OpenScape Business V1 R2

Sales Information

Unify VA SME

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1 Description of Product/Solution/Service

1.1 System Overview

OpenScape Business offers small and medium-sized businesses the answer to their individual and diverse communication needs in a unified, flexible and scalable solution. The OpenScape Business solution architecture can be deployed independently of the existing telephony infrastructure, regardless of whether traditional telephony, IP or DECT is involved. From powerful telephony to a comprehensive UC solution, OpenScape Business always provides the right solution for all enterprises with up to 500 stations or 1000 stations in a network.

Flexible, scalable and powerful

OpenScape Business combines the best of HiPath 3000 and OpenScape Office in a new solution platform.

OpenScape Business is the all-in-one solution for small and medium-sized enterprises and offers:

- Integrated voice services, presence management (presence status), drag and drop conferencing, visual voicemail (voicemail box), AutoAttendant, Multimedia Contact Center, IM (Instant Messaging), Mobility, directory access with database connection, fax, integration into business processes, and much more
- UC clients individually customized for the workplace and way of working
- Interface integration of OpenScape Web Collaboration
- The perfect solution for customers with one location or network-wide solution with multiple locations
- OpenScape Business offers a unified business solution architecture:
- Depending on the existing infrastructure, different OpenScape Business models are available for various configuration sizes (X3/X5/X8). Alternatively, it is also possible to operate the OpenScape Business software on standard servers (softswitch) and even in fully virtualized environments, of course.
- Regardless of the model, 500 stations are always supported (sum of IP, analog and digital stations)

- Optimized hardware concept: VoIP and data components are already integrated on the mainboard. UC for up to 50 users is likewise provisioned on the mainboard (UC Smart) and is expandable with a UC Booster Card (for up to 150 users) or a UC Booster Server (for up to 500 users) for more users and further UC functionality (UC Suite).
- UC software and hardware, including drag & drop conferencing and Multimedia Contact Center for all models
- All communication interfaces are already available for diverse and heterogeneous requirements: IP, digital, analog and DECT, as well as all common trunk interfaces for voice communication

Your sales partner can help you to select the right UC solution.

OpenScape Business was introduced in two phases.

Following the initial product introduction phase (V1 Step 1 in 6/2013), in which the new hardware models with many voice and standard UC features were released, the UC offering is now being completed in the second step.

With the product introduction phase 2 (V1 Step 2), all the UC Suite features as well as additional functions are available with the UC Booster Card, the UC Booster Server and OpenScape Business S.

The hardware (fan kit) for the OpenScape Business X8 will be delivered end of October 2013.
The unrestricted sales release will be achieved for the Step 2 in October 2013.

The release of the UC Booster Card OCAB for the X3W and X5W models is planned for a later date. This release will occur separately.

Please also refer to the notes provided in section 2.1.2, "New Functions in Product Introduction Phase 2".

For the sake of clarity, the new V1 Step 2 functions are flagged as **"NEW".**

1.2 OpenScape Business Models

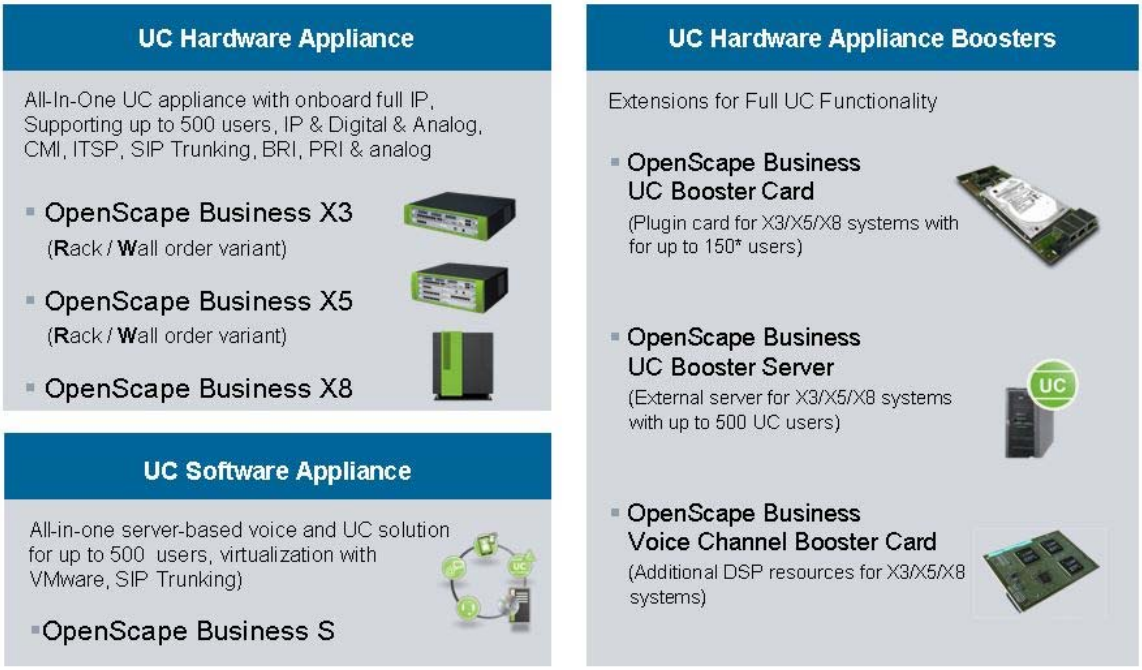
Different models are available for the use of telephony and UC functionality. You can choose between hardware models and pure software models that operate on standard servers or in a virtual environment with VMware vSphere.

The UC functionality for UC Smart is already integrated on the mainboard of OpenScape Business X3/X5/X8. UC Suite **NEW** additionally requires a plugin board **NEW** (UC Booster Card for the X3R/X5/X8 models) or an external UC server **NEW** (UC Booster Server **NEW**). Alternatively, you can use the UC software appliance (OpenScape Business S **NEW**) with the integrated UC Suite **NEW**.

Hardware Platforms

All models support up to 500 stations for IP, digital (ISDN), analog (a/b) and Cordless (DECT), and connections to the public network using ITSP (SIP), ISDN (BRI and PRI), CAS and analog and onboard IP (provisioned on the mainboard).

- OpenScape Business X3 (X3W/X3R for Wall/Rack Mount)
- OpenScape Business X5 (X5W/X5R for wall or rack-mount)
- OpenScape Business X8 (box system/rack-mounted system)



UC Hardware Model Boosters

Enhancements (Boosters) for the hardware models (X3/X5/X8 platforms).

- OpenScape Business UC Booster Card **NEW**
  Plugin board for OpenScape Business X3R/X5R/X8 if UC Suite is to be used as a UC solution with up to 150 UC users.
- OpenScape Business UC Booster Server **NEW**
  External UC server (Linux) for OpenScape Business X3/X5/X8 if UC Suite is to be used as a UC solution with up to 500 UC users.

SLES 11 SP2 64 Bit is used on the OpenScape Business Booster Server (Linux server). OpenScape Business Booster Server can also be run in a virtual environment with VMware vSphere.

When using the UC Booster Server, the UC Booster Card is not required. The UC Suite can optionally also be run on all hardware models via the UC Booster Server

- OpenScape Business Voice Channel Booster Card
  Plugin board for the extension of OpenScape Business X3/X5/X8 with additional DSP channels (for voice connections with IP/TDM conversion, for example).
  DSP channels for up to 8 simultaneous connections are already provisioned on the mainboard.
  To increase the DSP channels, the optional OCCB/1 board is required for up to 48 simultaneous IP/TDM transitions, and beyond that, the OCCB/3 is required for up to 128 DSP channels.

UC Software Models NEW (Softswitch)

All-in-one server-based UC software solution that supports up to 500 IP stations with connections to the public network using ITSP (SIP).

Independent of the platform used, OpenScape Business S NEW can be installed on a Linux server. SLES 11 SP2 64 Bit is used as the operating system. OpenScape Business S can also be run in a virtual environment with VMware vSphere. If TDM interfaces are required for connection to TDM telephones or TDM trunks, OpenScape Business X3/X5/X8 can be used as a gateway.

1.2.1 Structure and Environmental Conditions

	X3R X3W	X5R X5W	X8
Structure	Rack	Rack	Standard system (even for installation in rack)
	Wall-mount system	Wall-mount system	
Dimensions (HxBxT in mm)	89x440x380 (2U)	155x440x380 (3,5U)	490x440x430
	450x460x130	450x460x200	
Weight: Rack/Wall	about 6 kg	about 8 kg	about 34 kg (fully loaded)
Power supply	The models are equipped for connection to the power supply. • Rated input voltage (AC): 100 to 240 V • Nominal frequency: 50/60 Hz • Battery power (DC): -48 V		
Power consumption	Depending on the hardware platform and expansion		
Environmental Conditions	• Operating conditions: +5 to +40 °C (41 to 104 °F) • Humidity: 5 to 85%		
Housing color	Green / Gray	Green / Gray	Green / Gray
	White	White	

1.2.2 Hardware Platforms

The various communication platforms of OpenScape Business offer a high degree of flexibility in terms of functionality and design.

1.2.2.1 Overview of Communication Platforms

- OpenScape Business X3R
  Communication platform in a 19-inch rack housing, which can be installed in a 19-inch rack, as a standalone unit (desktop operation) or wall mounted. . (See Instructions in the Service Manual).
- OpenScape Business X3W
  Communication platform in the wall housing, which must be mounted on a wall (see Instructions in the Service Manual).
- OpenScape Business X5R
  Communication platform in a 19-inch rack housing, which can be installed in a 19-inch rack, as a standalone unit (desktop operation) or wall mounted. . (See Instructions in the Service Manual).
- OpenScape Business X5W
  Communication platform in the wall housing, which must be mounted on a wall (see Instructions in the Service Manual).
- OpenScape Business X8
  Modular communication platform, which can be used as a one-box system (base box) or two-box system (base box + expansion box). OpenScape Business X8 can be installed as a standalone unit or mounted in a 19-inch rack. . (See Instructions in the Service Manual).
- OpenScape Business S **NEW**
  Softswitch (software-based UC solution) that is platform-independent and can be operated on a Linux server.

1.2.2.2 Overview of UC Booster Card Functions for the Hardware Models (X3/X5/X8).

By using the UC Booster Card OCAB (Application Board) **NEW**, the X3R, X5R and X8 models can be enhanced with the following functions:

- UC Suite for unified communications and collaboration for up to 150 users,
- OpenStage Gate View with up to two cameras
- Open Directory Service
- CSTA interface for connecting external applications
- OpenScape Business TAPI 120/170

When using the UC Booster Card, fan units are needed in the OpenScape Business models. This includes:

- the X3R/X5R fan kit for the X3R/X5R models and
- the X8 fan kit for the X8 model

The release of the UC Booster Card OCAB for the X3W and X5W models is planned for a later date. This release will occur separately.

1.2.3 OpenScape Business X3R

OpenScape Business X3R is a communication system in a 19-inch rack mount case that can be mounted in a 19-inch rack, as a standalone unit (desktop operation) or as a wall-mounted unit.

OpenScape Business X3R has three slot levels, which are equipped as follows:

- Slot level 1: slots for two peripheral boards
- Slot level 2: slot for the OCCMR mainboard
- Slot level 3: slots for three options, slot 2 for the UC Booster Card (OCAB) **NEW**

The front panel of the mainboard provides several RJ45 jacks for connecting telephones, trunks, LAN switches, etc.

The UPSC-DR is located in the rear part of the 19" rack housing. The UPSC-DR functions both as a power supply and a battery manager. No further components are required for permanent AC power supply operation. To maintain short-term battery emergency operation after a power failure, that is, to use uninterruptible power supply functions, you must also connect the OpenScape Business Powerbox.

Construction data

- Dimensions (height x width x depth): approx. 88 mm x 440 mm x 380 mm
- Height units 19'' rack-mount installation: 2
- Weight: approx. 6 kg

Ringer Equivalence Number (type plate)

- 1.3 A / 115 - 230 VAC
- 50 - 60 Hz

1.2.4 OpenScape Business X3W

OpenScape Business X3W is a communication system which can be wall mounted.

OpenScape Business X3W includes a board shelf with three slot levels, which are equipped as follows:

- Slot level 1: slots for two peripheral boards
- Slot level 2: slot for the OCCM mainboard
- Slot level 3: slots for five options

The connection of telephones, CO trunks, etc., can be made directly at the boards or via an external main distribution frame.

The back of the board frame has the UPSC-D, which integrates the functions of a power supply and a battery manager. No further components are required for permanent AC power supply operation. To maintain short-term battery emergency operation after a power failure, that is, to use uninterruptible power supply functions, you must also connect the OpenScape Business Powerbox.

Construction data

- Dimensions (height x width x depth): approx. 450 mm x 460 mm x 128 mm
- Weight: approx. 6 kg

Ringer Equivalence Number (type plate)

- 1.3 A / 115 - 230 VAC
- 50 - 60 Hz

1.2.5 OpenScape Business X5R

The OpenScape Business X5R is a communication system in a 19-inch rack mount case that can be mounted in a 19-inch rack mount cabinet, as a standalone unit (desktop operation) or as a wall-mounted unit.

OpenScape Business X5R has five slot levels, which are equipped as follows:

- Slot levels 1 through 3: each slot level provides slots for two peripheral boards
- Slot level 4: slot for the OCCMR mainboard
- Slot level 5: slots for three options, slot 2 for the UC Booster Card (OCAB) **NEW**

The front panel of the mainboard provides several RJ45 jacks for connecting telephones, trunks, LAN switches, etc.

The UPSC-DR is located in the rear part of the 19'' rack housing. The UPSC-DR functions both as a power supply and a battery manager. No further components are required for permanent AC power supply operation. To maintain short-term battery emergency operation after a power failure, that is, to use uninterruptible power supply functions, you must also connect the OpenScape Business Powerbox.

Construction data

- Dimensions (height x width x depth): approx. 155 mm x 440 mm x 380 mm
- Height units 19'' rack-mount installation: 4
- Weight: approx. 8 kg

Ringer Equivalence Number (type plate)

- 2.6 A / 115 - 230 VAC
- 50 - 60 Hz

1.2.6 OpenScape Business X5W

OpenScape Business X5W is a communication system that can be wall-mounted.

OpenScape Business X5W includes a board shelf with six slot levels, which are equipped as follows:

- Slot levels 1 through 3: each slot level provides slots for two peripheral boards
- Slot level 4: slot for the OCCM mainboard
- Slot level 5: slot for a peripheral module in SIPAC format
- Slot level 6: slots for five options

The connection of telephones, CO trunks, etc., can be made directly at the boards or via an external main distribution frame.

The back of the board frame has the UPSC-D, which integrates the functions of a power supply and a battery manager. No further components are required for permanent AC power supply operation. To maintain short-term battery emergency operation after a power failure, that is, to use uninterruptible power supply functions, you must also connect the OpenScape Business Powerbox.

Construction data

- Dimensions (height x width x depth): approx. 450 mm x 460 mm x 200 mm
- Weight: approx. 8 kg

Ringer Equivalence Number (type plate)

- 2.6 A / 115 - 230 VAC
- 50 - 60 Hz

1.2.7 OpenScape Business X8

OpenScape Business X8 is a modular communication system that can be used as a one-box system (base box) or a two-box system (base box + expansion box). OpenScape Business X8 can be installed as a standalone unit or mounted in a 19-inch rack.

The base box has 9 slots, and the expansion box has 13 slots for peripheral boards.

The central control board OCCL has a fixed slot (slot 6, only in the base box). The UC Booster Card (OCAB) **NEW** is mounted on the mainboard.

Depending on your requirements, up to three LUNA2 power supply units can be used in the base box and up to four in the expansion box (see the Service manual for details). LUNA2 supports power supply and battery management functions. No other components are required if it is operated as a power supply. To maintain short-term battery emergency operation after a power failure, that is, to use uninterruptible power supply functions, you must also connect the OpenScape Business Powerbox for each system box.

There are several options for connecting phones, CO trunks, etc. with OpenScape Business X8:

- SIVAPAC connectors are available on the backplane for connecting the external main distribution frame MDFU-E or an external patch panel using CABLUs (prefabricated cabling units).
- Connector panels with 24 RJ45 jacks for direct connection of telephones, trunks, etc. The connector panels are clipped onto the SIVAPAC connectors on the backplane.
- For U.S. only: Connector panels with CHAMP jacks for connecting the external main distribution frame MDFU-E or external patch panels using CABLUs. The connector panels are clipped onto the SIVAPAC connectors on the backplane.

The type of connection used will be decided in consultation with the customer on conclusion of the agreement. The system boxes will be delivered accordingly with or without clipped-on connector panels.

Construction data

- Dimensions (height x width x depth): approx. 490 mm x 440 mm x 430 mm
- Height units for 19'' rack-mount installation: 11
- Weight, including cabinet feet:
  - Base box: approx. 16.5 kg
  - Expansion box: approx. 15 kg

Ringer Equivalence Number (type plate)

- Base box:
  - 6 A / 110 VAC
    3 A / 230 VAC
  - 50 - 60 Hz

- Expansion box:
  - 8 A / 110 VAC
    4 A / 230 VAC
  - 50 - 60 Hz

1.2.8 OpenScape Business S/Booster Server NEW

Independent of the platform used, the OpenScape Business S / Booster Server can be installed on a Linux server. The SLES 11 SP2 64-bit version is used as the operating system. The OpenScape Business S / Booster Server can also be run in a virtual environment with VMware vSphere.

On the server PC (Linux server), either the regular SLES 11 SP2 64-bit version or an SLES 11 SP2 64-bit version optimized by the manufacturer of the server PC must be installed.

The following requirements and conditions must be met in order to operate OpenScape Business on the Linux server (server PC).

Hardware

The server PC must satisfy the following minimum requirements:

- 64-bit capable
- Equipped for 24/7 operation
- Certified by the PC manufacturer for SLES 11 SP2 64 bit
- The communication software for OpenScape Business must be the only application running on the server (excluding virus scanners)
- At least a dual-core processor with 1.5 GHz per core (recommended: 2.0 GHz per core or more)
- At least 2 GB RAM (recommended: 4 GB RAM)
- Hard disk with at least 100 GB (recommended: 200 GB or more)
- DVD drive, keyboard, mouse
- Screen resolution: 1024x768 or higher

Software

To install the Linux operating system on the server PC, the SLES 11 SP2 64-bit Linux version is required.

When procuring the OpenScape Business communication software, you can purchase a DVD with this version of Linux. This DVD may only be used in conjunction with the communication software.

Some PC manufacturers offer their own optimized Linux installation disks for their server PC models. These can be used if they support the Linux version SLES 11 SP2 64 bit.

SLES 11 SP2 64-bit Certification

The server PC must be certified for SLES 11 SP2 64 Bit. Novell offers PC manufacturers a certification program called "YES" for the certification of their server PCs. The results can be found on the Internet at:

http://developer.novell.com/yessearch/Search.jsp

Registering with Novell

Although the installation and operation of SLES 11 SP2 64 bit is possible without registering with Novell, registration at Novell is required in order to obtain security patches and software updates. To do this, you will need to create an account with Novell with the help of the activation key. It is recommended that the customer account be set up before the Linux installation.

The required Novell registration key is provided as a License Authorization Code (LAC) on purchasing the OpenScape Business Server/S DVD and enables a 3 year SLES subscription.

Infrastructure

The internal network must satisfy the following conditions:

- LAN with at least 100 Mbps and IPv4
- Uniform time base (e.g., via an NTP server)
- Fixed IP address for the server PC

Internet Access

The server PC must have Internet access for:

- Registering with Novell
- Security patches and general Linux software updates

OpenScape Business requires an Internet connection for:

- OpenScape Business software updates
- OpenScape Business features such as Internet telephony, for example
- Remote Service (SSDP)

Installing OpenScape Business S or the Booster Server in a Virtual Environment

The following virtualization software has been released:

- VMware vSphere Version 4 or 5, including the latest patches
  For details on the hardware requirements of the physical server PC, refer to the "VMware Compatibility Guide and the "VMware Management Resource Guide" at www.vmware.com.

To determine the hardware requirements at the physical server PC, VMware offers an online search function for certified and tested hardware under "Compatibility Guides" on their Internet homepage at:

http://www.vmware.com/resources/guides.html

The following minimum requirements must be configured for Linux and the communication software in the virtual environment:

- Guest Operating System SLES 11 SP2 64 bit
- VM HD Capacity 200 GB
- Virtual Disk Mode: Default
- Virtual Disk Format Type: Thin Provisioning (fixed HD Capacity) or Thick Provisioning (dynamic HD Capacity)
- vCPUs: 2
- vCPUs Shares (High/Normal): High
- vCPU Reservation: 2 GHz
- vCPU Limit: Unlimited
- VM Memory: 2 GB
- VM Memory Shares (High/Normal): Normal
- VM Memory Reservation: 2 GB
- VM Memory Limit: Unlimited
- Number of vNICs: 1
- VMware Manual MAC Used: NO
- Virtual Network Adapter Support: YES vmxnet3 driver
- VMware Tools Installation: YES

The VM (Virtual Machine) may utilize the CPU up to 70%; values above that can result in erratic behavior.

The following VMware vSphere features are supported:

- Thin Provisioning
- High Availability (HA)
- VMotion
- Data Recovery (VDR)
- DRS (Automatic VMotion)
- Storage VMotion

The following VMware vSphere features are not supported:

- Fault tolerance

More information about the installation can be found in the OpenScape Business V1 Linux Server Administrator documentation.

1.2.9 Overview of Modules

All boards that can be ordered for OpenScape Business are listed below by their function.

A distinction is made between the following types of boards:

- Central boards
- Peripheral Boards
- Options

Refer to the topic *Migration* in the *OpenScape V1 Business Administrator Documentation* for detailed information on the following boards:

- Boards Being Phased Out
  These boards can no longer be ordered. However, they can still be used in the communication systems of the OpenScape Business communication platform.
- Non-Supported Boards
  These boards cannot be used in the OpenScape Business communication systems for technical reasons.
  These boards must be removed when migrating from HiPath 3000 to OpenScape Business (see section 1.12 on "Migration" for details). If required, the respective follow-up board must be used instead.

1.2.9.1 Central Board

All central boards that can be ordered for OpenScape Business are listed below.

INFO: Only the power supply units listed in the table below and those listed under *Boards Being Phased Out* ensure the safe operation of all OpenScape Business communication systems. Older versions of the power supply units must be replaced.

