793 TCP
- RFC 2822 Internet Message Format
- RFC 826 ARP
- RFC 2131 DHCP
- RFC 1918 IP Addressing
- RFC 1332 The PPP Internet Protocol Control Protocol (IPCP)
- RFC 1334 PPP Authentication Protocols
- RFC 1618 PPP over ISDN
- RFC 1661 The Point-to-Point Protocol (PPP)

- RFC 1877 PPP Internet Protocol Control Protocol
- RFC 1990 The PPP Multilink Protocol (MP)
- RFC 1994 PPP Challenge Handshake Authentication Protocol (CHAP)
- RFC 2516 A Method for Transmitting PPP Over Ethernet (PPPoE)
- RFC 3544 IP Header Compression over PPP

NAT

- RFC 2663 NAT

IPSec

- RFC 2403 IPsec Authentication - MD5
- RFC 2404 IPsec Authentication - SHA-1
- RFC 2405 IPsec Encryption - DES
- RFC 2407 IPsec DOI
- RFC 2408 ISAKMP
- RFC 2409 IKE
- RFC 2410 IPsec encryption - NULL
- RFC 2411 IP Security Document Roadmap
- RFC 2412 OAKLEY

- RFC 3602 IPSec encryption with AES
- RFC 4301 Security Architecture for the IP
- RFC 4303 IP Encapsulating Security Payload (ESP)

SNMP

- RFC 1213 MIB-II

QOS

- IEEE 802.1p Priority Tagging
- RFC 1349 Type of Service in the IP Suite
- RFC 2475 An Architecture for Differentiated Services
- RFC 2597 Assured Forwarding PHB Group
- RFC 3246 An Expedited Forwarding PHB (Per-Hop Behavior)

Services

- RFC 2597 Assured Forwarding PHB Group
- RFC 3246 An Expedited Forwarding PHB (Per-Hop Behavior)

Codecs

- G.711; G.729

CTI

- CSTA Phase III
- TAPI Service Provider for TAPI 2.1

VoIP over SIP

- RFC 2198 RTP Payload for Redundant Audio Data
- RFC 2327 SDP Session Description Protocol
- RFC 2617 HTTP Authentication: Basic and Digest Access Authentication
- RFC 2782 DNS RR for Specifying the Location of Services (DNS SRV)
- RFC 2833 RTP Payload for DTMF Digits, Telephony Tones and Telephony Signals
- RFC 3261 SIP Session Initiation Protocol
- RFC 3262 Provisional Response Acknowledgement (PRACK) Early Media
- RFC 3263 SIP Locating Servers
- RFC 3264 An Offer/Answer Model with the Session Description Protocol
- RFC 3310 HTTP Digest Authentication
- RFC 3311 Session Initiation Protocol (SIP)UPDATE Method
- RFC 3323 A Privacy Mechanism for the Session Initiation Protocol (SIP)
- RFC 3325 Private Extensions to the Session Initiation Protocol (SIP) for Asserted Identity within Trusted Networks
- RFC 3326 The Reason Header Field for the Session Initiation Protocol (SIP)
- RFC 3489 STUN - Simple Traversal of User Datagram Protocol (UDP) Through Network Address Translators (NATs)
- RFC 3515 The Session Initiation Protocol (SIP) Refer Method
- RFC 3550 RTP: Transport Protocol for Real-Time Applications
- RFC 3551 RTP Profile for Audio and Video Conferences with Minimal Control

- RFC 3581 An Extension to the Session Initiation Protocol (SIP) for Symmetric Response Routing
- RFC 3725 Best Current Practices for Third Party Call Control (3pcc) in the Session Initiation Protocol (SIP)
- RFC 3842 A Message Summary and Message Waiting Indication Event Package for the Session Initiation Protocol (SIP)
- RFC 3891 The Session Initiation Protocol (SIP) Replaces Header
- RFC 4040 RTP Payload Format for a 64 kbit/s Transparent Call

VoIP Security

- RFC 2246 TLS V1.0
- RFC 2459 X.509 PKI Certificate and CRL Profile
- RFC 3711 SRTP
- RFC 3830 MIKEY

XMPP

- RFC 3920 Extensible Messaging and Presence Protocol (XMPP): Core
- RFC 3921 Extensible Messaging and Presence Protocol (XMPP): Instant Messaging and Presence

Others

- RFC 959 FTP
- RFC 1305 NTPv3
- RFC 1951 DEFLATE

Emitted Interference/Radio Interference (EMC Classes)

- Class B (EN 55022) for the international market
- Class A (EN 55022) only for USA and Canada. Class A devices can cause radio interference in homes. In this case, the operator of the OpenScape Office may be required to perform the necessary interference suppression measures.

OpenScape Office Demonstration

If you want to know more, visit our Internet site at www.openscapeoffice.com or ask your channel partner today for a demonstration of OpenScape Office.

Copyright © Siemens Enterprise Communications GmbH & Co. KG, 11/2011
Hofmannstr. 51, D-80200 München

Siemens Enterprise Communications GmbH & Co. KG is a Trademark Licensee of Siemens AG

Reference No.: A31002-P1030-D100-2-7629

The information provided in this document contains merely general descriptions or characteristics of performance which in case of actual use do not always apply as described or which may change as a result of further development of the products. An obligation to provide the respective characteristics shall only exist if expressly agreed in the terms of contract.

Availability and technical specifications are subject to change without notice.

OpenScape, OpenStage and HiPath are registered trademarks of Siemens Enterprise Communications GmbH & Co. KG. All other company, brand, product and service names are trademarks or registered trademarks of their respective holders.