Board	Part Number	Used in	Function
CMA	S30807-Q6931-X	X3R X3W X5R X5W	Provisioning of ADPCM conversion and echo cancellation for DECT Light (integrated cordless solution)
CUC	S30777-Q750-X	X5W	Backplane
CUCR	S30777-Q750-Z	X5R	Backplane
CUP	S30777-Q751-X	X3W	Backplane
CUPR	S30777-Q751-Z	X3R	Backplane
DBSAP	S30807-Q6722-X	X8	HDLC, PCM and clock signals are sent from the base box to the expansion box.
LUNA2	S30122-K7686-A1-C1 S30122-K7686-A1-4 S30122-K7686-M1-10	X8	Power supply

Board	Part Number	Used in	Function
OCAB **NEW**	S30807-Q6950-X	X3R X5R X8	Provisioning of Unified Communications and Collaboration for the UC Suite and ensuring that the requirements for the Open Directory Service, OpenStage Gate View (with up to two cameras) and the connection of external applications to the CSTA are met
OCCB1	S30807-Q6949-X100	X3R X3W X5R X5W X8	Addition of one digital signal processor (DSP) for further DSP channels
OCCB3	S30807-Q6949-X	X3R X3W X5R X5W X8	Addition of three digital signal processors (DSPs) for further DSP channels
OCCL	S30810-Q2962-X	X8	Mainboard (central control board) with one WAN and two LAN interfaces
OCCM	S30810-Q2959-X	X3W X5W	Mainboard (central control board) with one WAN and two LAN interfaces, 8 $U_{P0/E}$ and 4 a/b subscriber line interfaces and 2 S_0 trunk/subscriber line interfaces
OCCMR	S30810-K2959-Z	X3R X5R	Mainboard (central control board) with one WAN and two LAN interfaces, 8 $U_{P0/E}$ and 4 a/b subscriber line interfaces and 2 S_0 trunk/subscriber line interfaces
UPSC-D	S30122-K5660-A300	X3W X5W	Power supply
UPSC-DR	S30122-K7373-A900	X3R X5R	Power supply

1.2.9.2 Peripheral boards

All peripheral boards that can be ordered for the communication systems of OpenScape Business are listed below.

Interfaces of the trunk boards (S2M interfaces), subscriber modules (a/b, S0, S_{2M}, and UP0/E interfaces) and Cordless boards.

Board	Part Number	Used in	Function
DIUT2	S30810-Q2226-X100	X8	Digital trunk/tie-traffic board with two S_{M2} interfaces
IVMNL	S30122-H7688-X	X8	Xpressions Compact VM, 24 ports
IVMP4	S30122-Q7721-X	X3W X5W	Xpressions Compact VM, 4 ports
IVMP4R	S30122-K7721-X	X3R X5R	Xpressions Compact VM, 4 ports
IVMS8N	S30122-Q7379-X200	X3W X5W	Xpressions Compact VM, 8 ports
IVMS8NR	S30122-K7379-Z200	X3R X5R	Xpressions Compact VM, 8 ports
SLAD4	S30810-Q2956-X100	X3W X5W	Analog subscriber line module with 4 a/b interfaces, supports CLIP
SLAD8	S30810-Q2956-X200	X3W X5W	Analog subscriber line module with 8 a/b interfaces, supports CLIP
SLAD8R	S30810-K2956-X300	X3R X5R	Analog subscriber line module with 8 a/b interfaces, supports CLIP
SLAD16	S30810-Q2957-X	X3W X5W	Analog subscriber line module with 16 a/b interfaces, supports CLIP
SLC16N Not for U.S.:	S30810-Q2193-X100	X5W	Cordless board with 16 ports for connecting base stations for the integrated Cordless solution
SLCN Not for U.S.:	S30810-Q2193-X300	X8	Cordless board with 16 ports for connecting base stations for the integrated Cordless solution
SLMAV8N	S30810-Q2227-X300	X8	Analog subscriber line module with 8 a/b interfaces, supports CLIP
SLMAV24N	S30810-Q2227-X400	X8	Analog subscriber line module with 24 a/b interfaces, supports CLIP

Board	Part Number	Used in	Function
SLMO24N	S30810-Q2168-X400	X8	Digital subscriber line module with 24 $U_{P0/E}$ interfaces
SLMO8N	S30810-Q2168-X300	X8	Digital subscriber line module with 8 $U_{P0/E}$ interfaces
SLU8N	S30817-H922-A401	X3W X5W	Digital subscriber line module with 8 $U_{P0/E}$ interfaces
SLU8NR	S30817-K922-Z401	X3R X5R	Digital subscriber line module with 8 $U_{P0/E}$ interfaces
STLSX2	S30810-H2944-X100	X3W X5W	Digital trunk or tie-traffic board/subscriber line module with two S_0 interfaces
STLSX4	S30810-H2944-X	X3W X5W	Digital trunk or tie-traffic board/subscriber line module with two S_0 interfaces
STLSX4R	S30810-K2944-Z	X3R X5R	Digital trunk or tie-traffic board/subscriber line module with two S_0 interfaces
STMD3	S30810-Q2217-X10	X8	Digital trunk or tie-traffic board/subscriber line module with eight S_0 interfaces
TCAS-2 For selected countries only	S30810-Q2945-X	X5W	Digital trunk board with 2 CAS (Channel Associated Signaling) interfaces
TCASR-2 For selected countries only	S30810-K2945-X	X5R	Digital trunk board with 2 CAS (Channel Associated Signaling) interfaces
TLANI2	S30810-Q2953-X100	X3W X5W	Analog trunk board with 2 a/b interfaces; supports CLIP and call detail recording with 12/16 kHz pulses
TLANI2 For Brazil only	S30810-Q2953-X182	X3W X5W	Analog trunk board with 2 a/b interfaces, supports CLIP
TLANI4	S30810-Q2953-X	X3W X5W	Analog trunk board with 4 a/b interfaces; supports CLIP and call detail recording with 12/16 kHz pulses
TLANI4 For Brazil only	S30810-Q2953-X82	X3W X5W	Analog trunk board with 4 a/b interfaces, supports CLIP
TLANI4R	S30810-K2953-X200	X3R X5R	Analog trunk board with 4 a/b interfaces; supports CLIP and call detail recording with 12/16 kHz pulses

Board	Part Number	Used in	Function
TLANI4R For Brazil only	S30810-K2953-X282	X3R X5R	Analog trunk board with 4 a/b interfaces, supports CLIP
TLANI8	S30810-Q2954-X100	X3W X5W	Analog trunk board with 8 a/b interfaces; supports CLIP and call detail recording with 12/16 kHz pulses
TLANI8 For international markets only	S30810-Q2954-X101	X3W X5W	Analog trunk board with 8 a/b interfaces, supports CLIP
TLANI8 For Brazil only	S30810-Q2954-X182	X3W X5W	Analog trunk board with 8 a/b interfaces, supports CLIP
TMANI	S30810-Q2327-X	X8	Analog trunk board with 8 a/b interfaces; supports CLIP and call detail recording with 12/16 kHz pulses
TMANI For international markets only	S30810-Q2327-X1	X8	Analog trunk board with 8 a/b interfaces, supports CLIP
TMANI For Brazil only	S30810-Q2327-X82	X8	Analog trunk board with 8 a/b interfaces, supports CLIP
TMCAS2 For selected countries only	S30810-Q2946-X	X8	Digital trunk board with 2 CAS (Channel Associated Signaling) interfaces
TMDID For selected countries only	S30810-Q2197-T	X8	Analog trunk board with 8 a/b interfaces, supports direct inward dialing from the central office (CO)
TMEW2	S30810-Q2292-X100	X8	Analog tie-traffic board with 4 E&M interfaces
TS2N Not for U.S.:	S30810-H2913-X300	X5W	Digital trunk/tie-traffic board with one S_{2M} interface
TS2RN Not for U.S.:	S30810-K2913-Z300	X5R	Digital trunk/tie-traffic board with one S_{2M} interface
TST1 For selected countries only	S30810-Q2919-X	X5W	Digital trunk board with 1 T1 interface
TST1R For selected countries only	S30810-K2919-Z	X5R	Digital trunk board with 1 T1 interface

1.2.9.3 Options

All options that can be ordered for the OpenScape Business communication platform are listed below.

Option	Part Number	Used in	Function
EXMR	S30122-K7403-T	X3R X3W X5R X5W X8	Enables the connection of an external music source, and thus the provisioning of announcements and music on hold (MOH), A-law version
MMP3R	S30122-K7731-Z	X3R X5R	MP3 player for Music On Hold, A-law version
MUSIC plugin module	S30122-K7275-T	X3R X3W X5R X5W X8	Provision of MOH (Music On Hold)
PFT4	S30777-Q540-X	X8	Switching of up to 4 analog CO trunks to up to 4 analog phones in the event of a power failure
REALS	S30807-Q6629-X	X8	Switchover from an analog trunk to an analog phone in the event of a power failure Four relays (actuators) for special connections, such as door openers
STRB	S30817-Q932-A	X3W X5W	Four double-pin, double-throw relays (actuators) are available for special connections, such as door openers 4 control inputs (sensors) for monitoring the status of connected equipment such as motion detectors, for example
STRBR	S30817-K932-Z	X3R X5R	Four double-pin, double-throw relays (actuators) are available for special connections, such as door openers 4 control inputs (sensors) for monitoring the status of connected equipment such as motion detectors, for example
ET-S	S30122-K7696-T313	X3R X3W X5R X5W	Adapter box with amplifier for connecting an entrance telephone (external box)

1.2.9.4 Expansion Levels Available through Sales

Which deployment model you choose depends, among other things, on the existing configurations and available expansion levels.

	X3		X5		X8	Server (S) NEW
	Rack	**Wall**	**Rack**	**Wall**		
Connecting to Service Providers						
ITSP channels (SIP providers)	60 Max. 4 SIP Providers	60 Max. 4 SIP Providers	60 Max. 4 SIP Providers	60 Max. 4 SIP Providers	60 Max. 4 SIP Providers	128 Max. 4 SIP Providers
ISDN S_0 (BRI)	20	20	52	52	128	-
	2* STSLX4		6* STLSX4		SW limit, i.e., regardless of the number of STDM3 boards	
ISDN S_{2M} (PRI)	0	0	30	30	180	-
			1* TS2		3 * DIUT2	
Max. number of trunk channels	250	250	250	250	250	250
Station						
Analog	20	20	52	68	384	-
	2* SLAD8	1* SLAD16	6* SLAD8	4* SLAD16	16* SLMA	
Digital	24	24	56	56	384	-
	2* SLU8		6* SLU8		16* SLMO2	
IP stations	500	500	500	500	500	500
Cordless/DECT (CMI)	32	32	32	32/64	250	
				64 with 1* SLC16N only in the X5W	4* SLCN	
Max. number of stations	500	500	500	500	500	500
Unified Communications (UC Smart)						
myPortal Smart	50	50	50	50	50	-
Smart VoiceMail ***	320	320	320	320	320	-

	X3		X5		X8	Server (S) NEW
	Rack	**Wall**	**Rack**	**Wall**		
Number of Mobility User stations (Sum of myPortal for Mobile + Mobility Entry)	150	150	150	150	150	-
myPortal for Mobile	50 configurable/ 30 active concurrently	50 configurable/ 30 active concurrently	50 configurable/ 30 active concurrently	50 configurable/ 30 active concurrently	50 configurable/ 30 active concurrently	
Unified Communications (UC Suite NEW)						
Maximum number of simultaneously active UC Suite clients	500*/150	500*	500*/150	500*	500*/150	500
	up to 150 UC Suite users, a UC Booster Card is used from 150 UC Suite users onwards, a UC Booster Server is required					
myPortal for Desktop	500*/150	500*	500*/150	500*	500*/150	500
myPortal for Outlook	500*/150	500*	500*/150	500*	500*/150	500
Voicemail ***	500*/150	500*	500*/150	500*	500*/150	500
Number of Mobility User stations (Sum of myPortal for Mobile + Mobility Entry)	150	150	150	150	150	200 Only myPortal for Mobile
myPortal for Mobile	100 configurable/ 30 active concurrently	100 configurable/ 30 active concurrently	100 configurable/ 30 active concurrently	100 configurable/ 30 active concurrently	100 configurable/ 30 active concurrently	200 configurable/ 30 active concurrently
myAgent	64	64	64	64	64	64
myReports	1	1	1	1	1	1
myAttendant	20	20	20	20	20	20
Maximum number of fax channels	3	3	3	3	3	3
Maximum number of Fax Users	200* /150	200*	200* /150	200*	200* /150	200
Maximum number of channels for conferences **	20	20	20	20	20	40

	X3		X5		X8	Server (S) NEW
	Rack	Wall	Rack	Wall		
Unified Communications (CRM, database connectivity)						
Application Launcher User	500 configurable/ 50 active concurrently	500 configurable/ 50 active concurrently	500 configurable/ 50 active concurrently	500 configurable/ 50 active concurrently	500 configurable/ 50 active concurrently	500 configurable/ 50 active concurrently
TAPI User NEW (UC Booster Server / Card required) NEW	500*/150	500*	500*/150	500*	500*/150	500
Directory Service Connectors NEW (UC Booster Server / Card required) NEW	4	4	4	4	4	4
Gate View NEW						
Cameras	8*/2	8*/2	8*/2	8*/2	8*/2	8

* Maximum expansion with UC Booster Server NEW
Example: 500*/ 150 (max. 500 using Booster Server / max. 150 using Booster Card)

** The following conference channels are available for UC Suite conferences and system conferences (conference setup at the phone):

OpenScape Business S NEW

- 20 channels for UC Suite Meet-Me conferences + 20 channels for UC Suite Ad Hoc conferences + 20 channels for system conferences. In total, up to 5 UC conferences and 6 system conferences can be conducted simultaneously while taking the above-mentioned limits into account. Maximum number of participants per UC Suite conference: 16; maximum number per system conference: 8

OpenScape Business X3/X5/X8 (with Booster Card or Booster Server) NEW:

- 20 channels for UC Suite Meet-Me conferences or UC Suite Ad Hoc conferences + 32 for system conferences. One DSP is required for each IP/TDM conversion. For example, every IP phone that participates in a conference needs a DSP. Consequently, an OCCB may also need to be marketed for the use of the conferencing feature. In total, up to 5 UC conferences and 6 system conferences can be conducted simultaneously while taking the above-mentioned limits into account. Maximum number of participants per UC Suite conference: 16; maximum number per system conference: 8

*** Smart Voicemail:
Recording length per call: 2 min; total recording duration per communication system: 32 hours; 100 messages per mailbox, 6 simultaneous calls (incoming and outgoing)

Voicemail UC Suite:
The total recording duration for voice announcements, voicemails, recorded voice calls and faxes depends on the hard disk capacity in the communication system. There are no individual limits per subscriber. Example for a 160 GB hard drive: the storage volume of the partition for recording voice announcements, voicemails, voice calls and faxes is 20 GB. This corresponds to a total recording time of about 20000 minutes.

For a detailed description of the expansion levels and capacity limits, see also the chapter on *Configuration Limits and Capacities in the Administrator Documentation*.

1.2.10 Supported Phones

OpenScape Business X3/X5/X8 enables telephony over IP/HiPath Feature Access (HFA), SIP, TDM, a/b, Cordless/DECT and WLAN. IP/HFA, SIP and wireless phones can be connected to OpenScape Business S.

OpenStage telephones (IP/HFA, SIP and T)	• OpenStage 5/10/15/20/30/40/60/80
OpenScape Desk Phone (SIP)	• IP 35G/55G
Key modules	• OpenStage Key Module, only for OpenStage 15, 40, 60 • OpenStage BLF 40 (Busy Lamp Field), only for OpenStage 40 and OpenStage 30 T
Cordless/CMI/DECT-IP/DECT telephones	• OpenStage S4/SL4/M3
PC clients (HFA, SIP)	• OpenScape Personal Edition (incl. video for SIP)
SIP phones (UC Suite) / AP adapter	• SIP phones with RFC 3725 support • Mediatrix 4102S (for connecting 2 analog phones or Fax devices)
WLAN Phones	• OpenStage WL3
Analog and ISDN phones	• Analog (a/b) phones • Digital (S_0) ISDN phones

Older devices (such as optiPoint 410/420/500, Gigaset SL3/S3/M2 and optiPoint WL2 SIP) are supported. For further details such as the required SW versions for each device, please refer to the respective technical release notes.

Optiset E devices cannot be operated.

Functions and Configuration of SIP Devices

OpenScape Business offers an extensive range of voice communication features for OpenStage HFA telephones. Many functions are also available for standard SIP phones.

An overview of the features supported with OpenStage SIP telephones and further information can be found in the Unify wiki at the following link:

http://wiki.unify.com/wiki/Features_and_Configuration_of_SIP_Devices

Info: To control voice calls for SIP telephones using CTI (3PCC), a Booster Card or a Booster Server is required for the X3/X5/X8 models.

The control of voice calls for SIP telephones via UC Smart clients is supported for the X3/X5 rack models with the Booster Card (OCAB).

1.3 Functions

1.3.1 Subscribers/Stations

A subscriber or station is a communication partner connected to the communication system. In general, every station (apart from virtual stations) is assigned a terminal. A terminal is, for example, a telephone, a PC or fax device. The stations may also be users of the UC Clients.

The following types of stations exist:

- IP stations (also known as IP clients)
- SIP stations (a subset of IP stations)
- UP0 stations
- DECT stations
- WLAN stations
- ISDN stations
- Analog stations
- Mobile stations (for details on mobile phone integration and Mobility Clients, see *Administrator Documentation, Mobility*)
- Virtual Stations

The data of subscribers (name, station number, DID number, e-mail address, etc.) can be imported and exported as an XML file (details can be found in the Administrator Documentation).

Licensing Procedure for Stations

All stations are subject to licensing. To begin with, stations can be set up during the initial installation or later by using the Station wizards. After a successful setup, the subscribers can make internal calls. In the next step, the station licenses must be activated and assigned to the subscribers. Once the licenses have been assigned successfully, the subscribers can also make external calls.

1.3.2 Functions at the Telephone

Convenient features support all communication processes in every workplace and in any work environment. Due to the Team function and integrated voicemail, no call is lost even when a phone happens to be unmanned. In the Exchange or secretariat, where many communication processes converge, the convenient Executive/Secretary function ensures a smooth flow of communication in the reception hall. Furthermore, integrated call distribution ensures availability and guarantees the fastest customer contact. So telephony is not only convenient, but also more efficient.

OpenScape Business offers a variety of business telephony features such as:

- Advisory messages
- Intercept position / Attendant console
- Call waiting / Call waiting tone
- Caller list
- Do Not Disturb / Ringer cutoff
- Call pickup
- Call forwarding from the extension
- Display of call destination and call source
- Override for call forwarding and call pickup
- Classes of Service
- Executive/Secretary function
- Display languages (individually settable)

- Announcements
- Call detail recording
- Group call
- Internal texts for the Comfort handsets
- Internal directory
- Conferencing (internal/external)
- Speed dialing (individual/system)
- Line seizure (automatic)
- Trunk keys
- Toggle/Connect
- Message texts
- Music-on-hold with system-driven announcements
- External music source (optional)
- One Number Service (ONS)
- Night/day service
- Parking
- Account code
- Relay (actuators/sensors)
- Consultation
- Callback on busy and no answer (automatic)
- Station number suppression
- Call signaling
- Call forwarding after timeout / on RNA / immediately / on busy
- Ringing group on
- Hunt group (linear/cyclical)
- Locking the phone (individual lock code)
- Central telephone directory
- Entrance telephone and door opener function
- Call transfer (internal/external)
- Redialing (expanded)
- Automatic recall from public network provider
- Encryption (SPE)

INFO: System-controlled announcements

In addition to the connection of external announcement devices via the a/b interface, OpenScape Business supports the importing of audio files with announcements.

  - The input format for Music On Hold is a wave file with PCM and 16 bits.
  - Supported sample rates are 8, 22.05, 24, 32, 40, 44.1 and 48 kHz in mono or stereo.
  - The preferred format is PCM, 16 bits, 8kHz, mono.

The recommendation is to use the preferred input format and limit the length of the wave files to about 2 min.

INFO: Before using announcements or music from other sources, make sure that you do not infringe on any copyrights.

A detailed list of the telephony features can be found in the Feature Description.

1.3.3 Unified Communications and Collaboration

Unified Communication (UC) is a technology that improves communication in enterprises by integrating various communication media in a unified application environment. OpenScape Business simplifies business processes in enterprises by providing, among other things, an integrated presence management (that enables users to automatically route calls to their mobile phones when they are out of the office, for example). However, several other features such as dial-in conferencing **NEW**, personal voicemail (voicemail box), personal fax box **NEW**, Instant Messaging (IM) **NEW**, use of the mobile phone as an extension of the PBX, Contact Center **NEW**, video and web collaboration **NEW**, etc., are also combined in this unified solution. UC streamlines business processes and saves working hours, and thus makes employees happier and businesses more profitable.

1.3.3.1 Presence Status

The presence status enables you to keep track of the availability and accessibility of your team, even across locations. By using automatically generated announcements about your presence status, you can inform even external callers of your status, for example, "In a meeting until 12 Noon". This makes it possible to work more effectively because your customers can decide what you do, i.e., leave a message for you or contact a colleague immediately. You can change the presence status via your UC client or through your phone. Using the link to the Outlook Calendar **NEW** and the calendar for the Mac OS X **NEW** (iCal), the presence status is set automatically if certain keywords have been entered in appointments.

*1.3.3.2 Drag and drop Conferencing **NEW***

You can save travel costs and share information quickly and effectively by taking advantage of the conferencing facilities of OpenScape Business. There is no need to set up conferences manually on the phone; you can do this easily with a few clicks in your UC client. As the conference controller, you can choose whether you want to start a spontaneous conference or a scheduled conference - with or without web collaboration.

1.3.3.3 Favorites List

Save the phone numbers of your most important business partners and colleagues in the personal Favorites bar; this will allow you to quickly contact them without a long search for the phone number.

1.3.3.4 Directories

Browse all automatically connected phone books (directories in the system, in Exchange **NEW**, directories connected via LDAP **NEW** or the Open Directory Service **NEW**) with a single search command. This ensures the least amount of effort when looking for a contact.

*1.3.3.5 Dialing with a Mouse Click **NEW***

You found the phone number of a customer in an e-mail or on the Internet and want to contact that customer immediately? No problem! Simply highlight the phone number and then dial it automatically, without losing any time by typing the phone number at the phone.

1.3.3.6 Call Journal

Who called and when, and whom did I not reach? The phone journal provides you with this information at any time and allows you to contact them with a click.

1.3.3.7 Status-based Call Forwarding

Do you forward your calls to your cell phone when you are not in the office and have you sometimes forgotten to do that? Then the automatic forwarding of calls on setting the presence status will help you by forwarding your calls automatically to your cell phone whenever you set your status to "Out of the Office". With the mobile client, this can, of course, also be conveniently done from the road.

*1.3.3.8 CallMe! **NEW***

You are sitting in a hotel, but still need to make some business calls and want to avoid additional costs. No problem. CallMe helps. With the CallMe feature enabled, you simply dial your contact in the UC client. OpenScape Business calls you back in the hotel room and connects you with your contact. The cost is incurred in the company, while saving you time.

1.3.3.9 Personal Auto Attendant ***NEW***

You can give callers options to increase your presence. For example: "Press 1 to reach me on my mobile phone or 2 to leave me a message."

1.3.3.10 Screen Pops ***NEW***

Incoming calls are immediately shown on the PC via a screen pop (i.e., a pop-up window); you can then decide what you do, e.g., accept the call or directly forward it, with just a click of the mouse! After accepting a call, the options presented are automatically changed, e.g., you can then start a web collaboration (see also below).

1.3.3.11 Voicemail Box and Fax Box ***NEW***

Use your personal voicemail box more effectively by having incoming voice messages sent to you by e-mail and accessing your important messages quickly via the UC client.

Save yourself the long way to the fax machine; your personal fax box **NEW** allows you to receive and send faxes directly at your personal computer.

1.3.3.12 Notifications ***NEW***

Incoming voice and fax messages can be automatically signaled by e-mail, SMS or a call (to your mobile phone, for example).

1.3.3.13 Instant Messaging ***NEW***

Communicate using chat in real time with colleagues, e.g., when the phone is busy, but you have to reach a colleague quickly because you have an important client on the phone. You can, of course, also chat with multiple subscribers, which is ideal for coordination while conducting a conference call.

1.3.3.14 Voice Recording ***NEW***

You can record a call or a conference easily, so no details are lost.

1.3.3.15 Web Collaboration ***NEW***

Web collaboration allows multiple participants to work on a document concurrently, regardless of their location; you only need a computer with access to the Internet.

The solution provides secure multimedia conferencing, integrated seamlessly into the interface of OpenScape Business.

OpenScape Web Collaboration improves cooperation and teamwork within your organization and with your business partners. Through integrated features such as desktop and file sharing, whiteboards and video conferencing, for example, project or sales meetings, training sessions and product presentations can be conducted without costly business trips.

1.3.3.16 Access Protection

Security is of utmost importance; a 6 digit password secures access to the client and the voicemail box. The default codes must, of course, be changed at the first access. This is somewhat cumbersome, but increases the security.

1.3.3.17 OpenScape Business UC Clients

Depending on the selected UC solution (UC Smart or UC Suite **NEW**), different UC clients with different functions and integration options are available to you. Depending on how you work, you can choose the optimum OpenScape Business UC client to facilitate your daily communication and to improve customer service. The clients of UC Smart and UC Suite cannot be operated in parallel. However, it is possible to migrate from UC Smart to UC Suite.

myPortal Smart

myPortal Smart offers the easiest access to all UC Smart features such as presence indication with favorites, quick search for contacts, phone directories, instant messaging, voicemail, call journals, etc. The UC client adapts to your desktop and can be installed on all major operating systems (Windows and Mac). It is also possible to signal voicemails by e-mail **NEW**.

myPortal for Mobile/Tablet

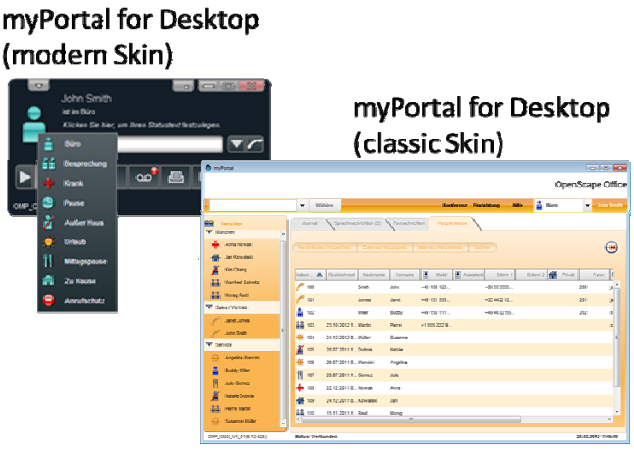
myPortal for Mobile/Tablet is the web-based user interface for mobile employees with smartphones and tablet PCs. Mobile workers thus have access to UC features such as presence or voice messages, no matter where and at what time they are on the road. The mobile device is thus fully integrated into the corporate communication.

The cost of voice calls can be reduced on the mobile phone through a variety of dialing methods (callback, GSM or call-through), which can be set by the user.

myPortal for Desktop NEW

myPortal for Desktop provides access to all the UC Suite features of OpenScape Business. Besides the features in myPortal Smart, additional features such as drag and drop conferencing, a personal fax box, dialing with a mouse click and CallMe are available here.

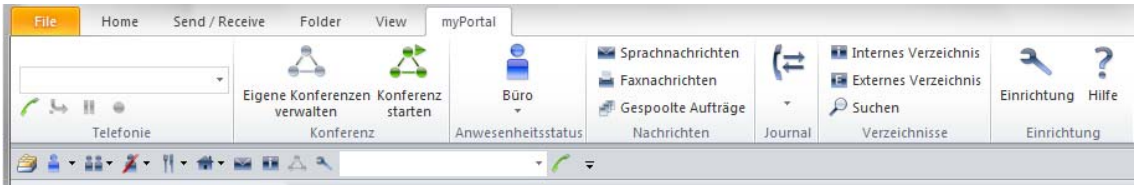
myPortal for Desktop is available in different variants.



myPortal for Outlook NEW

With myPortal for Outlook, all the myPortal UC Suite features can be integrated seamlessly into Microsoft Office Outlook.

Users thus have direct access to their personal voicemail and fax messages, can dial directly from their Outlook contacts and use them for scheduling phone conferences.



myPortal for OpenStage

With myPortal for OpenStage, users of OpenStage 60/80 phones can access voicemail and presence functions.

1.3.4 Multimedia Contact Center to Improve Availability and Customer Service NEW

The Contact Center is a powerful solution for the optimal distribution and handling of incoming calls, faxes and e-mails. Intelligent, skills-based routing ensures that callers are always connected to the most qualified agent, regardless of the contact medium. A number of convenient functions for handling and wrapping up calls, faxes and e-mails are offered to the Contact Center agents via the myAgent application. myReports provides a number of report templates for analyzing the Contact Center operations.

The Multimedia Contact Center is fully integrated in the UC Suite software. It includes all required software components. The Contact Center functions themselves are released through licenses.

The Contact Center uses the resources of the communication system such as queues for incoming calls and unified communication functions to record and play back announcements.

The central software component of the Contact Center controls all routing functions for incoming calls, faxes, and e-mails and also controls the LAN-connected PC workplaces of agents and wallboard displays.

On the PC workplaces of agents, the myAgent application is installed. The myReports application can be optionally installed to generate and send reports. The required software can be downloaded directly from the download area of the communication system and installed on the client PC.

The WBM is used to set up the Contact Center basic functions, schedules, distribution rules as well as the agents. The settings for the daily operation of the Contact Center such as the assignment of agents to queues, for example, can also be made directly via myAgent.

To increase availability, the internal call distribution UCD is available as an alternative in the event of problems. The UCD distribution rules for emergencies must be taken into account when setting up UCD groups within the framework of the initial setup of the Contact Center.

1.3.4.1 Intelligent Call Distribution

The integrated Multimedia Contact Center of OpenScape Business allows you to improve your customer service and thus the satisfaction of your customers. Thanks to the intelligent distribution of calls, your customers are served quickly and efficiently and always connected to the appropriate staff. Apart from the call distribution, you can also offer your customers the alternative option to establish contact by fax and/or an e-mail. As with calls, the queries using these media are always routed automatically to the correct employee. If all the staff are busy, callers can also leave voicemails. Your employees can then call them back, so no potential orders are lost.

1.3.4.2 Flexible Queue Options

With the individual queues options, your customers are forwarded to the appropriate employee as soon as possible. For example, when all your employees (agents) are busy on the phone, an individual announcement can be played back to the customer, or the customer can be optionally forwarded to members of another service group. To reduce the waiting time, customers can optionally also leave a message, and your employees can call them back later when fewer new calls come in.

1.3.4.3 Agents in Multiple Groups

In order to make the best possible use of the skills of your employees, they can also be assigned to multiple contact center groups. Each agent will then always first receive calls of the group for which he or she has been assigned the highest level of competence (e.g., if an agent was assigned a skill level of 100% in the Sales group, but only 80% in the Service group, calls for the Sales group are preferentially routed to that agent)

1.3.4.4 Wallboard

To ensure that your employees are always informed about the utilization of the contact center, e.g., how many calls are currently in queue, these details can be displayed in real time on a large screen monitor or a projection device.

1.3.4.5 Caller list

The caller list of the contact center shows detailed information on all the previously handled calls, faxes and e-mails of your customers. Search and sort functions enable agents to quickly find specific details.

1.3.4.6 Preferred Agent

In order to provide your customers with even more personalized service, the OpenScape Business Contact Center can be set so that a particular customer is always forwarded automatically to his or her contact partner (preferred agent).

1.3.4.7 VIP Service

VIP customers can be forwarded directly to free agents without lingering for extended periods in a queue. This ensures that your VIP customers are served quickly and no important job is lost.

1.3.4.8 Number-Based Voice Prompts

OpenScape Business can play back individual announcements, depending on the caller's number. For example, if you have international customers, these callers can be received in their own respective languages and thus feel well cared for.

1.3.4.9 Wrap up

OpenScape Business gives your staff the time to complete follow-up tasks and wrap up customer calls. The warp up time is customizable. Advanced options such as the reason for the call: order, information, complaint, etc. can thus be recorded and evaluated later

1.3.4.10 Authorization Level (Class of Service)

Depending on the structure of your Contact Center, different permissions can be assigned for the role of an employee as an agent, a supervisor (team leader) or an administrator

1.3.4.11 Administration of the Contact Center

Depending on their assigned role (authorization level), users can select and easily customize a number of options individually:

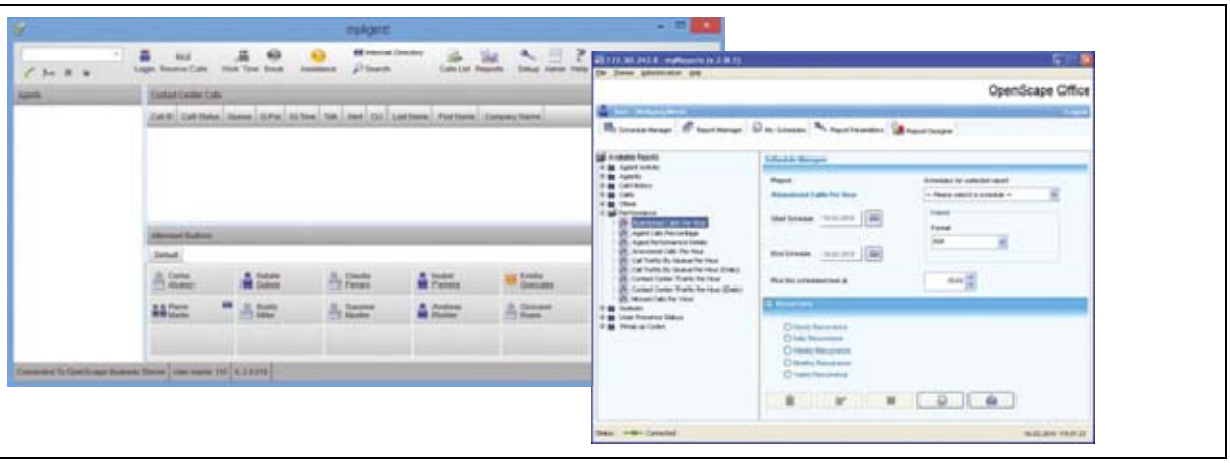
- Queues
- Schedules
- Breaks
- Wrap-up Codes

- Announcements
- External Directory

1.3.4.12 myAgent

The myAgent client is the user interface with which employees (agents) can provide qualified responses to customers. Thanks to the integrated presence display, agents can quickly bring in other experts, since they can immediately see which experts are currently available to support them. myAgent also ensures that your agents always know how many callers are still in the queue and can thus always respond appropriately.

Depending on the assigned role (authorization level), more than 20 predefined reports can be created, e.g., to check how many calls were received by each agent.



myAgent provides the following features:

- Processing of
  - Make Call
  - Faxes
  - E-mails
- Callback function for agents
- Displaying and changing the agent status
- Displaying and changing the presence status of internal subscribers of the communication system
- Real-time presentation of queues
- Recording of calls, if activated in the communication system
- Request for assistance through
  - Silent monitoring of calls (depending on country)
  - Overriding calls
  - Instant Messaging
- Integration of the internal directory, external directory and the external offline directory (LDAP) for searches by name
- Creation of reports based on predefined report templates

Depending on the authorization level assigned to an agent, either a set of standard functions (agent) or advanced functions (Supervisor or Administrator) are available to the agents in myAgent (see *Administrator Documentation, Multimedia Contact Center*).

The assignment of agents to queues occurs using the myAgent application. Only an agent with the authorization level of a Supervisor or an Administrator can make this assignment. The following properties, which affect the distribution of calls, faxes and e-mails in a queue, can be assigned here to the agents (agent assignment (binding)):

- **Primary Agent** or **Overflow Agent**
  Calls are distributed uniformly to primary agents. An overflow agent receives a call only when the number of calls exceeds a defined number or when a call has exceeded a specified waiting period.
- **Overflow after seconds in queue**
  Calls that exceed this waiting period and received by an "Overflow Agent".

- **Overflow after calls in queue**
  Calls that exceed the maximum number are received by an "Overflow Agent".
- **Skill Level**
  Skill levels control the distribution of calls to agents in call queues. Agents with higher skill levels are given precedence when calls are distributed. In cases where all agents have the same skill level the longest idle agent receives the call.
- **Enable agent callback**
  Agent callback enables a caller in the queue to leave a voicemail for agents. As soon as an appropriate agent becomes free, that agent receives a call, hears the voicemail left by the caller, and can then call back that caller.
- **Wrapup time**
  The wrapup time enables agents to finish any tasks, e.g., administrative tasks, which may be required after completing a call and before receiving the next call.

The **agent binding list** shows agents with the authorization level of a Supervisor or Administrator which agents are assigned to which queues. Agents with the agent authorization level can only see the queues to which they are assigned.

1.3.4.13 Reporting with myReports

myReports enables the creation of historical reports for the OpenScape Business Contact Center as well as reports for UC Suite subscribers.

More than 100 predefined report templates are available for evaluating incoming calls, faxes and e-mails with different filter criteria and display options for analyzing the utilization of resources.

The automation features of myReports enable the ad-hoc creation and output of reports on the screen or printer as well as the scheduled generation of reports and their delivery by e-mail or storage at a configurable location in the file system.

myReports offers the following features:

- User-specific creation of schedules for the generation and delivery of reports with
- selection of a report template from over 100 predefined report templates and setting the time for the creation of the report
- setting possible repetitions at hourly, daily, weekly or monthly intervals
- setting the report delivery options as an e-mail attachment or a file stored in the file system
- defining the file format (PDF, Excel or Word)
- Schedule management with
  - individual storage of user created schedules for report generation
  - Editing function for the schedule parameters
- Multi-user support
  Different users can create and manage individual schedules for reporting
- Predefined report templates for reports on:
  - Calls in general
  - Queues
  - Agents
  - Performance
  - Avg. G.O.S
  - Wrap-up codes

etc.

An overview of the report templates included in myReports with output examples can be found in the Unify wiki at the following link: http://wiki.unify.com/wiki/myReports

1.3.5 Mobility

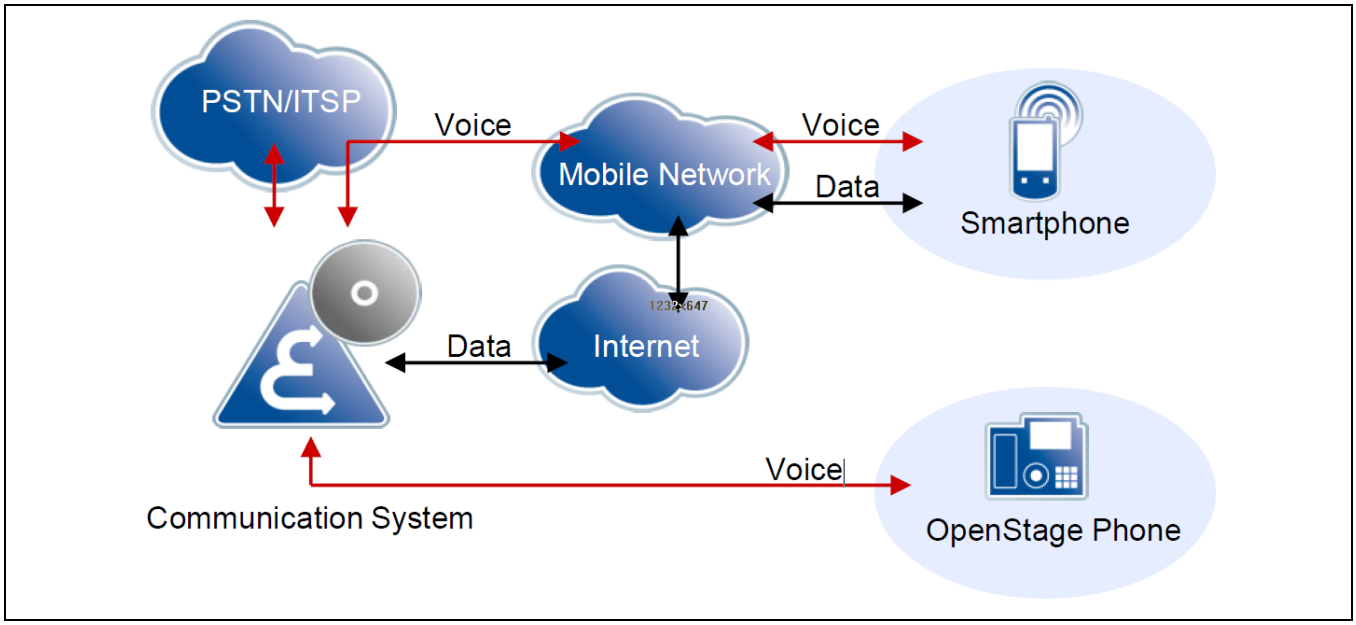
OpenScape Office offers integrated mobility solutions for every company. Mobility includes mobility on the road, mobility in the office and mobility at home. This typically includes the integration of mobile phones/smartphones, the usage of Cordless and WLAN phones, etc., down to Desk Sharing and teleworking.

The mobility solutions integrated in the communication system provide efficient communication everywhere and with a wide variety of endpoints.

1.3.5.1 myPortal for Mobile

myPortal for Mobile integrates mobile phones into the communication system. This enables subscribers to access unified communications features analogously to myPortal for Desktop and myPortal for Outlook via the web browser of the mobile phone.

With myPortal for Mobile, the UC client of OpenScape Business is controlled via a web application in the web browser of the mobile phone. myPortal for Mobile provides access to unified communications features such as the presence status, directories and journals. myPortal for Mobile can be used on both pure GSM mobile phones and dual-mode phones. In order to use myPortal for Mobile on GSM devices, a mobile phone contract with a data option (flat rate recommended) is required.
myPortal for Mobile can be used in combination with a smartphone/fixed-network phone or only with a smartphone.



Features of myPortal for Mobile

- Directories
- Favorites List
- Journal
- Presence Status
- CallMe service (only with UC Suite [NEW])
- Voicemail

Dialing Methods in myPortal for Mobile

Mobile phone users can choose between different dialing methods for outbound calls.

- Callback
  In the case of a callback, the mobile phone first sends a signal to the communication system about the user's intention to call a specific destination number via a callback. After an authorization check, the system first calls the mobile phone and then connects the destination number. Consequently, call charges are not incurred for the mobile phone, but for the system.
- Call-through
  In the case of a call-through, the mobile phone first sends a signal to the communication system about the intention to make a call-through call and indicates the destination number. Then, the mobile phone calls the DISA port of the system. After checking the caller ID (CLIP) and the authorization, the system connects the destination number to be dialed with the mobile phone. Consequently, no call charges are incurred for the mobile phone and possibly for the system (i.e., depending on the dialed number). This dialing method mode is recommended for mobile phone contracts with flat rate telephony tariffs.

- SIP
  The call is set up via the 3rd party SIP client of the mobile phone.
- Associated dialing (only for tablet PCs)
  Dialing is initiated from the tablet PC for a specific UP0 or HFA device. The call is then conducted at the UP0 or HFA device.

Features in the Call State

- Consultation
- Alternate (Toggle/Connect)
- Conferencing
- Disconnect and return to held call
- Activate callback
- Enabling DTMF suffix dialing

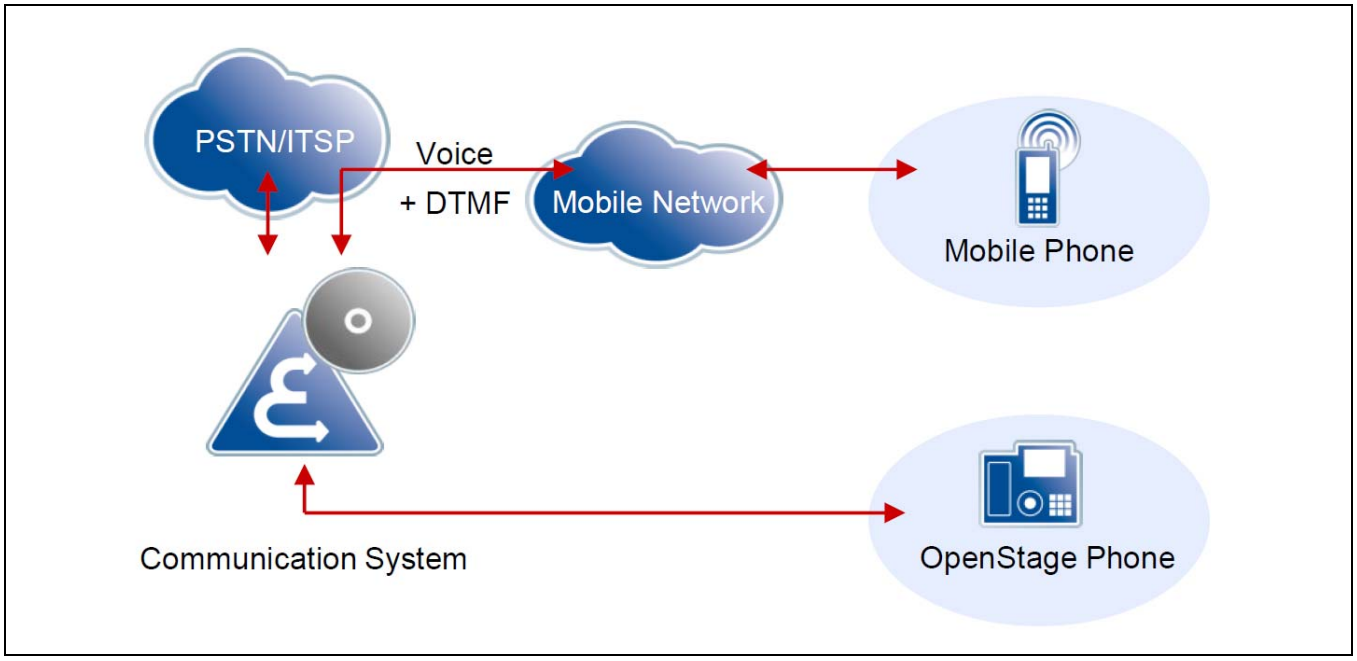
1.3.5.2 Mobility Entry

Mobility Entry enables the integration of mobile phones.

Mobility Entry enables subscribers to control voice connections/features (via codes) using DTMF after dialing into the system. The communication system must support DISA for this. This provides subscribers with access to certain system features via mobile phones.

Info: For Mobility Entry, there is no client available on the mobile phone. myPortal for Mobile is available for convenient use.

Mobility Entry can be used in combination with a smartphone/fixed-network phone or only with a smartphone.



Dialing Methods for Mobility Entry

Mobile phone users can choose between different dialing methods for outbound calls.

Mobility Entry offers the following dialing methods:

- Callback
- Call Through

If a mobile phone subscriber at the communication system calls a special DID number with a callback, the call is automatically terminated before the connection is established, and a callback is executed immediately. After the callback, no further authorization is necessary. The mobile phone subscriber can conduct internal and external calls and also use all Mobility features via the communication system.

The prerequisites for a callback are as follows:

- The external number of the calling telephone must be registered and configured at the communication system. If not, the call is disconnected, and no callback is executed.
- The DISA direct inward dialing number must be configured.
- The external number of the mobile phone subscriber is transmitted to the communication system (CLIP information)

Features in a Dormant State

- Dial a number
- Program or delete call forwarding
- Activate or deactivate Do Not Disturb
- Send message
- Reset all services
- Activate or deactivate station number suppression (CLIR)

Features in the Call State

- Consultation
- Alternate (Toggle/Connect)
- Conferencing
- Disconnect and return to held call
- Activate callback
- Enabling DTMF suffix dialing

1.3.5.3 One Number Service (ONS)

The One Number Service (ONS) effectively makes mobile phones operate as fixed network extensions. This means that subscribers can be reached under their OpenScape Business phone number world-wide and can identify themselves only by their respective fixed network numbers.

The mobile phone integration with the One Number Service offers a single phone number for the workplace (system telephone) and the mobile phone. The caller dials the system phone's number (fixed network). Outgoing calls from mobile phones are signaled to the called party with the fixed network number. Another advantage of the One Number Service is the system- and network-wide busy indicator for the mobile subscriber.

1.3.5.4 Dual-Mode Telephony

Dual-mode mobile phones support both GSM/UMTS networks and WLAN networks. Registration at the communication system as a SIP station is possible over a WLAN.

If the dual-mode mobile phone is in the WLAN range, it is automatically called as a SIP station (SIP features). If it is outside the WLAN range, the dual-mode mobile phone is called via GSM/UMTS (i.e., mobile phone integration functionality is available).

Automatic forwarding to the GSM phone number only works if the associated SIP station is entered in the system as a mobile phone station (mobile phone integration). This means that if the SIP station is registered, it is called as a SIP station, and if it is not registered, it is called via the GSM phone number assigned in the mobile phone integration configuration. CTI call features are not available for SIP clients in myPortal for Mobile. Call control usually occurs within the SIP clients instead (see also the Release Notice and

https://intranet.unify.com

Calls on the company premises occur over the WLAN. As long as calls are made via a SIP client, no call charges are incurred on the mobile phone. Handover and roaming are supported within the WLAN range (if the wireless LAN infrastructure is designed for it), but not from WLAN to GSM, and vice versa.

1.3.5.5 Desk Sharing

With Desk Sharing, multiple subscribers can share a system telephone and thus a workplace.

With Desk Sharing (or Hot Desking), subscribers have no fixed workplace and no fixed office phone. Desk Sharing enables multiple mobile subscribers of the communication system to share an office workplace and/or the

phone. The subscriber simply logs in at the workplace phone where he or she happens to be currently working. After the login, the phone number of the employee is assigned to the used phone, and all programmed functions, as well as any associated VM and the UC features become available.

Desk Sharing is implemented via Mobile Logon or, for only the next outgoing call, via Flex Call/Mobile PIN.

If Desk Sharing is to be implemented for IP telephones (HFA) in networked nodes, an external DLS (Deployment Service) must be installed. The following features can be used for Desk Sharing:

- Speaker call (paging)
- Conferencing
- Override
- Toggle/Connect
- Parking
- Consultation
- Transfer
- Call pickup
- Do Not Disturb
- Call forwarding
- Send message (message waiting)
- Callback
- Station number suppression
- Ringing group on

1.3.5.6 Integrated Cordless Solution

OpenScape Business Cordless is integrated cordless solution for the operation of cordless telephones (DECT phones) via the communication system. The DECT phones are HFA system telephones with which the HFA features can be used.

In the integrated cordless solution, the DECT phones are internal, system-specific stations as opposed to separate DECT systems, which are connected via standard interfaces.

The connection of the base stations for the operation of the DECT phones can be implemented via:

- Direct connection to the $UP0_{/E}$ interfaces of the mainboards of OpenScape Business X3 and OpenScape Business X5.
- Board connection to the $UP0_{/E}$ interfaces of a Cordless board of the OpenScape Business X5W and OpenScape Business X8 communication systems

The Cordless radio technology corresponds to the DECT (Digital Enhanced Cordless Telecommunications) Standard. The entire radio area administered by the system is made up of base stations, which together form either a complete network of overlapping radio cells or individual radio "islands". The size of a radio cell is dependent on the local/structural factors.

The integrated Cordless solution supports GAP-enabled mobile telephones from third-party manufacturers. The full scope of services (HFA) can, however, only be used with approved DECT phones.

Cordless Direct Connections (DECT Light)

In the case of Direct Connections (also referred to as DECT Light), the base stations are connected directly to the $_{UP0/E}$ interfaces of the central control boards of OpenScape Business X3/X5.

Connecting Cordless Boards

When using Cordless boards, the base stations are connected to the $U_{P0/E}$ interfaces of the Cordless boards (SLC modules).

Base stations can be connected to the $U_{P0/E}$ interfaces of the following Cordless boards:

- SLC16N with OpenScape Business X5W (wall-mount system only)
- SLCN with OpenScape Business X8

You can install up to four Cordless boards (SLCN) in OpenScape Business X8. All four Cordless boards provide full cordless functionality (roaming and seamless connection handover) because the radio fields on the Cordless boards are synchronized within the communication system. Network-wide handover is currently not supported.

System Configuration for DECT Auxiliary Equipment

Depending on the communication system, up to 64 base stations can be connected, and up to 250 DECT phones can be used.

The following table shows the maximum possible system configuration for the integrated cordless solution and indicates in which cases analog trunk access of the communication system is possible.

INFO: The BS3/1 (S30807-H5482-X), BS3/3 (S30807-H5485-X) and BS3/S (X30807-X5482-X100) base stations are being phased out and may no longer be ordered. However, they can still be connected to OpenScape Business X3/X5/X8 communication systems.

OpenScape Business	Cordless board	CMA required?	Max. number of base stations with connection via 1 x $U_{P0/E}$				Maximum number of simultaneous calls per base station, depending on the $U_{P0/E}$ connection				Max. number of DECT phones	Analog trunk access is possible
			BS3/1	BS3/S	BS3/3	BS4	BS3/1	BS3/S	BS3/3	BS4		
X3R, X3W X5R, X5W	–	no	1	1	–	1	2 (1 x $U_{P0/E}$)	2 (1 x $U_{P0/E}$)	–	2 (1 x $U_{P0/E}$)	8	no
	–	yes	7	–	–	7	4 (1 x $U_{P0/E}$)	–	–	4 (1 x $U_{P0/E}$)	32	yes
X5W	1 x SLC16N	no	16	–	16	16	4 (1 x $U_{P0/E}$)	–	12 (3 x $U_{P0/E}$)	12 (3 x $U_{P0/E}$)	64	Yes
X8	4 x SLCN	no	64	–	64	64	4 (1 x $U_{P0/E}$)	–	12 (3 x $U_{P0/E}$)	12 (3 x $U_{P0/E}$)	250	yes

1.3.5.7 Cordless IP

Cordless IP (IP DECT) is the optional Cordless solution that serves as an alternative to the integrated Cordless solution or is used with OpenScape Business S.
The wireless technology in the Cordless IP solution corresponds to the DECT standard. This established DECT Standard for mobile voice communications is now available in voice-over-IP infrastructures. This enables DECT radio cells to complement SIP-enabled voice-over-IP systems perfectly as a basis for mobile communication solutions.

The DECT phones at Cordless IP communicate via the BSIP base station with the communication system like SIP phones. Consequently, only SIP features can be used with Cordless IP. For more information on Cordless IP, refer to the documentation for HiPath Cordless IP.

For details on the supported features, see:
http://wiki.unify.com/wiki/call_feature_overview_for_HiPath_Cordless_IP_with_different_platforms

The same Cordless phones can be used for the integrated Cordless solution as well as the Cordless IP solution; see also the section on Supported Phones.

1.3.5.8 Attendants and Company AutoAttendant

Depending on the selected UC solution (UC Smart or UC Suite **NEW**) different Attendant clients are available to you (as an Attendant Console). OpenStage Business is the Attendant client for UC Smart. The recommended client for UC Suite is myAttendant **NEW**, but the OpenScape Business Attendant can also be optionally used here.

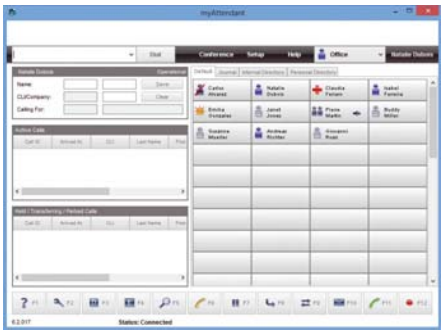
1.3.5.9 Business Attendant

The classic Attendant Console ideally integrated on a PC: pending calls, active calls, calls on hold and parked calls, everything always visible at a glance. In addition, information is available on the busy status of the extensions as well the presence status of the subscribers. The status of a subscriber can also be changed via the Business Attendant. All functions can be performed via the keyboard of the PC or with mouse clicks. The busy lamp fields for subscribers can be individually customized and thus used to optimize the workflow.

1.3.5.10 myAttendant ***NEW***

myAttendant is a convenient Attendant Console that optimally connects phone functions with the UC features of OpenScape Business. Besides the traditional switching functions, myAttendant also focuses on managing the UC solution. Apart from displaying and managing the presence statuses of subscribers, it is also possible to directly access mailboxes and fax boxes (if released by the subscriber) with myAttendant, thus expanding the possibilities of its deployment.

All UC functions are combined in the message center, which provides central access to voice, fax and instant messages (only with the consent of the individual subscribers, of course)



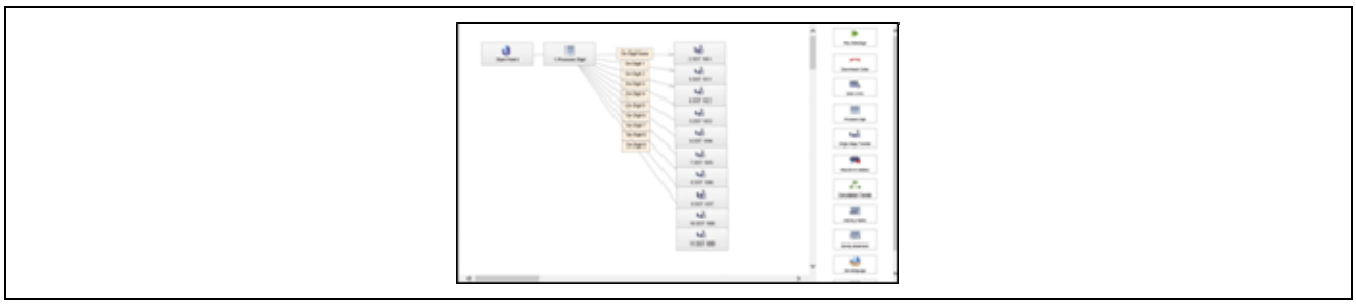
1.3.5.11 Company AutoAttendant

The Company AutoAttendant forwards incoming calls to the company number automatically to the appropriate destination by using the possibilities of information prompts combined with an automatic transfer after the caller enters a digit.

The AutoAttendant enables you to customize the workflow in your company, whether for advertising messages or through use of the individual announcement tree (press 1 for Sales or 2 for Service ...). The available schedules NEW expand the possible use cases, since the workflows for incoming calls can be automatically switched, depending on the day of the week and the time of day. For example, outside business hours, incoming calls can be automatically routed to the night station.

Based on the incoming call number, an individual announcement, e.g., in a country-specific language, can be played.

Existing announcements or professionally recorded announcements in WAV format can also be imported, of course.



1.3.6 Connecting to Service Providers

OpenScape Business supports connecting to public communication networks through traditional voice connections as well as the Internet. The connection to the IP network provides access to the Internet and Internet telephony, and the classic connection to the Central Office provides access to the ISDN network and the analog network.

Access to the Internet occurs via either an Internet modem or an Internet router.

The list of tested SIP providers can be found in the Unify WIKI portal at:
http://wiki.unify.com/wiki/Collaboration_with_VoIP_Providers

ISDN trunk access for the hardware platforms occurs via the mainboard or additional plug-in boards. ISDN trunk access is not possible with the softswitch.

The analog trunk access for the hardware platforms requires an additional plug-in board. Analog trunk access is not possible with the softswitch.

1.3.7 Application Launcher for active interaction with CRM/ERP applications

Application Launcher is a client application that enables call-related data such as the call number, name, etc., to be passed to other applications (e.g., CRM applications) and to thus control them accordingly. Its extremely flexible settings allow both fully automatic operation in the background as well as interactive operation via a separate pop-up window.

Application Launcher can retrieve caller data from the system speed dials as well as the internal and external OpenScape Office directory. When using the Open Directory Service (optional), it is also possible to access external SQL databases, and additional information such as address data is offered.

Control of the application is alternatively achieved by executing a batch file or by sending a URL request.

A typical use case for Application Launcher is the activation of a pop-up window (screen pop) in a CRM application on receiving an incoming call. For applications that do not support their own pop-ups, the pop-up window of Application Launcher can be used to display the caller information.

In cases where users need to work with different applications, they can call the appropriate application from the pop-up window of Application Launcher. Up to ten different applications are supported.

1.3.8 OpenStage Gate View V2 NEW

OpenStage Gate View presents the camera image of your entrance area, for example, on your OpenStage phone.

- Operating principle:
  An IP-capable video camera sends a video stream (mjpeg) to the OpenScape Business, which enables authorized Gate View users to display this video stream on their OpenStage 60/80 HFA display screens or their mobile devices. Gate View offers convenient web administration integrated in OpenScape Business Assistant.
- Maximum values for OpenScape Business X3, X5 and X8 with UC Booster Card:
  - 2 cameras
  - 10 OpenStage 60/80 HFA telephones
  - 10 iPhone apps or web clients

- Maximum values for OpenScape Business Booster Server / Business S:
  - 8 cameras
  - 20 OpenStage 60/80 HFA telephones
  - 20 iPhone apps or web clients

The full functionality, incl. recording, is only made available with video cameras that have been certified for OpenStage Gate View. Video cameras certified for OpenStage Gate View are not included in the Unify ordering process Depending on the customer's requirements (e.g., LAN, WLAN, indoor/outdoor, PoE), cameras can be purchased on the open market.

- Scheduled recording
- Saving the recording to a network drive
- The video image associated with an activated entrance telephone (door opener) is automatically displayed on the OpenStage phone.
- In addition to the iPhone app, a web client is now also offered to display the video streams

Instructions on integrating user-defined cameras together with a list of certified cameras as well as the technical specifications can be found at: http://wiki.unify.com

1.3.9 Accounting Software for Evaluating Call Charges

OpenScape Business Accounting includes:

- Capture and storage of call detail records (CDRs) for incoming and outgoing calls over CO trunks
- Transfer and display of call charges at the terminal devices
- Transfer of stored call detail records over the LAN for evaluation by external applications.

OpenScape Business Accounting supports privacy concerns by, among other things:

- Suppression of call detail recording system-wide
- Suppression of call detail recording for specific subscribers
- Suppression of the last digits of recorded phone numbers

The Accounting Manager included in the supplied OpenScape Business software can be used for the evaluation and analysis of the recorded call detail records. The Accounting Manager of OpenScape Business offers:

- Retrieval of call detail records from OpenScape Business and storage for further processing in a separate database.
- Creation of call detail reports about all records stored in the local database of the Accounting Manager
- Evaluation of filtering criteria when creating reports, for example:
  - Calls with a certain account code:
  - Data associated with a particular device in the last three days.
- Export of generated report data to a "CSV" file

If the functional range of the supplied Accounting Manager is not sufficient, other powerful accounting applications such as Teledata Office, for example, can be used.

More information on the usability in combination with OpenScape Business can be found in section 1.3.13, "Certified Products and Applications".

1.3.10 Directory Services for Information on Callers and Searching Internal and External Directories NEW

The OpenScape Directory Service integrates external databases and internal data sources in the caller identification of the UC Suite during an incoming call and in the search function of myPortal.

The use of the standardized LDAP interface to access the OpenScape Directory Service also allows its use for other LDAP clients.

Thus, in addition to the myPortal clients, even

- OpenStage 60/80 HFA phones,
- the system directory of OpenScape Business
- and the Cordless IP system

can use their built-in LDAP functions to access the data of the connected databases via the OpenDirectory Service.

The OpenScape Directory Service has a modular structure:

The basic function includes access to the speed dials and to entries of the internal and external directory of the UC Suite.

The database connector provides the connection to an external database. It is optional to the basic function. At present, an SQL database connector is available for connecting to the following databases, which are used in many modern CRM systems:

- Microsoft SQL Server
- PostgreSQL
- Sybase SQL Server

The OpenScape Directory Service is a component of OpenScape Business that enables you to access speed dial destinations as well as the internal and external directory of the UC Suite.

The database connector license is marketed separately. It allows the connection of up to ten databases of the same type (e.g., SQL) to the Directory Service. A maximum of four database connectors are connectible to the Directory Service. This enables the following functions to be implemented:

- Presence management and instant messaging (IM) to social media networks using XMPP
- Web services for interactions with web-based applications on mobile phones and tablet PCs, for example

1.3.11 TAPI Service Provider NEW

Many CTI and CRM applications on the market use the Microsoft TAPI interface for connecting to the telephone system. With OpenScape Business TAPI 120 V1 and OpenScape Business TAPI 170 V1, two new and powerful TAPI Service Providers (TSP), which are optimized for the system architecture and network topology of OpenScape Business, are now available for connecting TAPI-based applications in addition to the CallBridge Collection.

The choice of the appropriate TAPI Service Provider essentially depends on the number of client PCs to be connected with TAPI applications as well as the existing IT infrastructure and the phone devices used.

- CallBridge Collection
  is used as a traditional first-party TAPI Service Provider on system terminals that have a LAN or USB interface. It is suitable for installations with just a few PCs. A LAN is not necessary for the operation of the CallBridge Collection. The CallBridge Collection is installed on each PC that is running a TAPI application. Analog, Cordless and system devices without USB/IP interfaces are not supported. TAPI connections via the CallBridge Collection are not licensed.
- OpenScape Business TAPI 120
  is used as the preferred first-party TAPI Service Provider in Microsoft networks with or without a domain controller when analog, Cordless and system devices without IP/USB interfaces are also to be operated in conjunction with TAPI applications. The TAPI 120 Service Provider is installed on each PC client that is running a TAPI application. Connections via TAPI 120 are subject to licensing within OpenScape Business. To connect to OpenScape Business, only one CSTA link is required, regardless of how many TAPI 120 clients are being operated.
- OpenScape Business TAPI 170
  is a classic "third-party" TAPI Service Provider that is installed on a server on the LAN and connected centrally to the OpenScape Business System. TAPI 170 can be used as an alternative to TAPI 120 if there is a domain controller in the Microsoft network. When using the so-called remote TAPI function, it is not necessary to install the TAPI Service Provider on the client PCs. This offers significant time savings in installations with many client PCs. Please note, however, that the use of OpenScape Business TAPI 170 is mandatory in the following constellations:
  - Connection of TAPI stations to networked OpenScape Business systems when the TAPI stations are located in different nodes.
  - Connection to TAPI applications running on a terminal server
  - Connection to server-based TAPI applications
  - OpenScape Business TAPI 170 is subject to licensing within OpenScape Business. To connect to OpenScape Business, one CSTA link is required, regardless of how many TAPI 170 stations are being operated.

Info

In contrast to the handling of the HiPath TAPI 120/170 V2 TAPI Service Providers for HiPath 3000, the following changes apply in the OpenScape Business environment:

- OpenScape Business TAPI 120 and TAPI 170 are new software components that were developed exclusively for OpenScape Business. The software versioning begins with Version 1.
- The connection to OpenScape Business takes place exclusively via the LAN.
- Additional hardware and software components such as the CSTA Message Dispatcher (CMD), CSTA Service Provider (CSP), HG 1500 board or HiPath 5000 RSM System are no longer required for operation with OpenScape Business.
- The licensing is station based and no longer distinguishes between OpenScape Business TAPI 120 or TAPI 170 stations. The licensing requirement begins with the first TAPI station.
- The OpenScape Business TAPI 120 or 170 software and the licenses can only be used in conjunction with OpenScape Business.
- Existing HiPath TAPI 120 or 170 user licenses cannot be used in conjunction with OpenScape Business TAPI 120 or 170

1.3.11.1 OpenScape Business TAPI 120 TAPI Service Provider

OpenScape Business TAPI 120 TSP is a "first party" telephony service provider that supports the Microsoft TAPI V2.1 functionality. TAPI 120 enables Microsoft Windows-based CTI applications to monitor and control a phone or device connected to OpenScape Business.

Overview of Features

- Central first-party TAPI Service Provider connected via a LAN
- Compatible with the Microsoft TAPI 2.1 Standard
- Supported telephony features
  - Signaling of incoming call
  - Answering a call
  - Initiation of outgoing call
  - Transfer of the caller ID for incoming/outgoing calls
  - Consultation Hold
  - Call transfer
  - Call pickup
  - Toggle/Connect
  - Conferencing
  - Call forwarding (diversion)
  - Call Forwarding - No Answer (CFNA)
  - Disconnect call
  - Transmission of feature codes
  - Monitoring of the device status (ringing, error, etc.)
  - Monitoring / access to keypad for system telephones (HFA)
  - Control of display/LED for system telephones (HFA)
- Connection to standalone OpenScape Business system
- Support for the OpenScape Business CTI firewall
- Support for MULAP stations / call numbers

Supported Devices

TAPI 120 supports the same devices as the OpenScape Business CSTA interface.

These are described in section 1.3.12, "CSTA Interface".

TAPI 120 Connections

The TAPI 120 software is installed on a Microsoft Windows client PC. The connection to the OpenScape Business System occurs via a LAN. A physical connection between the Windows PC and the phone is not required

All TAPI 120 client PCs are connected to the same CSTA link of OpenScape Business. OpenScape Business internally multiplexes all TAPI 120 connections.

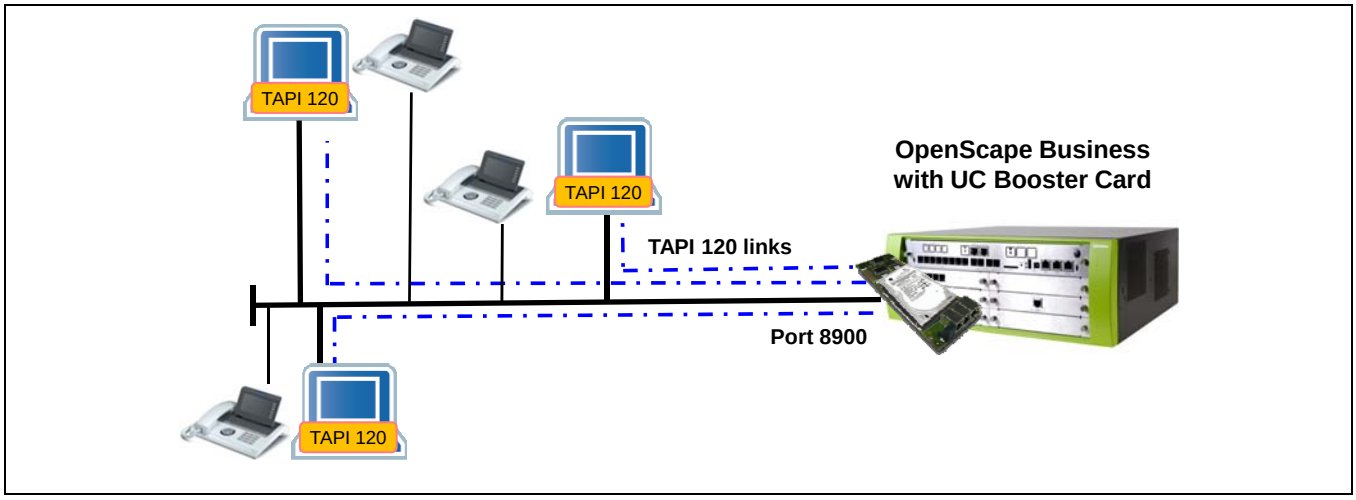


Figure: TAPI 120 with OpenScape Business X5R and UC Booster Card

Maximum values

The maximum number of TAPI 120 client PCs that can be connected to OpenScape Business depends on the model. More information on this can be found in section 1.2.9.4.

Released Operating Systems

- OpenScape Business TAPI 120 has been tested and released in combination with the following operating systems.
  - Microsoft Windows 7, 32 bit, 64 bit, Professional, Ultimate
  - Microsoft Windows 8, 32 bit, 64 bit, Professional, Ultimate

Licensing

The use of OpenScape Business TAPI 120 is licensed on a subscriber basis. The licenses are managed within the OpenScape Business System. When using the "MULAP" feature, a TAPI license is required for each station within the MULAP.

Prerequisites and Requirements

- OpenScape Business CSTA Interface
  In order to connect to OpenScape Office TAPI 120, one CSTA link of OpenScape Business is required, regardless of how many TAPI 120 clients are connected.
- PC Hardware
  The PC hardware must comply with at least the system requirements specified by Microsoft for the operating system used as well as the requirements of the TAPI application. In addition, an Ethernet LAN interface is required.

Other Constraints

- Only Microsoft Windows operating systems can be used in conjunction with TAPI 120.
- For installations on terminal servers, OpenScape Business TAPI 170 must be used instead of TAPI 120.

Software Provisioning

The OpenScape Business TAPI 120 software is supplied on a separate data medium. It is not part of the OpenScape Business System software.

Migration

The procedure for migrating a HiPath 3000 system with HiPath TAPI 120/170 V2 to OpenScape Business is described in section 1.12.

1.3.11.2 OpenScape Business TAPI 170 – TAPI Service Provider

OpenScape Business TAPI 170 TSP is a "third party" telephony service provider that supports the Microsoft TAPI V2.1 functionality. TAPI 170 enables Microsoft Windows-based CTI applications to concurrently monitor and control a phones or devices connected to OpenScape Business.

Overview of Features

- Centrally connected third-party TAPI Service Provider.
- Compatible with the Microsoft TAPI 2.1 Standard
- Telephony functions are available on each connected PC client via the TAPI 2.1 client/server architecture.
- No additional TSP client software is required
- Supported telephony features
  - Selection or dialing of incoming/outgoing calls from the PC
  - Transmission of incoming call number, if signaled
  - Consultation and transfer
  - Toggle/Connect
  - Conferencing
  - Call forwarding
  - Forwarding callers
  - Answering a call through the application
  - Initiating a call through the application
  - Blind/Supervised transfer (also called "transfer before answer / consultation transfer")
  - Transmission of feature codes
  - Monitoring of the phone (call states, failure, etc.)
  - Provision of an ACD interface
  - Monitoring / access to keypad for system telephones (HFA)
  - Control of display/LED for system telephones (HFA)
  - Connection to standalone and networked OpenScape Business systems
  - Support for MULAP members / station numbers

Supported Devices

TAPI 170 supports the same devices as the OpenScape Business CSTA interface.

These are described in section 1.3.12, "CSTA Interface".

TAPI 170 Connections

The OpenScape Business TAPI 170 software is installed on a Microsoft Windows server on the network. The connection to OpenScape Business occurs via a CSTA link. A physical connection between the Windows PC and the phone is not required.

OpenScape Business TAPI 170 can be set up in different operating modes on standalone systems or in the OpenScape Business network.

Connecting Server-based TAPI Applications to OpenScape Business using TAPI 170

The server applications and the TAPI 170 software are installed on the so-called "Telephony Server" in the network. The server applications provide their associated clients in the network with telephony features for stations that are configured within OpenScape Business TAPI 170. The TAPI 170 software is connected to the CSTA interface of OpenScape Business over the LAN.

For this connection, one CSTA link of OpenScape Business as well as one TAPI license for each configured TAPI station are required.

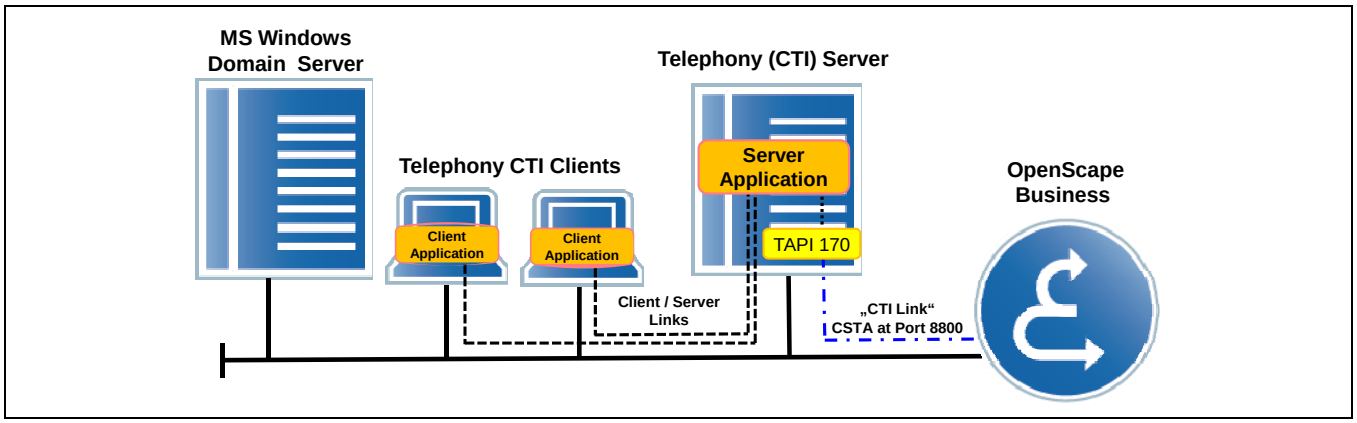


Figure: Server-based TAPI application via TAPI 170 to OpenScape Business

Connecting Client-based TAPI Applications to OpenScape Business using TAPI 170 with the "Remote TAPI" Function

In this scenario, the OpenScape Business TAPI 170 software is installed on a server on the network. On the client PCs with the TAPI applications, the so-called "Remote TAPI" function is enabled, via which the TAPI application on the client communicates with the TAPI 170 software on the server. No TAPI 170 software needs to be installed on the client for this purpose. The TAPI 170 software is connected to the CSTA interface of OpenScape Business over the LAN.

For this connection, one CSTA link of OpenScape Business as well as one TAPI license for each configured TAPI station are required.

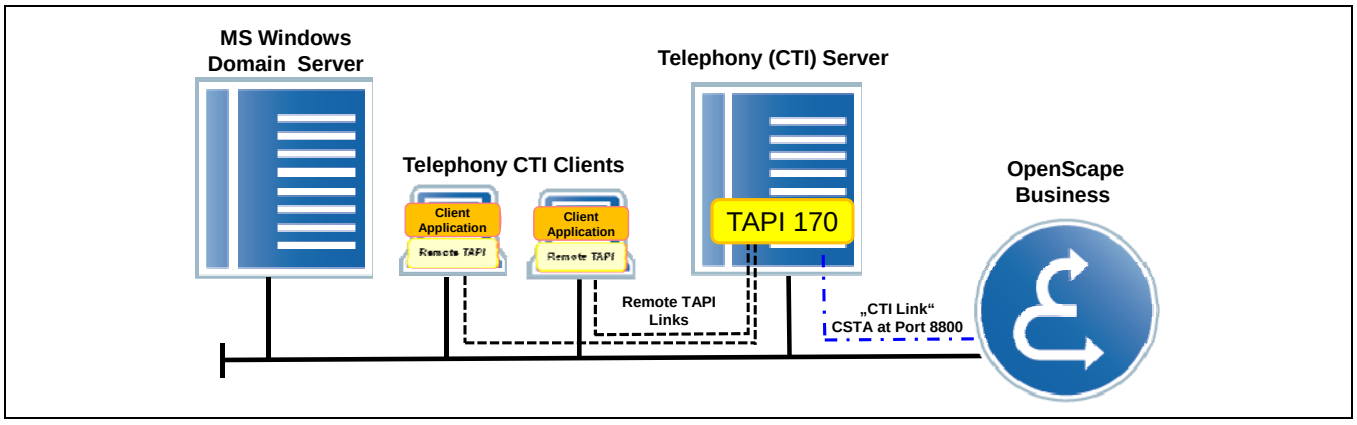


Figure: Client-based TAPI application via "Remote TAPI" to OpenScape Business

Connecting Terminal Server-based TAPI Applications to OpenScape Business using TAPI 170

In this scenario, the client-based TAPI applications are installed on one or more terminal servers. In this case, the TAPI 170 software is also installed on the terminal server. In the case of a cluster consisting of multiple terminal servers, the TAPI 170 software must be installed on each terminal server in the cluster. Each instance of the installed TAPI 170 software is connected to OpenScape Business over the LAN.

For each instance of the TAPI 170 software installed on a terminal server, one CSTA link of OpenScape Business is required. In addition, a TAPI license is also required for each configured TAPI station.

Note

The number of terminal servers that can be operated in the cluster is limited to the number of free CSTA links available within OpenScape Business for connecting the TAPI 170 software. This should be checked and taken into account before marketing.

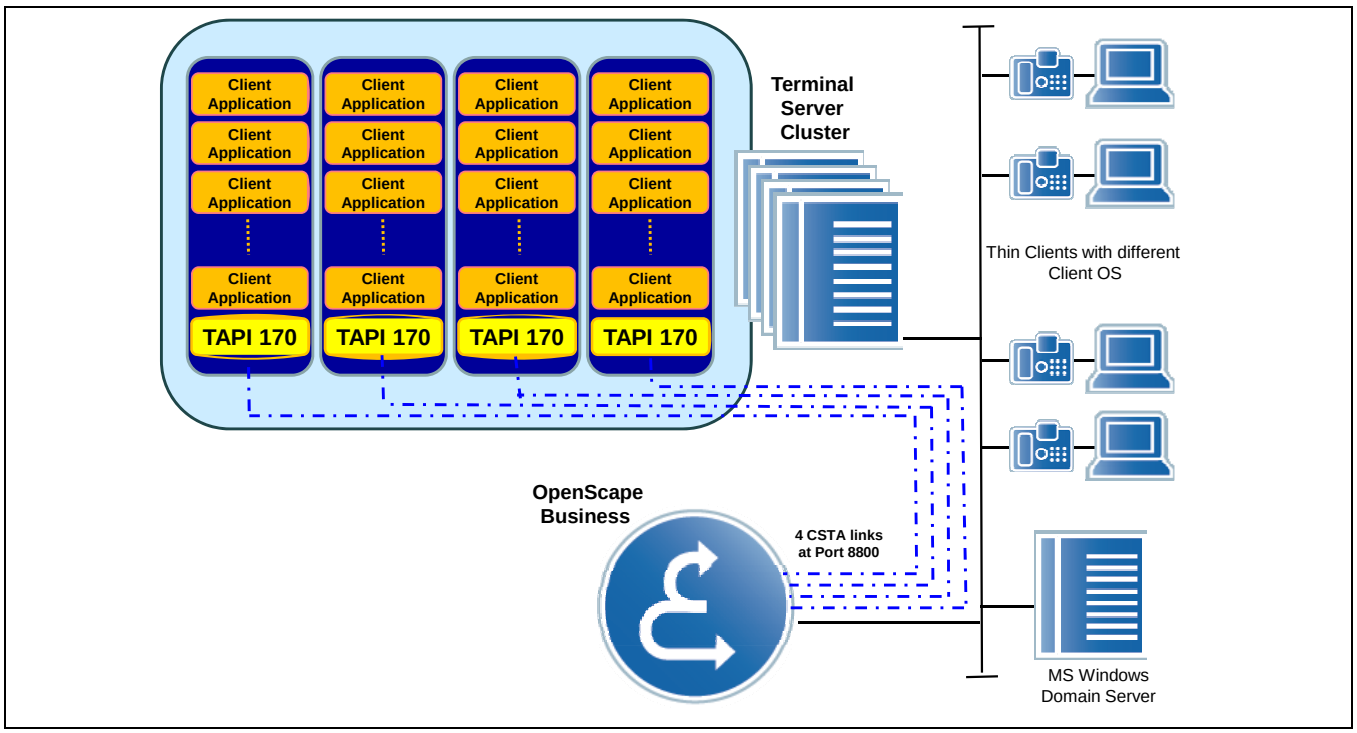


Figure: Client-based TAPI applications on terminal servers to OpenScape Business

Connecting TAPI 170 to Networked OpenScape Business Systems

For networked OpenScape Business systems, the TAPI 170 software is installed on one server, which is connected via the LAN to the CSTA interface of the master node.

This connection is independent of the previously mentioned operating modes of the TAPI 170 Service Provider (remote TAPI or server-based connection).

To implement this connection, one **CSTA link of the OpenScape Business master node as well as one TAPI license for each configured TAPI station are required.**

Note

Via the master node, the TAPI 170 receives network-wide access to all stations in the network.

If the TAPI 170 is connected to a slave node instead of the master node, TAPI 170 can access only the stations of the slave node.

When using multiple TAPI 170 in a terminal server cluster, one CSTA link to the master node is required for each TAPI 170.

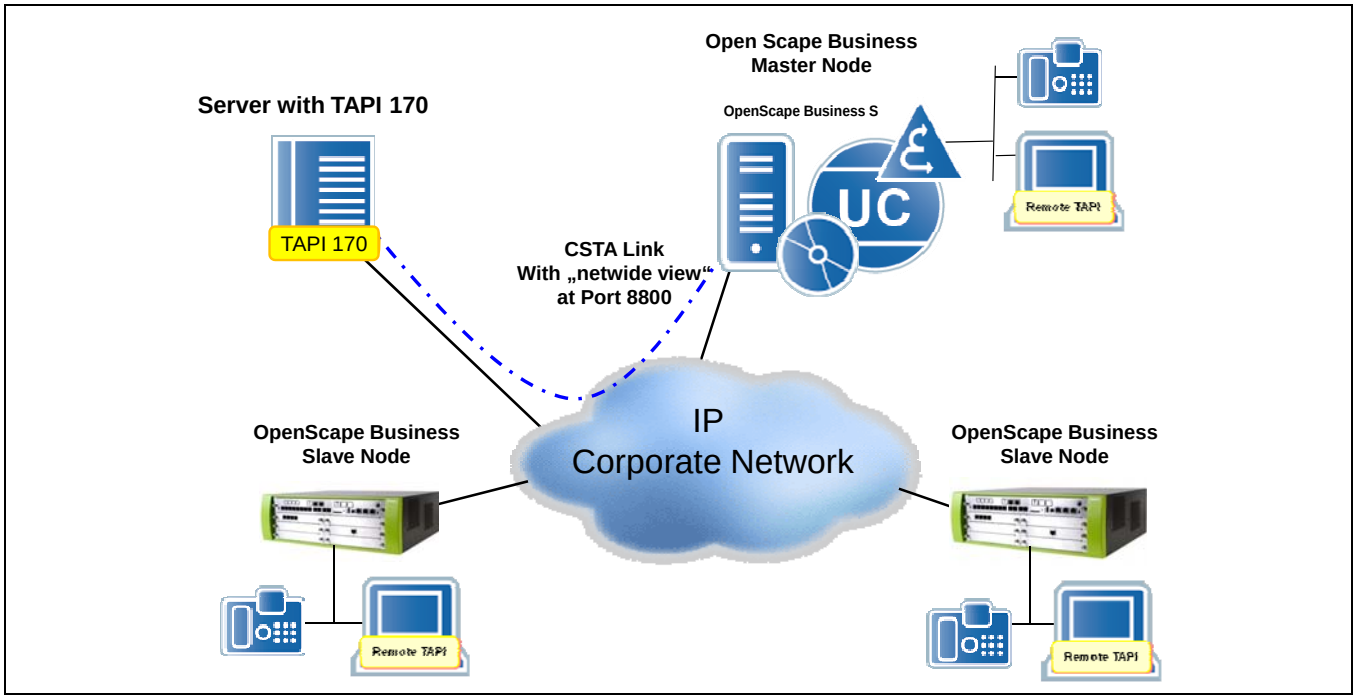


Figure: Connection of TAPI 170 to networked OpenScape Business systems

Capacity Limits

The maximum number of TAPI 170 client PCs that can be connected to OpenScape Business depends on the model. More information on this can be found in section 1.2.9.4.

Released Operating Systems

OpenScape Business TAPI 170 has been tested and released in combination with the following operating systems.

- Microsoft Server 2008, 32 bit, 64 bit
- Microsoft Server 2008 R2, 64 bit
- Microsoft Server 2012, 64 bit

Note

The Microsoft Home Server and Microsoft Small Business Server variants are not supported.

Licensing

The use of OpenScape Business TAPI 170 is licensed on a subscriber basis. The licenses are managed within the OpenScape Business system.

When using the "MULAP" feature, a TAPI license is required for each station within the MULAP.

More information on licensing can be found in the section 1.5 .

Prerequisites and Requirements

- OpenScape Business CSTA Interface
  In order to connect to OpenScape Business TAPI 170, one CSTA link of OpenScape Office is required, regardless of how many TAPI 170 clients are connected. This also applies to networked OpenScape Business systems.
- PC Hardware
  The PC hardware must comply with at least the system requirements specified by Microsoft for the operating system used, provided that no further software applications other than TAPI 170 are being operated. In addition, an Ethernet LAN interface is required.

Other Constraints

- Only Microsoft Windows operating systems can be used in conjunction with TAPI 170.
- The TAPI server and clients must be managed by the same network domain controller.
- The following applies to the terminal server environment:
  – OpenScape Business TAPI 170 must be installed on the same server hardware as the terminal server.
  – When using a terminal server cluster architecture, the TAPI 170 software must be installed on each terminal server in the cluster.
  – The maximum possible number of OpenScape Business TAPI 170 servers in conjunction with OpenScape Business must not be exceeded. The maximum number of possible connections is reduced if the CSTA links of OpenScape Business are used by other CSTA applications.

Software Provisioning

The OpenScape Business TAPI 170 software is supplied on a separate data medium. It is not part of the OpenScape Business System software.

Migration

The procedure for migrating a HiPath 3000 system with HiPath TAPI 120/170 V2 to OpenScape Business is described in section 1.12.

1.3.12 CSTA interface NEW

The CSTA interface enables high-performance CTI, Contact Center and Unified Communications applications, etc., to be connected to OpenScape Business.

Overview of Features

- Access via Ethernet LAN (TCP/IP)
- CSTA Phase III, ASN.1 encoding:
  – ECMA-269 Services for Computer Supported Telecommunications Applications (CSTA) Phase III
  – Standard ECMA-285 ASN.1 for Computer Supported Telecommunications Applications (CSTA) Phase III
- Support for a wide range of system telephones
- Network-wide monitoring and control of all resources
- Multiplexing for monitor points:

Info

In contrast to the handling of the CSTA interface of HiPath 3000, the following must be observed for the CSTA interface of OpenScape Business:

- The connection to the CSTA interface is identical for standalone and networked OpenScape Business systems. It occurs exclusively via the LAN. RS-232 (V.24) and S0 interfaces are no longer supported.
- Additional hardware and software components such as the CSTA Service Provider (CSP), HG 1500 board or HiPath 5000 RSM System are no longer required with OpenScape Business.
- The CSTA interface is still not licensed
- A maximum of 4 CSTA links can be used for connecting external applications. In the default factory state, 3 of the 4 CSTA interfaces are preconfigured for the use of internal applications of OpenScape Business. These can optionally also be used for connecting external applications.
- The protection of the CSTA interfaces against abuse has been improved. The access mechanism has been revised.

- The provided CSTA functions have been expanded. Detailed descriptions can be found in the OpenScape Business CSTA Interface Manual.
- The CSTA Phase II protocol is no longer supported.
- CSTA applications to be used with OpenScape Business should be tested and released in conjunction with OpenScape Business.

Supported Devices

The devices listed in section 1.2.10, "Supported Devices", can be controlled via the CSTA protocol. However, the functionality provided via the CSTA protocol is highly dependent on the respective terminal equipment as well as the device interface.

System telephones with TDM or IP/HFA interfaces offer the most functionality, and ISDN devices offer the least. Devices based on SIP and DECT occupy a special position with regard to the available functions.

Detailed descriptions of the supported devices and the supported features can be found in the "CSTA Interface Manual" for OpenScape Business.

In addition to the listed devices, the following system resources can be accessed via CSTA:

- CO trunks
- Virtual stations
- UCD groups
- MULAPs

Connections to the CSTA Interface

The OpenScape Business CSTA interface supports a maximum of 4 CSTA links for connecting external and internal CSTA applications (running within OpenScape Business). These applications must share the available CSTA links. In the default factory state of OpenScape Business, the following preassignments are preconfigured for the CSTA links, which sufficient for most use cases:

- 1 free CSTA link available for connecting an external CSTA application
- 1 CSTA link preassigned for the internal connection of the OpenScape Business UC Suite
  If the OpenScape Business UC Suite is not required due to the use of UC Smart, for example, the assigned CSTA link can be used elsewhere.
- 1 CSTA link preassigned for the internal connection of the CSTA Message Dispatcher (CMD)
  If no TAPI 120 Service Provider is being used at the system, this CSTA link can be used for connecting other external applications.
- 1 CSTA link preassigned for the internal connection of the Direct Station Server (DSS)
  The DSS server is used only for networked OpenScape Business systems. In standalone systems, the preassigned CSTA link can be used for other purposes.

If multiple external CSTA applications need to be connected, it must be checked which internal applications are not required. The CSTA links occupied by these applications can then be used for connecting the external CSTA applications.

Info

OpenScape Business TAPI 120 is always connected at the CSTA link preassigned for the CSTA Message Dispatcher (CMD) and does not count in the above sense as one of the external CSTA applications. OpenScape Business TAPI 170, by contrast, must be connected as an external CSTA application.

Connection of External CSTA Applications to a Standalone OpenScape Business System

The CSTA applications are connected to the CSTA interface of OpenScape Business over the LAN.

For this connection, one CSTA link of OpenScape Business is required for each CSTA application. No licenses in the OpenScape Business system are required for this purpose.

However, the model-specific prerequisites for the operation of the CSTA interface must be taken into account.

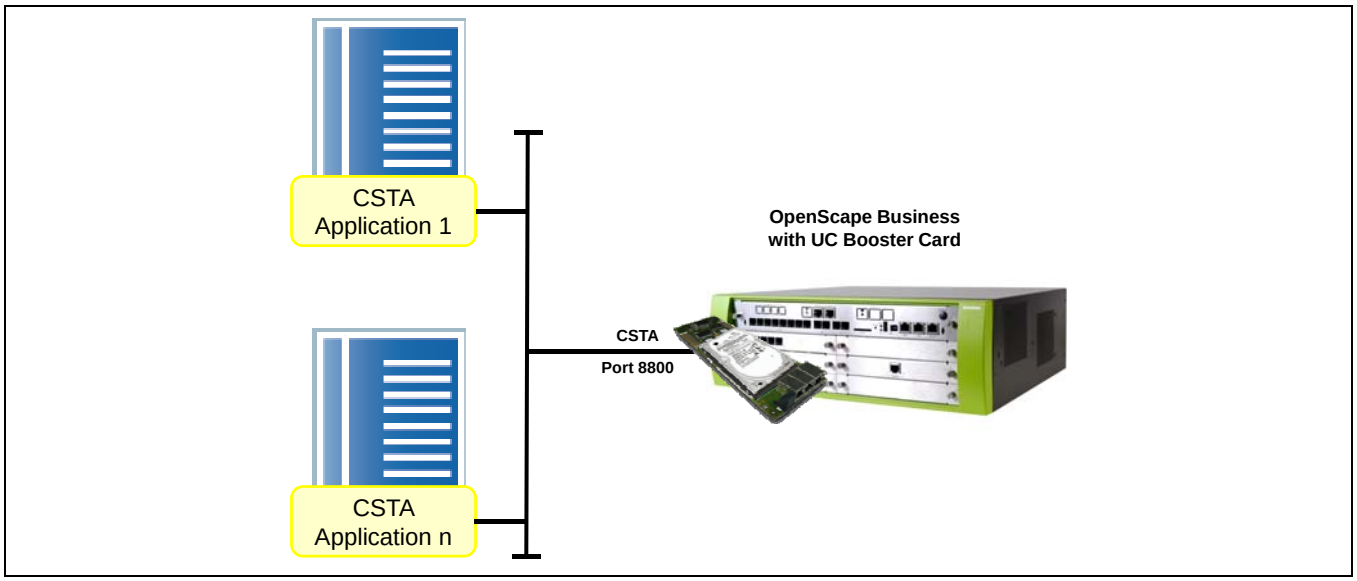


Figure: CSTA application to an OpenScape Business System

Connecting CSTA Applications to an OpenScape Business Network

The application is connected to the CSTA interface of the master node over the LAN. Via the master node, the CSTA application receives a network-wide view of all the resources of the OpenScape Business nodes involved in the network.

For the connection, one CSTA interface link per CSTA application is required in the OpenScape Business master node. No CSTA links are required to the slave nodes themselves.

However, the model-specific prerequisites for the operation of the CSTA interface in the master node must be taken into account.

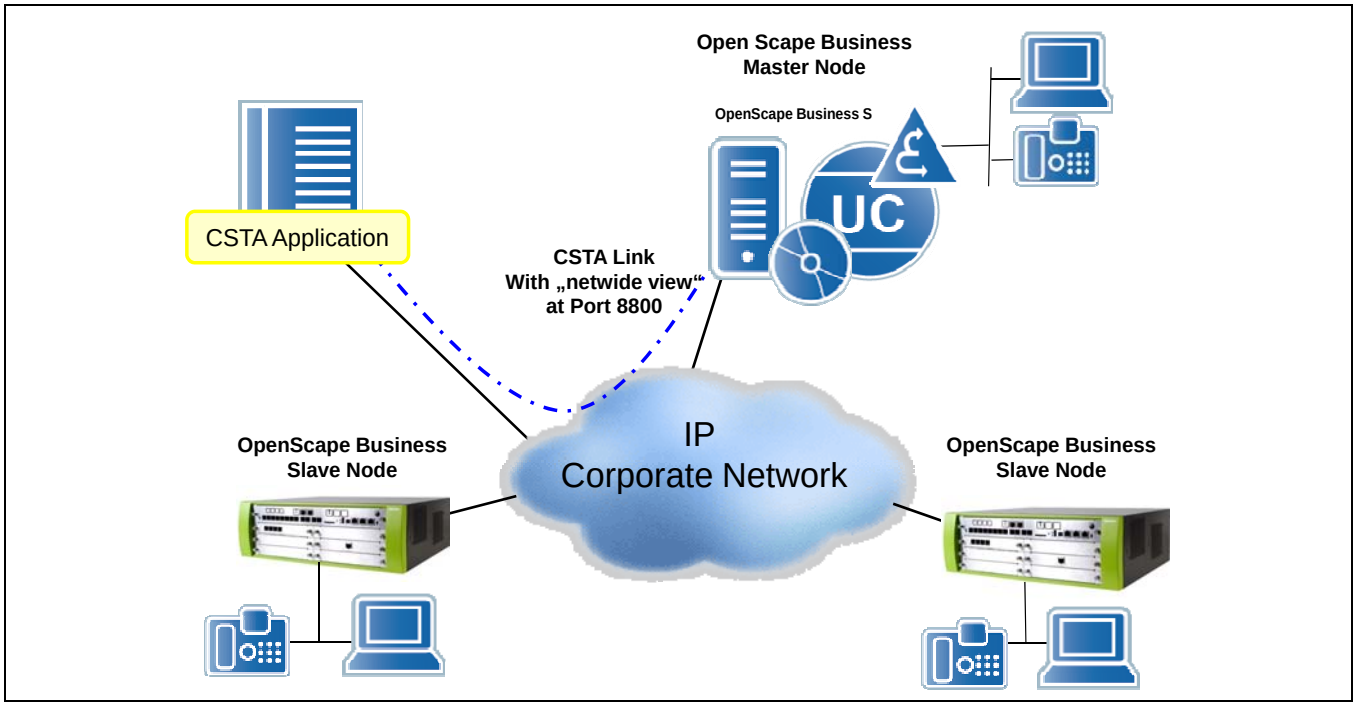


Figure Connection of a CSTA Application to Networked OpenScape Business Systems

Note:

When CSTA applications are connected to slave nodes in the network, the CSTA application can access the stations/resources of the slave node. In order to access to the slave node in this case, the prerequisites for the CSTA interface must be satisfied in every node connected via CSTA.

Maximum values

The maximum number of monitorable CSTA devices are described, among other things, in section 1.2.9.4, "Expansion Levels Available through Sales".

Licensing

The use of the CSTA interface is not licensed.

Prerequisites

In order to use the CSTA interface with the OpenScape Business models X3/X5 or X8, the UC Booster Card or UC Booster Server is required.

When using OpenScape Business S, no UC Booster is required for the operation of the CSTA interface.

Migration

Applications that were previously connected to the CSTA interfaces of HiPath 3000 and OpenScape Office and certified for this should be tested again by the vendor and possibly recertified before being connected to OpenScape Business. More information on product certifications is provided at the following link.

Product Certification | Unify

More information about migration can be found in section 1.12, "Migration".

1.3.13 Certified Products and Applications

The OpenScape Business product package includes some additional applications (such as Accounting Manager and Audio Wizard).

In addition, the following Unify products are scheduled to be released for OpenScape Business.

The connection is supported with the following OpenScape Business software version.

	Unify Product Version	**OpenScape Business Version**	
		As of V1 Step 1	**As of V1 Step 2** **New**
HiPath 4000	V6		x
OpenScape Voice			Test planned
CallBridge Collection	V2R3	x	
CallBridge for Data	V1R1	x	
OpenScape Deployment Service	V7R1	x (PES, Desk Sharing network-wide, manual configuration of OpenScape Business stations in the DLS	
OpenScape Fault Management	V7	x	
OpenScape Alarm Response Economy	V1.11	x	
OpenScape Alarm Response Professional	V3R2	x	

	Unify Product Version	OpenScape Business Version	
		As of V1 Step 1	As of V1 Step 2 NEW
OpenScape Contact Center	V8R2		Test planned
OpenScape Web Collaboration	V7R0		x
OpenScape Xpressions	V7R1	x (connection via TDM connector)	
Teledata Office	V4.0	x	
OpenScape Accounting	V1R2		Test planned

Certified Products and Partners' Applications

OpenScape Business can also be expanded with certified products and applications from partners. Product Certification | Unify

HiMed	Test planned
HiCall	Test planned

Information on the certified applications of Unify Application Partners can be found on the website of the OpenScape Ready Program

1.4 UC Models (Comparison between UC Smart and UC Suite NEW)

1.4.1 UC Features

Depending on the selected UC solution (UC Smart or UC Suite) different UC functions are available to you. The clients of UC Smart and UC Suite cannot be operated in parallel. However, it is possible to migrate from UC Smart to UC Suite.

The following tables are intended to help you choose the best UC solution for your requirements. Detailed functional constraints can be found in the relevant sections (UC Smart, UC Suite, Attendants) of the Feature Description and Administrator Documentation.

UC feature	UC Smart		UC Suite NEW	
	myPortal Smart	myPortal for Mobile	myPortal for Desktop/Outlook	myPortal for Mobile
Presence status (presence management)	x	x	x	x
Change presence status via the Client	x	x	x	x
Change presence status via the TUI	-	-	x	-

UC feature	UC Smart		UC Suite NEW	
	myPortal Smart	myPortal for Mobile	myPortal for Desktop/Outlook	myPortal for Mobile
Status-based call forwarding	x	x	x	Via destinations defined in myPortal
Status display in favorites	x	x	x	x
Status display in directories	x	x	x	x
Status display in the Journal	-	-	x	x
CallMe	-	-	x	x
Calendar integration (Outlook)	-	-	x	-
Calendar integration (iCal) (only with myPortal for Desktop)	-	-	x	-
Display call status	x	x	x	x
Create groups	x	-	x	-
Compact display of favorites	x	-	x	-
Personal directory	x	x	x	x
Internal directory	x	x	x	x
External directory	-	-	x	x
Search in directories	x	x	x	x
Access to speed-dial destinations defined in the system (SSD)	x	x	-	x
Import of personal contacts (Outlook)	x	x	x	x
Import of personal contacts (Mac OS) (myPortal for Desktop)	-	-	x	-
Integration of external directory server via LDAP	-	-	x	-
All calls	x	x	x	x
Open calls	-	-	x	-
Missed calls	x	x	x	x

UC feature	UC Smart		UC Suite NEW	
	myPortal Smart	myPortal for Mobile	myPortal for Desktop/Outlook	myPortal for Mobile
Answered calls	x	x	x	x
Scheduled calls	-	-	x	-
Fax journal	-	-	x	-
Manual dialing	x	x	x	x
Desktop dialer (click to call)	-	-	x	-
Forwarding	x	x	x	x
Place call on hold	x	x	x	x
Record calls (voice recording)	-	-	x	-
Send e-mail	x	-	x	-
Send SMS	-	x	-	x
Screen pops	x	-	x	-
AdHoc conference	x	x	x	x
Scheduled, permanent and open conferences (drag & drop conference)	-	-	x	-
Web collaboration integration	-	-	x	-
Voicemail box (visual voicemail)	x	x	x	x
Listen to voicemail via telephone	x	x	x	x
Listen to voicemail via PC sound card	-	-	x	-
How to Send a Voice Message as an E-mail	x NEW	-	x	-
Fax (For Windows operating systems)	-	-	x	-
Instant messaging (chat)	x	-	x	-

1.4.2 Contact Center Functions NEW

UC feature	UC Suite	
	myAgent	myReports
Agents, queues and schedules	x	-
Fax and e-mail	x	-
Predefined reports/report templates	x	x
Report Designer for custom reports and report templates	-	x
Scheduled creation of reports	-	x

Optionally, the connection of OpenScape Contact Center is possible.

1.4.3 Attendants/Attendant Consoles

UC feature	UC Smart	UC Suite NEW
	Business Attendant	myAttendant NEW
Display of waiting calls with call type, name and phone number	x	x
Display connection status	x	x
Fast switching of calls	x	x
Speed-dialing via BLFs and user buttons. Individual configuration of the busy lamp fields and user buttons with call number or name	x	x
View presence status of other subscribers	x	x
Change presence status of other subscribers	x	x
Personal directory	-	x
Internal directory	x	x
External directory	x	x
Outlook Contacts	x	x

UC feature	UC Smart	UC Suite NEW
	Business Attendant	myAttendant NEW
LDAP access	x	x
Journal	-	x
AdHoc conference	x	x
Scheduled, permanent and open conferences (drag & drop conference)	-	x
Message Center	-	x
Access to voicemail and fax messages of other subscribers	-	x
Instant messaging (chat)	-	x
Night service	x	x
BLF	x	x

The recommended Attendant client for UC Suite is myAttendant. However, OpenScape Business Attendant can also be used with UC Suite.

1.4.4 Company AutoAttendant

UC feature	UC Smart	UC Suite NEW
Schedules	Day and Night service	Schedule with rules (Call Control Vector, CCV)
Templates	Individual AutoAttendant voice prompts can be disabled	5 customizable templates
Graphical rule editor (CCV editor)	-	x
AutoAttendant mailboxes	x	x
Concatenation of mailboxes	x	-
Dial by Name	-	x
Dial by Extension	-	x

1.4.5 UC Clients for UC Smart or UC Suite NEW and their Technical Prerequisites

UC clients are offered for the major operating systems. Please also note the requirements of the clients in the respective technical release notes.

1.4.5.1 Communication Clients (Desktop and Groupware Clients)

Prerequisites for myPortal Smart, myPortal for Desktop NEW, MyPortal for Outlook NEW, myAttendant NEW and Business Attendant/BLF

In order to use UC clients, the client PC must be equipped with the appropriate hardware and software configurations. Depending on the configuration, administration rights are required for the installation and automatic updates.

Additional notes and the dependencies on the latest respective operating system and Service Pack versions for MS Windows & the Apple OS X can be found in the UC client installation packages and the "ReadMe first" file.

Please refer to the current Release Notes for the latest technical information.

Phones for using the UC clients

myPortal Smart, myPortal for Desktop, myAttendant and myPortal for Outlook can be used in combination with the following telephones:

- OpenStage HFA
- OpenStage SIP
- OpenScape Desk Phone IP 35G/55G SIP
- OpenStage T
- optiPoint 410 HFA
- optiPoint 420 HFA
- optiPoint 500
- SIP phones from third parties that support 3PCC
- Analog telephone
- OpenScape Personal Edition HFA
- OpenScape Personal Edition SIP
- OpenScape Business Cordless
- OpenScape Cordless IP

Operating System of the UC Client PCs

- Apple MAC OS X (Lion / 10.7.3)
- Apple MAC OS X (Mountain Lion / 10.8.x)
- Microsoft Windows 8
- Microsoft Windows 7
- Microsoft Windows Vista
- Microsoft Windows XP
- Office 365 (local installation: Office 2013)
- Microsoft Windows 2012, 2008 R2, 2008 and 2003 as Microsoft Terminal Server
- Microsoft Windows 2008 R2, 2008 and 2003 as Citrix XenApp 5.0 or 6.0 Server

Local administration rights on the client PC are required for the installation, but not for automatic updates (exceptions: Apple MAC OS X for UC Suite, myPortal Smart). The Russian and Chinese user interfaces of myPortal for Outlook require a corresponding Russian or Chinese Windows installation.

Support for the UC Suite clients for Microsoft Office 2003, Microsoft Windows XP and Microsoft Windows 2003 Server will end at the same time as the end of support for these products by Microsoft. The product will still be supported, but will no longer be tested in detail.

INFO: myPortal for Desktop for Apple MAC is available with same interface as under Microsoft Windows. However, due to the Apple MAC OS system architecture, the following functions are currently not supported:

- Sending faxes
- Outlook, Entourage Integration

INFO: myPortal for Outlook is supported in Microsoft Office 365 environments. Microsoft Office 365 is a cloud application It includes, among other things, an Exchange server for the centralized distribution of e-mails as well as the traditional Microsoft Office products. OpenScape Business supports Microsoft Office 365.

The following functions can be used under Microsoft Office 365:

- Exchange Calendar Integration
- E-Mail Forwarding

Web Browsers for Programming Telephone Keys via the UC Suite Client

myPortal for Desktop, myPortal for Outlook and OpenScape Office Fax Printer can be used in combination with the following web browsers:

- Microsoft Internet Explorer Version 10
- Mozilla Firefox Version 19 or later

Additional Software

Additional Software	myPortal Smart	myPortal for Desktop	myAttendant	myPortal for Outlook
Oracle Java >= 1.6.0_31 or 1.7.x (32 bit or 64 bit ➔ See * note under this table)		X	X	
Microsoft Office 2013 (32 bit and 64 bit) or Microsoft Office 2010 (32 bit and 64 bit) or Microsoft Office 2007 (32 bit) or Microsoft Office 2003 (32 bit) with installed .NET components for Outlook				X
Access to Microsoft Exchange Server (for Outlook contacts and appointments) Exchange 2013 (64 bit) Exchange 2010 (64 bit) Exchange 2007 (64 bit)		X	X	X
Microsoft .NET Framework >= 3.5 (Outlook 2003/2007) or Microsoft. NET Framework >= 4.0 (Outlook 2010/2013)				X
Adobe AIR 3.6 for Windows / Mac OS X or later	X			

*** Note about Oracle Java 32 bit or 64 bit:**

In order to use the myPortal for Desktop function "Import Outlook Contacts at Startup" in conjunction with the 64-bit version of Microsoft Office 2013, an installation of the 64-bit variant of Oracle Java is required. If this optional setting is not needed, then the use of the 32-bit version of Oracle Java is recommended, since the memory requirements are then significantly lower. For this reason, the 32-bit version of Oracle Java is generally recommended for all other installations as well.

Minimum Hardware Requirements

Windows Client PCs

- 2 GHz CPU
- RAM: 2 GB
  (Microsoft Windows XP: 1 GB)
  (Microsoft Windows 2003 Server: 1 GB)
- 100 Mbps LAN
- XGA (1024x768) screen resolution, myPortal for Outlook: SVGA (800x600) screen resolution

MAC Client PCs

- Processor type: Intel Core 2 Duo 2 GHz
- Memory: 2 GB 667 MHz DDR RAM
- Operating system: Apple MAC OS X >= 10.7.3 (Lion) or >= 10.8.x (Mountain Lion)
- Installed Java: Java SE 6 >= 1.6.0.31-b04-415

Microsoft Terminal Server, Citrix Server

myAttendant, myPortal for Desktop, myPortal for Outlook and OpenScape Office Fax Printer can be used in Microsoft Terminal Server and Citrix Server environments under the following preconditions:
myPortal smart does not support any Terminal Server or Citrix server installations.

Terminal Server and Citrix Server environments, including hosted services and virtual environments are the responsibility of the customer.

Operating system:

Microsoft Windows 2012 Server as Microsoft Terminal Server

- Microsoft Windows 2008 R2 Server as Microsoft Terminal Server
- Microsoft Windows 2008 R2 Server as Microsoft Terminal Server
- Microsoft Windows 2003 Server as Microsoft Terminal Server
- Microsoft Windows 2008 R2 Server (64 bit) with Citrix XenApp 6.0 and 6.5 Server (Desktop Mode)
- Microsoft Windows 2008 R2 Server (64 bit) with Citrix XenApp 5.0 Server (Desktop Mode)

Office applications:

- Microsoft Office 2013 (32 bit and 64 bit)
- Microsoft Office 2010 (32 bit and 64 bit)
- Microsoft Office 2007 (32 bit)
- Microsoft Office 2003 (32 bit)

Hardware Prerequisites: The number of installable clients depends on the server performance and on the amount of available memory. If the server is being used for other applications as well, their memory requirements must also be taken into account. More information on the configuration of Citrix XenApp Server can be found under:
http://wiki.unify.com/wiki/OpenScape_Business

Note: Support of UC Suite clients on Microsoft Windows XP, Microsoft Office 2003 and Microsoft Windows 2003 Server will end synchronously to the stop of the product support from Microsoft.

1.4.5.2 Prerequisites for OpenScape Business Attendant/BLF

Minimum Hardware Requirements

None other those for the operating system

Screen with a resolution of min. 1024x768, optional second screen to display the second BLF

Video card with 16-bit color depth (min. 256 colors)

Operating System

- Microsoft Windows 8
- Microsoft Windows 7

- Microsoft Windows Vista
- Microsoft Windows XP
- Microsoft Windows 2012 Server as Microsoft Terminal Server
- Windows Terminal Server 2003 and 2008 and 2008 R2

Support for the UC Suite clients for Microsoft Office 2003, Microsoft Windows XP and Microsoft Windows 2003 Server will end at the same time as the end of support for these products by Microsoft. The product will still be supported, but will no longer be tested in detail.

Possible use of a Microsoft Terminal Server / Citrix Server when using HFA telephones

myAttendant, myPortal for Desktop, myPortal for Outlook and OpenScape Office Fax Printer can be used in Microsoft Terminal Server and Citrix Server environments under the following preconditions:

Terminal Server and Citrix Server environments, including hosted services and virtual environments are the responsibility of the customer.

Operating system:

- Microsoft Windows 2012 Server as Microsoft Terminal Server
- Microsoft Windows 2008 R2 Server (64 bit) with Citrix XenApp 6.0 and 6.5 Server (Desktop Mode)
- Microsoft Windows 2008 R2 Server (64 bit) with Citrix XenApp 5.0 Server (Desktop Mode)
- Microsoft Windows 2008 R2 Server (64 bit) as Microsoft Terminal Server
- Microsoft Windows 2008 Server as Microsoft Terminal Server
- Microsoft Windows 2003 Server as Microsoft Terminal Server

Office applications:

- Microsoft Office 2013 (32 bit and 64 bit)
- Microsoft Office 2010 (32 bit and 64 bit)
- Microsoft Office 2007 (32 bit)
- Microsoft Office 2003 (32 bit)

Supported Phones

- OpenStage 40 HFA, 60 HFA, 80 HFA
- OpenStage 30T, 40T, 60T, 80T
- optiPoint 500
- optiPoint 410, 420

1.4.5.3 Prerequisites for myPortal for OpenStage

In order to use myPortal for OpenStage, the phone must have a suitable hardware and software configuration.

Telephones

myPortal for OpenStage can be used with the following telephones:

- OpenStage 60 HFA V2 and later
- OpenStage 80 HFA V2 and later

Web Browsers for Programming Telephone Keys via the UC Suite Client

myPortal for OpenStage can be used in combination with the following web browsers (for configuration and administration):

- Microsoft Internet Explorer Version 10
- Mozilla Firefox Version 19 or later

1.4.5.4 Mobility Client Prerequisites for myPortal for Mobile/Tablet

In order to use myPortal for Mobile, the mobile phone must have a suitable hardware and software configuration.

Depending on which device and operating system is used, the ease of use or function may be affected, e.g., the size and resolution of the existing display.

Operating Systems and Reference Devices

myPortal for Mobile works with numerous mobile phones and tablet PCs. For more information on devices, browsers and operating systems, refer to the Unify Experts wiki at http://wiki.unify.com.

1.4.5.5 Multimedia Contact Center ***NEW***

Prerequisites for myAgent

In order to use myAgent, the client PC of the subscriber must be equipped with the appropriate hardware and software configurations.

Please refer to the current Release Notes for the latest technical information.

myAgent can be used in combination with the following telephones:

- OpenStage HFA
- OpenStage SIP
- OpenScape Desk Phone IP 35G/55G SIP
- OpenStage T
- optiPoint 410 HFA
- optiPoint 420 HFA
- optiPoint 500
- OpenScape Personal Edition HFA
- OpenScape Business Cordless

Minimum Requirements for myAgent Client

Operating system:

- Microsoft Windows 8
- Microsoft Windows 7
- Microsoft Windows Vista
- Microsoft Windows XP (until end of support by Microsoft)

Web Browsers for Programming Telephone Keys via the UC Suite Client

myPortal for OpenStage can be used in combination with the following web browsers (for configuration and administration):

- Microsoft Internet Explorer Version 10
- Mozilla Firefox Version 19 or later

Additional software for reports:

- Adobe Reader 9

Hardware:

- 2 GHz CPU
- 1 GB RAM for Microsoft Windows XP
- 2 GB RAM for Microsoft Windows 8, Microsoft Windows 7 and Microsoft Windows Vista
- 100 Mbps LAN (1 Gbps LAN recommended)
- XGA (1024x768) screen resolution

Microsoft Terminal Server, Citrix XenApp Server

myAgent can be used in terminal server environments under the following conditions: A project-specific release is required for this.

Terminal server environments, including hosted services and virtual environments, are the responsibility of the customer.

Software:

- Microsoft Windows 2012 Server as Microsoft Terminal Server
- Microsoft Windows 2008 R2 Server as Microsoft Terminal Server
- Microsoft Windows 2008 R2 Server as Microsoft Terminal Server
- Microsoft Windows 2003 Server as Microsoft Terminal Server
- Microsoft Windows 2008 R2 Server (64 bit) with Citrix XenApp 6.0 and 6.5 Server (Desktop Mode)
- Microsoft Windows 2008 R2 Server (64 bit) with Citrix XenApp 5.0 Server (Desktop Mode)

Support for the UC Suite clients for Microsoft Office 2003, Microsoft Windows XP and Microsoft Windows 2003 Server will end at the same time as the end of support for these products by Microsoft. The product will still be supported, but will no longer be tested in detail.

Hardware Prerequisites: The number of installable clients depends on the server performance and on the amount of available memory. If the server is being used for other applications as well, their memory requirements must also be taken into account. More information on the configuration of Citrix XenApp Server can be found under:

https://intranet.unify.com

1.4.5.6 Prerequisites for myReports

In order to use myReports, the client PC of the subscriber must be equipped with the appropriate hardware and software configurations.

Please make sure that you refer to the notes in the `ReadMe first` file, which is located in the storage directory of the install files.

Minimum Requirements for myReports

Operating System

- Microsoft Windows 8
- Microsoft Windows 7
- Microsoft Windows Vista
- Microsoft Windows XP (until end of support by Microsoft)

The used operating system always requires the latest version of all available updates (Service Packs with related patches and Microsoft .NET Framework >= 4.0).

Additional Software:

- Java >= 1.6.x
- Adobe Reader >= 9 (for reports in PDF format)
- Microsoft Excel 2013, 2010, 2007 or 2003 (for reports in Excel format)
- Microsoft Word 2013, 2010, 2007 or 2003 (for reports in Word format)

Hardware:

- 2 GHz CPU
- 1 GB RAM for Microsoft Windows XP
- 2 GB RAM for Microsoft Windows 8, Microsoft Windows 7 and Microsoft Windows Vista
- 100 Mbps LAN (1 Gbps LAN recommended)
- XGA (1024x768) screen resolution

Microsoft Terminal Server, Citrix XenApp Server

myReports can be used in terminal server environments under the following conditions: A project-specific release is required for this.

Terminal server environments, including hosted services and virtual environments, are the responsibility of the customer.

Software:

Microsoft Windows 2012 Server as Microsoft Terminal Server

- Microsoft Windows 2008 R2 Server as Microsoft Terminal Server
- Microsoft Windows 2008 R2 Server as Microsoft Terminal Server
- Microsoft Windows 2003 Server as Microsoft Terminal Server
- Microsoft Windows 2008 R2 Server (64 bit) with Citrix XenApp 6.0 and 6.5 Server (Desktop Mode)
- Microsoft Windows 2008 R2 Server (64 bit) with Citrix XenApp 5.0 Server (Desktop Mode)

Support for the UC Suite clients for Microsoft Office 2003, Microsoft Windows XP and Microsoft Windows 2003 Server will end at the same time as the end of support for these products by Microsoft. The product will still be supported, but will no longer be tested in detail.

The used software always requires the latest version of all available updates (Service Packs and patches).

Hardware:

- 2 GHz CPU
- 100 Mbps LAN (1 Gbps LAN recommended)
- XGA (1024x768) screen resolution
- 1 GB RAM for Microsoft Windows 2003 Server
- 2 GB RAM for Microsoft Windows 2008 R2 Server and Microsoft Windows 2008 Server

Hardware Prerequisites: The number of installable clients depends on the server performance and on the amount of available memory. If the server is being used for other applications as well, their memory requirements must also be taken into account. More information on the configuration of Citrix XenApp Server can be found under:

http://wiki.unify.com/wiki/OpenScape_Office.

1.4.6 Languages Supported

Several different language variants are available for the various target groups such as subscribers, customer administrators, administrators and service technicians.

These languages will be released as part of the country-specific introduction.

	German	English	Czech	Danish	Spanish	Finnish	French	Croatian	Hungarian	Italian	Dutch	Norwegian	Polish	Portuguese	Russian	Swedish	Turkish	Chinese
UC Smart myPortal Smart myPortal for Mobile myPortal for OpenStage	X	X	-	X	X	-	X	-	-	X	X	X	X	X	X	X	-	-
TUI (Telephone User Interface)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
TUI like UC Suite	X	X	-	X	X	-	X	-	-	X	X	X	-	X	-	X	-	-
UC Suite myPortal for Desktop myPortal for Outlook myPortal for Mobile myPortal for OpenStage	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

	German	English	Czech	Danish	Spanish	Finnish	French	Croatian	Hungarian	Italian	Dutch	Norwegian	Polish	Portuguese	Russian	Swedish	Turkish	Chinese
myAttendant myAgent																		
myReports	X	X	X	–	X	X	X	–	–	X	X	–	X	X	X	–	–	X
TUI (Telephone User Interface)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
OpenScape Business Attendant/BLF	x	X	-	-	X	-	X	-	X	-	X	-	X	-	-	-	-	-
Administration OpenScape Business Assistant (WBM) (The language can be set at login.)	X	X	-	-	X	-	X	-	-	X	X	-	-	X	-	-	-	--
Manager E	X	X	X	X	X	X	X			X	X	X	X	X	X	X		

In addition, the voicemail box/voicemail (UC Smart and UC Suite **NEW**) is also offered in the languages Belgian (Flemish) and Greek.

INFO: A Russian or Chinese Windows operating system is required in order to use the Russian or Chinese user interface.

1.5 Licensing

The flexible licensing concept of OpenScape Business allows customers to adapt the functional scope to their own requirements through licenses. All OpenScape Business communication systems (X3/X5/X8 and OpenScape Business S) are subject to this licensing concept. Phones, UC clients, UC functions and system-wide features can thus be unlocked according to individual customer needs. Uniform licenses are used for all OpenScape Business communication systems.

OpenScape Business can be expanded or equipped with additional features at a later date by purchasing additional licenses.

All licenses are always bound to the basic license of the communication system and enable the use of the purchased features for the associated version of OpenScape Business.

90-day evaluation licenses can be ordered to allow customers to test and evaluate special features.

Activation Period

The activation period begins when the WBM is accessed for the first time. After the initial installation of the communication system, the license activation must be completed within a period of 30 days (activation period). During the activation period, the product is fully functional, and the maximum number of licenses are available for use.

If the licensing is not completed before the activation period expires, the functionality of the communication system will be severely restricted. The system also remains in this restricted state when the initial installation is carried out only with Manager E, since this does not start the activation period.

License Structure

The licenses for the communication system are structured as follows:

- A basic license permanently activates the software of the communication system. This basic license is also required for activating all other licenses.
- Station licenses activate the phones for external voice communications.
- User-oriented licenses to unlock specific user features.
- System licenses to unlock general system-wide features.

Migration

Existing HiPath 3000 V9 customers are being offered an upgrade license for license migration. License migration ensures investment protection for customers through continued use of telephones and voice features.

1.5.1 Licensing Procedure

Licensing is handled via the centralized OpenScape License Management procedure for the administration and activation of licenses. This ensures that a customer can use precisely the system configuration or features for which that customer has acquired the appropriate licenses (usage rights).

The Web Based Management (WBM) provides wizard-driven functions for the customer registration, license activation and the license assignments for standalone systems and systems in an OpenScape Business internetwork. Licensing with Manager E is not possible.

Steps for Successful Licensing

1. Configuration of the system within the activation period
2. Registration of customer data
3. License activation: Binding of purchased licenses to the customer system
4. License assignment: assignment of licenses to the individual OpenScape Business users

Please observe the CLS guidelines for maintaining customer and partner accounts. Additional information can also be found in the Unify Partner Portal under https://www.unify.com/partnerportal

Customer Registration

Your data will be collected as part of this registration and the subsequent system licensing by Unify GmbH & Co KG. For more information about our company, please visit: http://www.unify.com/de/sitecore/content/Home/Internet/Internet2010/de/Home/about/legal-information.aspx.

We collect this data in order to be able to notify you quickly about any security-related issues. In addition, we will also provide you with information to prevent license misuse by third parties, e.g., via the new link to the license information

For more information about the data protection and privacy policy of our company, please visit: http://www.unify.com/de/sitecore/content/Home/Internet/Internet2010/de/Misc/legal-information/privacy-policy.aspx

Licensing in an Internetwork

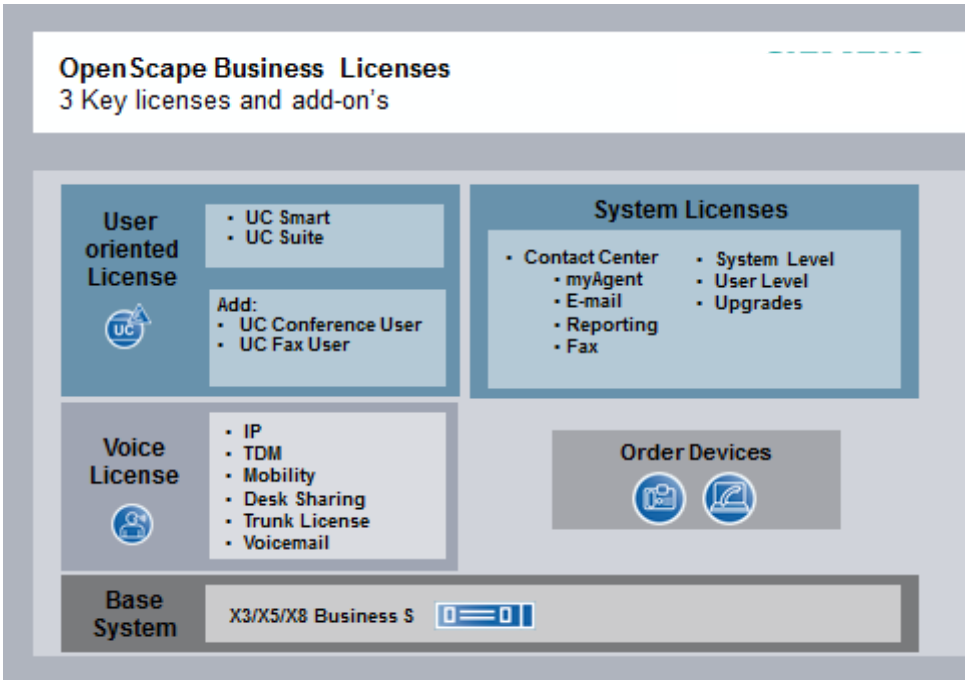
For an OpenScape Business internetwork, a network-wide license file (network license file) is generated by an authorized partner at the Central License Server (CLS). This network-wide license file is managed by the Central License Agent (CLA) of the master node and provides the licenses for the individual nodes. The assignment of the licenses occurs via the WBM of each individual node. Within an internetwork, the network licenses can be shifted freely by using the WBM.

Online activation is not possible when licensing an internetwork.

1.5.2 Available Licenses

Licenses are categorized thematically into license groups. The following license groups are available:

- Basic licenses
- Station/Voice licenses
- User-oriented licenses
- System licenses



The above licenses can be used for OpenScape Business X3/X5/X8, OpenScape Business S and the OpenScape Business UC Booster Server. There is no basic license for the UC Booster Server. The licenses cover all features and can be combined in accordance with the wishes of the customer. The possible combinations of licenses are explained in greater detail in the "Assigning Licenses and License Profiles" section.

Station licenses and user-oriented licenses are permanently assigned to subscribers.

1.5.2.1 Basic License

The basic license allows the general use of the communication system and serves as the basis for all other licenses.

Internal telephony and emergency operation is possible without a basic license. The following basic license is available:

System Base

For unlocking the V1 functionality of

- OpenScape Business X3/X5/X8 with or without UC Booster **NEW** (Application Board or Application Server) or
- OpenScape Business S **NEW**

contains the OpenDirectory Base license required for using Open Directory Service (ODS). This makes it possible for UC Suite **NEW** or UC Smart to be connected to an external database.

1.5.2.2 Station/Voice licenses

Every subscriber connected to the communication system requires a station license. This license is permanently bound to the call number of the subscriber via the WBM.

Station/Voice licenses include the comprehensive voice functionality of OpenScape Business. Additional licenses are required to use the UC solutions UC Smart or UC Suite.

The following station licenses are available:

- **IP User**
  For the use of IP system telephones (HFA) and SIP telephones.
- **TDM User**
  For the use of UP0 system phones, analog phones, analog fax devices, ISDN phones, ISDN fax and DECT phones.
  INFO: For S0 subscriber line interfaces, each MSN requires a license.

- **Mobility User**
  For the use of GSM/mobile telephones as an extension of the communication system and the voice functionality for myPortal for Mobile/Tablet and Mobility Entry. The assignment of an additional desk phone is not required.
- **DeskShare User**
  For use of the DeskSharing feature. Only a phone number and no physical phone is permanently assigned to such users. DeskShare users can operate specific IP system phones using their permanently assigned phone number, and they can access their personal phone settings on these phones.

1.5.2.3 User-oriented Licenses

User-oriented licenses are station-based and authorize the use of unified communications features and data integration applications. A user-oriented license also requires a station license and is permanently assigned to the phone number of the subscriber.

The following user-oriented licenses are available:

Voicemail

- **VoiceMail (UC Smart or UC Suite based voicemail)**
  For the use of a voicemail box (VoiceMail).
  INFO: If the UC solution UC Smart is expanded to UC Suite, the existing voicemail licenses and the assignments to the stations are retained.

UC Client User Interface

- **UC Smart User (myPortal Smart)**
  For use of the UC Smart features of the communications clients myPortal Smart and myPortal for Mobile.
- **UC Suite User** **NEW** **(myPortal for Desktop)**
  For use of the UC Suite features of the communication clients myPortal for Outlook and myPortal for Mobile. .
- **Groupware User** **NEW** **(myPortal for Outlook)**
  For use of UC Suite features of the communication clients myPortal for Outlook and myPortal for Mobile. This client is integrated in Microsoft Outlook.
- **Fax** **NEW**
  For use of a fax box within the UC Suite. As a prerequisite, one UC Suite User or Groupware User license is required additionally.
- **Conference** **NEW**
  For the use of the UC Suite conference management features, such as managing and initiating permanent and recurring conferences. As a prerequisite, one UC Suite User or Groupware User license is required additionally.
- No license is required for participating in conferences.
- **myAttendant** **NEW**
  For use of the UC Suite Attendant features.
- **myAgent** **NEW**
  For the use of Contact Center functions such as information about queues, pop-ups with customer information on incoming calls, and access to the call history.
- **Upgrade from myPortal Smart to myPortal for Desktop** **NEW**
  For upgrading UC Smart clients to myPortal for Desktop in order to use the full UC functionality such as conferencing, fax, etc.

Data Integration

- **Application Launcher** **NEW**
  For call-related control of applications on a client PC during incoming and outgoing calls, e.g., launching an application or displaying caller information. The Application Launcher can be combined with the functions of the UC Suite, but can also be used without the UC Suite.
- **OpenScape Business TAPI** **NEW**
  For the use of TAPI compliant applications and for PC-supported telephony with the customer's own applications from various software vendors. This requires the UC Server (Application Board or Application Server).

1.5.2.4 System Licenses

System licenses are not subscriber-specific and unlock the system-wide features. These features can be used by all subscribers of the communication system.

The following system licenses are available:

System Resources

- **S_{2M}/SIP Trunks to the public network**
  For the use of S_{2M} and ITSP channels. S_0 channels do not need to be licensed, this includes interfaces to S_0 fax servers in P-P mode. For primary multiplex connections, the individual voice channels are licensed. For ITSP connections, the number of simultaneous connections to one or more ITSP providers (SIP providers) is licensed. The number of possible simultaneous connections depends on the bandwidth of the connection.
- **Networking**
  For IP networking via SIP-Q/native SIP and/or TDM networking via CorNet-NQ or QSIG. For networking the UC Suite applications. One license is required per node.
  INFO: The networking license unlocks the lines for voice networking and UC Suite networking for a node. No S_{2m}/ SIP trunk licenses are required for network trunks.

INFO: S0 trunk interfaces (DSS1) are not subject to licensing.

Xpressions Compact

- **Xpressions Compact Announcement**
  For the use of Xpressions Compact Announcements features such as recording special announcements for information or attendant mailboxes. One license is required per Xpressions Compact.
- **Xpressions Compact Conferencing**
  For the use of Xpressions Compact Conference features such as managing and conducting conferences and controlling conferences through a web client. Six licenses can be purchased per Xpressions Compact.
- **Xpressions Compact Mobility**
  For the use of Xpressions Compact Mobility features such as the One Number Service (which enables a subscriber to be reached via a single phone number for all calls on all phones associated with that subscriber). Six licenses can be purchased per Xpressions Compact.

Contact Center Options NEW

- **Contact Center Mail**
  For setting up one or more e-mail boxes to send and receive e-mails for Contact Center agents. A station license and a myAgent license are required for this. One license is required per node.
- **Contact Center Fax**
  For setting up one or more fax boxes to send and receive faxes for Contact Center agents. A station license and a myAgent license are required for this. One license is required per node.
- **myReports**
  For the compilation of statistics on the utilization of Contact Center resources based on different criteria. Using the Schedule Manager, reports can be created from over 100 predefined report templates for telephone, e-mail and fax contacts. The report templates are managed via the Report Manager, with functions for regrouping as well as adding and deleting newly created report templates.

UC Client Options

- **Web Collaboration** NEW
  For integrating web collaboration in the UC Suite This requires the OpenScape Web Collaboration product. One license is required per node.
  INFO: As a prerequisite, OpenScape Web Collaboration V7 is required. OpenScape Web Collaboration is a scalable and secure multimedia web conferencing solution that integrates seamlessly into the interface of OpenScape Office. **Open Directory Connector** NEW
  For connecting to the Open Directory Service (ODS) in order to enable access to an external database or an external directory A maximum of four databases can be connected per node.
- **Company AutoAttendant (UC Smart or UC Suite** NEW **Based Company AutoAttendant)**
  For the use of a central AutoAttendant to automatically transfer calls. One license is required per node.
- **Gate View Cameras** NEW
  For video surveillance, which provides real-time video images on your OpenStage phone, PC or smartphone. A separate license is required for each of the eight possible cameras within a node.

- **OpenScape Business Attendant**
  For using the OpenScape Business Attendant (PC attendant). Up to 8 OpenScape Business Attendants may be licensed per node. If OpenScape Business Attendant should have access to presence information, a UC Smart or UC Suite license is additionally required.
- **OpenScape Business BLF**
  For use of the additional Busy Lamp Field indicator of OpenScape Business BLF. For each client, one BLF license + either a UC Smart or UC Suite license is required. Up to 50 OpenScape Business BLFs may be licensed per node.

A BLF server is required for the network-wide deployment of OpenScape Business Attendant and BLF (providing presence and BLF information throughout the network). The BLF server requires one IP user with a UC Smart or UC Suite license per node.

1.5.2.5 Free Evaluation Licenses

An evaluation license can be used to test special features with full functionality over a fixed time period (called the evaluation period) free of charge. If a regular license for the feature is activated during the evaluation period, the evaluation license will be disabled.

The following evaluation licenses are available:

- **OpenScape Business V1 UC Smart / UC Suite Evaluation** **NEW**
  This evaluation license is intended for customers who want to test the UC features of UC Smart or UC Suite. All UC Smart or UC Suite features can be used with this evaluation license.
  INFO: This evaluation license cannot be used if the communication system is located in an internetwork and the "Networking" license is active. If voicemail licenses are already available, they are used in combination with the new UC evaluation licenses.
- **OpenScape Business V1 UC Suite Contact Center Evaluation** **NEW**
  This evaluation license is intended for customers who want to test the Multimedia Contact Center. All features of the Multimedia Contact Centers can be used with the evaluation license.
  INFO: If the Multimedia Contact Center is not licensed within the evaluation period, the administrator must undo the Contact Center settings (e.g., delete schedules and queues, deactivate agents, etc.) before the evaluation license expires. Otherwise, errors may occur in OpenScape Business.
- **OpenScape Business V1 CRM Evaluation** **NEW**
  This evaluation license is intended for customers who want to test Application Launcher, Open Directory Service and TAPI.
- **OpenScape Business V1 Evaluation**
  This evaluation license is intended for customers who want to test the OpenScape Business Attendant application.
- **OpenScape Business V1 BLF Evaluation**
  This evaluation license is intended for customers who want to test the OpenScape Business BLF application (e.g., to independently display the busy lamp field and presence information).

Rules

- The activation of an evaluation license occurs at the Customer License Server (CLS) and can only be performed once.
- The evaluation period is 90 days. After 60 days, the remaining time in days is counted backwards on the display of system telephones.
- When the evaluation period expires, the feature is automatically disabled.
- Multiple evaluation licenses may be active simultaneously in the system, but may then end at different times.
- If a perpetual license is active, the evaluation license is not started or, if already present, is stopped.

1.5.2.6 Upgrade Licenses

Upgrade licenses are required to upgrade the product or feature to the latest version.

The license migration of HiPath 3000 systems requires a running and possibly licensed HiPath 3000 V9 system. The steps for the hardware and license migration must be carefully observed. Pure HiPath 3000 TDM systems without licenses must be first upgraded to Version 9 and can then be migrated from HiPath 3000 V9 to OpenScape Business.

For license migrations from OpenScape Office V3 LX, a separate upgrade license to OpenScape Business S **NEW** is required.

The following upgrade licenses are available:

- **HiPath 3000 V9 Upgrade to OpenScape Business X3/X5/X8**
  For upgrading from HiPath 3000 V9 to OpenScape Business X3/X5/X8.
- **HiPath 3000 V9 Upgrade to OpenScape Business X3/X5/X8**
  For upgrading from HiPath 3000 V8 to OpenScape Business X3/X5/X8.
- **HiPath 3000 V7 Upgrade to OpenScape Business X3/X5/X8**
  For upgrading from HiPath 3000 V7 to OpenScape Business X3/X5/X8.
- **OpenScape Office V3 LX to OpenScape Office S** **NEW**
  For upgrading from OpenScape Office V3 LX to OpenScape Business V1 S (server)

For migrations of networks with HiPath 5000 RSM, please refer to the notes in section 1.12, "Migration".

1.5.2.7 Returns of HiPath 3000 mainboards with migrations within the context of the market introduction promotion (expires on 12/31/2013)

After returning the original HiPath 3000 mainboard from your client system, you will receive a lifetime free upgrade license for further migrations of:

HiPath 3000 V9 to OpenScape Business V1

The LAC is supplied through a delivery note / e-mail to the specified address and can be activated by authorized users at the CLS. The ownership of the returned HiPath 3000 mainboard transfers to Unify.

INFO: This upgrade license is not posted to the CLS partner account, but can be enabled by specifying the LAC/MAC address for a customer system.

Within the context of the migration, the return form with information about the MAC address of your customer system is automatically generated by Manager E. The MAC address of the submitted mainboard must match this MAC address. No upgrade license will be supplied for other mainboards. If the MAC addresses do not match, the HiPath 3000 mainboard will be sent back with return charges.

Additional information on the promotion can also be found in the Unify Partner Portal under
https://www.unify.com/partnerportal

1.5.2.8 Possible License Combinations

The licenses can be combined as desired. Some suggestions for possible license combinations that will allow you to use the desired functions are listed below.

Please note that multiple licenses are required for some functions.

Example for Telephony

- Required: IP User, TDM User or DeskShare User station license
  INFO: Without a valid license, the phone can only be used for internal connections.

Example for Telephony with UC Smart

- Telephony with voicemail box (UC Smart)
  - Required: IP User, TDM User or DeskShare User station license
  - Required: user-oriented VoiceMail license
- Telephony with Mobility Entry (DISA-based mobility)
  - Required: Mobility User station license
- Telephony with myPortal Smart
  - Required: IP User, TDM User or DeskShare User station license
  - Required: user-oriented UC Smart User license
  - Optional: user-oriented VoiceMail license
- Telephony with myPortal for Mobile/Tablet
  - Required: Mobility User
  - Required: user-oriented UC Smart User license
  - Optional: user-oriented VoiceMail license

- Telephony with OpenScape Business Attendant
  - Required: IP User, TDM User or DeskShare User station license
  - Required: OpenScape Business Attendant system license
  - Optional: user-oriented VoiceMail license
  - Optional: user-oriented UC Smart User license

Examples for Telephony with UC Suite NEW

- Telephony with voicemail box (UC suite)
  - Required: IP User, TDM User or DeskShare User station license
  - Required: user-oriented VoiceMail license
- Telephony with myPortal for Desktop
  - Required: IP User, TDM User or DeskShare User station license
  - Required: user-oriented UC Suite User license
  - Optional: user-oriented VoiceMail license
  - Optional: user-oriented Fax license
  - Optional: user-oriented Conference license
  - Optional: Web Collaboration system license
- Telephony with myPortal for Outlook
  - Required: IP User, TDM User or DeskShare User station license
  - Required: user-oriented Groupware User license
  - Optional: user-oriented VoiceMail license
  - Optional: user-oriented Fax license
  - Optional: user-oriented Conference license
  - Optional: Web Collaboration system license
- Telephony with myPortal for Mobile/Tablet
  - Required: IP Mobility User station license
  - Required: user-oriented UC Suite User or Groupware User license
  - Optional: user-oriented VoiceMail license
- Telephony with myAttendant
  - Required: IP User, TDM User or DeskShare User station license
  - Required: user-oriented myAttendant license
  - Optional: user-oriented VoiceMail license

Using the Contact Center NEW

- Required: IP User, TDM User, DeskShare User or Mobility User station license
- Required: user-oriented myAgent license
- Optional: Contact Center E-Mail system license
- Optional: Contact Center Fax system license
- Optional: myReports system license

Using the Company AutoAttendant

- Required: Company AutoAttendant system license

1.6 Administration Concept

The administration of OpenScape Business is performed using web-based management (OpenScape Business Assistant).The user administration of the web-based management allows you to set up role-based administration. Some specific administration tasks require Manager E.

1.6.1 Introduction to OpenScape Business Assistant

OpenScape Business Assistant is the web-based application for the administration of the system.

Language of the User Interface

You can select one of the following languages at login:

- German
- English
- French
- Italian
- Dutch (The online help is only available in English)
- Portuguese
- Spanish

1.6.2 Prerequisites for OpenScape Business Assistant

In order to use OpenScape Business Assistant, the administration PC must have the appropriate software installed.

Supported Web browsers:

- Microsoft Internet Explorer 10
- Mozilla Firefox 17

In addition, the current version of Java Edition 6 must be installed.

1.7 Maintenance

The system offers several maintenance options. This includes changing the telephony settings, backing up and restoring the configuration data, updating the software with updates and upgrades and restarting/reloading functions. In addition, appropriate functions for status identification, monitoring and maintenance are available. Remote access to the system is possible via different Remote Services.

1.7.1 Smart Service Delivery Platform (SSDP)

SSDP V1 offers you the opportunity to easily and securely manage OpenScape Business, including the OpenScape Business Booster Card, from a distance. All you need is a browser and an Internet connection.

This enables you to support your customers fully and comprehensively from anywhere in the world via the Unify Remote infrastructure. SSDP is a secure remote solution, since only one outbound connection using HTTPS (port 443) is required at the customer's end.

This port is usually already open in the firewalls of customers, so no adaptations (such as opening ports or natting) are required in the IT environment of the customer.

1.8 Security

Security involves protecting the communication system and the stored and transmitted data against unauthorized access. This can be achieved through access protection for the IP network (firewall) and encrypted transmissions (SSL VPN, for example).

Security Checklist

The aspect of secure communications has been taken into account in the default settings of the communication system. During the initial setup, the functions and settings may need to be adapted to the specific situation of the customer, and additional provisions may have to be made in the customer environment. In order to raise the awareness of security risks and to implement suitable measures to counteract them, a security checklist is provided in the product documentation. It is urgently recommended that this checklist be discussed with the customer during the initial setup and that all implemented measures be carefully documented.

The Security Checklist can be found in the Unify Partner Portal under the Portfolio Information.

1.9 Networking OpenScape Business

The communication system enables the networking of OpenScape Business X3/X5/X8, OpenScape Business S, HiPath 4000 and OpenScape Voice. In a homogeneous OpenScape Business network, subscribers can now use features such as the presence status, voicemail, conferencing and much more in exactly the same way as was originally possible with only a single OpenScape Business communication system.

Info: The release of OpenScape Voice networking is planned for a later date.

Possible Networks:

- Pure voice network of OpenScape Business X3/X5/X8
- OpenScape Business X3/X5/X8 network (optionally with UC Suite or UC Smart) and OpenScape Business S (always with UC Suite).
- OpenScape Business X3/X5/X8 with HiPath 4000 (UC functionality in OpenScape Business only under certain conditions)
- OpenScape Business X3/X5/X8 with OpenScape Voice (without UC functionality in OpenScape Business)
- Networking with certified third-party applications and external systems via SIP trunks.

Supplemented with a comprehensive set of features in the area of voice networking, medium-size companies now have access to a solution that offers a rich portfolio of features.

Configuring an IP network is a complex task and should only be performed by experienced service technicians.

INFO: For all UC Suite-based networking scenarios described here, closed numbering is required. This means that the dial plan of the internal station numbers must be unique.

In a UC Suite-based internetwork without unified communications, both closed and open numbering can be used.

Consequently, closed numbering should always be selected for any newly created network (with UC functionality) to allow for future expansion requests by the customer.

A network of OpenScape Business with the following systems is not supported:

- HiPath 3000
- HiPath 5000 RSM
- OpenScape Office MX
- OpenScape Office LX

The migration from HiPath 3000 to OpenScape Business is described in section 1.12, "Migration".

1.9.1 Networking Requirements

To ensure the quality of the voice transmission, the IP networks being used and the communication system must meet certain requirements. The voice quality and voice communication reliability always depend on the network technology in use.

1.9.1.1 Network Parameters, LAN and WAN Requirements

Parameters	Minimum requirement	Notes
Delay (one way)	50 ms	Higher values degrade the voice quality
Roundtrip delay	100 ms	Higher values degrade the voice quality
Jitter	20 ms	Higher values degrade the voice quality
Packet Loss	3 %	For fax or modem transmissions using G.711, the packet loss should not exceed 0.05% (in the event that no T.38 is possible)
Consecutive Packet Loss	3 with G.711	Higher values degrade the voice quality

1.9.1.2 Recommendation for Calculating Bandwidth

- A bandwidth of at least 256 kbps (in both the sending and receiving direction) is required on the internetwork.
- The bandwidth calculation should be based on a maximum of 50% for the voice portion with respect to the total bandwidth. In other words, in the case of a 1 Mbit WAN, for example, a maximum of 500 kbps should be calculated for voice. With the G.711 codec, for example, that would be a maximum of 5 IP trunks.
- Regardless thereof, the network properties with respect to QoS, delay, packet loss, etc., must also be taken into account.

1.9.1.3 Requirements for the LAN

To ensure the quality of the voice and data transmissions, the IP networks being used and the communication system must meet certain requirements for the LAN.

LAN Requirements

- The data network must be of the Ethernet type.
- The recommended cable is at least a Cat.5 cable (screened/unscreened multi-element cables characterized for 100 MHz and higher for horizontal and building backbone cables as per EN 50288).
- Support for QoS: IEEE. 802.1p, DiffServ (RFC 2474).
- All active LAN ports must support 100 / 1000 MBit/sec. and full duplex communications.

1.9.1.4 Requirements for the WAN

To ensure the quality of the voice and data transmission, the IP networks being used and the communication system must meet certain requirements for the WAN.

WAN Requirements

- The internal IP networks (LANs) must each be connected to the Internet via a WAN port with a fixed IP address.
- The bandwidth required for the calls must always be available for both uploads and downloads.
- The number of simultaneous WAN-based IP phone connections is limited by the bandwidth and the audio codecs used.
- No modem is integrated at the WAN port of the OpenScape Business, so an external modem may be required (e.g., a DSL modem or cable modem).
- Voice quality restrictions can occur at ports that are not QoS-compliant (generally, ADSL ports).
- An external router must provide QoS features and bandwidth control mechanisms to ensure the voice quality

1.9.2 Networking Scenarios

There are essentially six scenarios for setting up a new internetwork and three scenarios for upgrading an existing internetwork.

- Networking Multiple OpenScape Business X3/X5/X8 Systems
- Networking OpenScape Business and OpenScape Business S (Single Gateway) **NEW**

- Networking OpenScape Business and OpenScape Business S (Multi -Gateway) **NEW**
- Networking OpenScape Business and HiPath 4000
- Networking OpenScape Business and OpenScape Voice
- Networking OpenScape Business with other communication systems

Call charge details can only be retrieved per network node, but not across nodes.

INFO: It is not possible to use an ITSP across nodes. This means that the SIP trunks of a node can only be used by the local stations of that node.

1.9.2.1 General Information

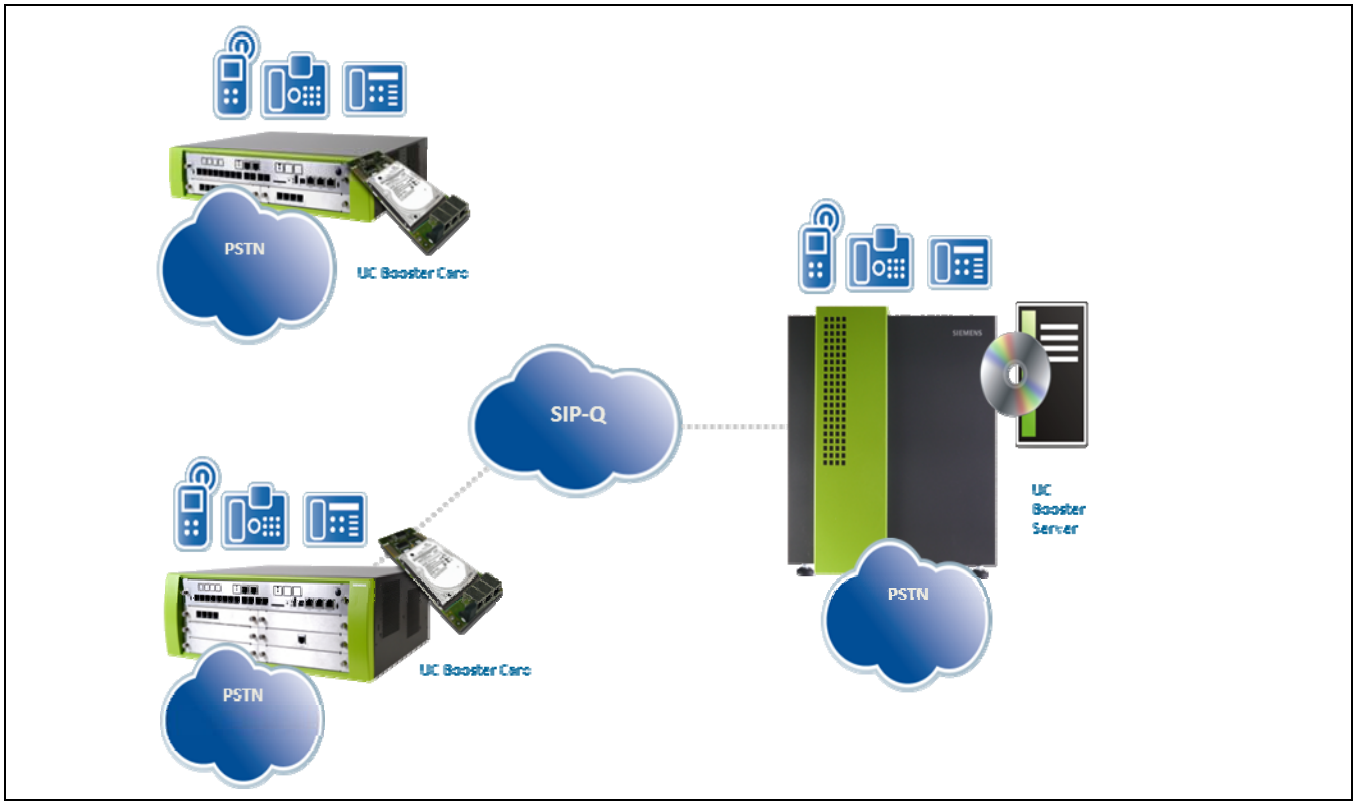
This section provides information on general requirements and helpful tips regarding the possible networking scenarios.

Restrictions and Dependencies

- For information on how to upgrade an existing HiPath 3000 (including HiPath 5000 RSM), please refer to the Migration topic.
- For all types of networking, the servers and clients must be in the same time zone.
- OpenScape Business S multi-gateway networks have only been released within a country (same time zone, same CO access code).
- As a general rule, all OpenScape Business internetworks are configured using wizards. OpenScape Voice and HiPath 4000 in the internetwork are configured per node in Expert mode.
- The Presence Manager (DSS server functionality = network-wide display of busy states at DSS keys + call pickup) is available in OpenScape Business networks.
- SIP-Q trunks with route 16 (last route) are used to configure homogeneous OpenScape Business systems via the Networking wizard. External SIP trunks (SIP interconnections) are used for networking HiPath 4000, OpenScape Voice or other communication systems; configuration is performed in Expert mode.
- Notes on the used Company AutoAttendants (UC Smart):
  - The functionality of Company Attendants (UC Smart) and of the voicemail box are node-specific. In each node, only ONE voicemail system can be used. As a general rule, different voicemail systems are allowed in an OpenScape Business internetwork.
  - If the UC Suite is used as the voicemail system, any other voicemail systems present in the internetwork must be disabled by the administrator.
  - A HiPath 3000 internetwork with different voicemail systems can be migrated 1:1 to OpenScape Business.

1.9.2.2 Scenario 1: Networking Multiple OpenScape Business X3/X5/X8 Systems

Up to 32 OpenScape Business communication systems can be networked with each other.

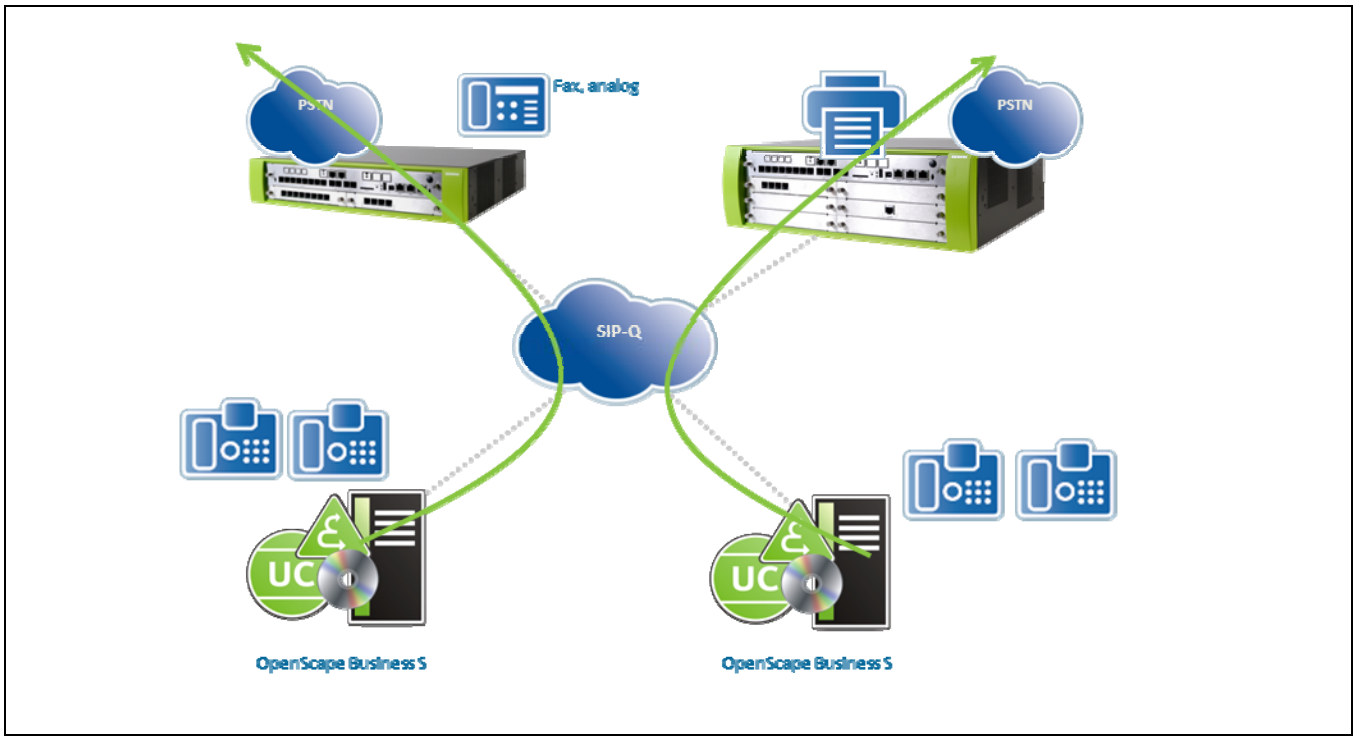


Network Data

- Closed numbering when using the UC Suite
- Closed or open numbering when using UC Smart
- Network-wide voice and UC functionality with UC Suite (except UC Contact Center)
- Network-wide voice functionality and local UC functionality with UC Smart
- Configuration via WBM (wizards) when using closed numbering
- UC Suite functionality based on UC Booster Server or UC Booster Card
- Up to 32 networked systems, 1000 users with UC Smart (UC Smart functions are available network-wide) (> 32/1000 on project-specific basis)
- Up to 8 networked systems, 1000 users with UC Suite (> 8/1000 on project-specific basis)

1.9.2.3 Scenario 2: Networking Multiple OpenScape Business X3/X5/X8 with one OpenScape Business S (Single Gateway) ***NEW***

Up to 32 OpenScape Business X3/X5/X8/S communication systems can be networked with one another. Multiple OpenScape Business S systems are allowed in an internetwork. Single Gateway means that all IP stations registered at OpenScape Business S only use ONE gateway to the PSTN.

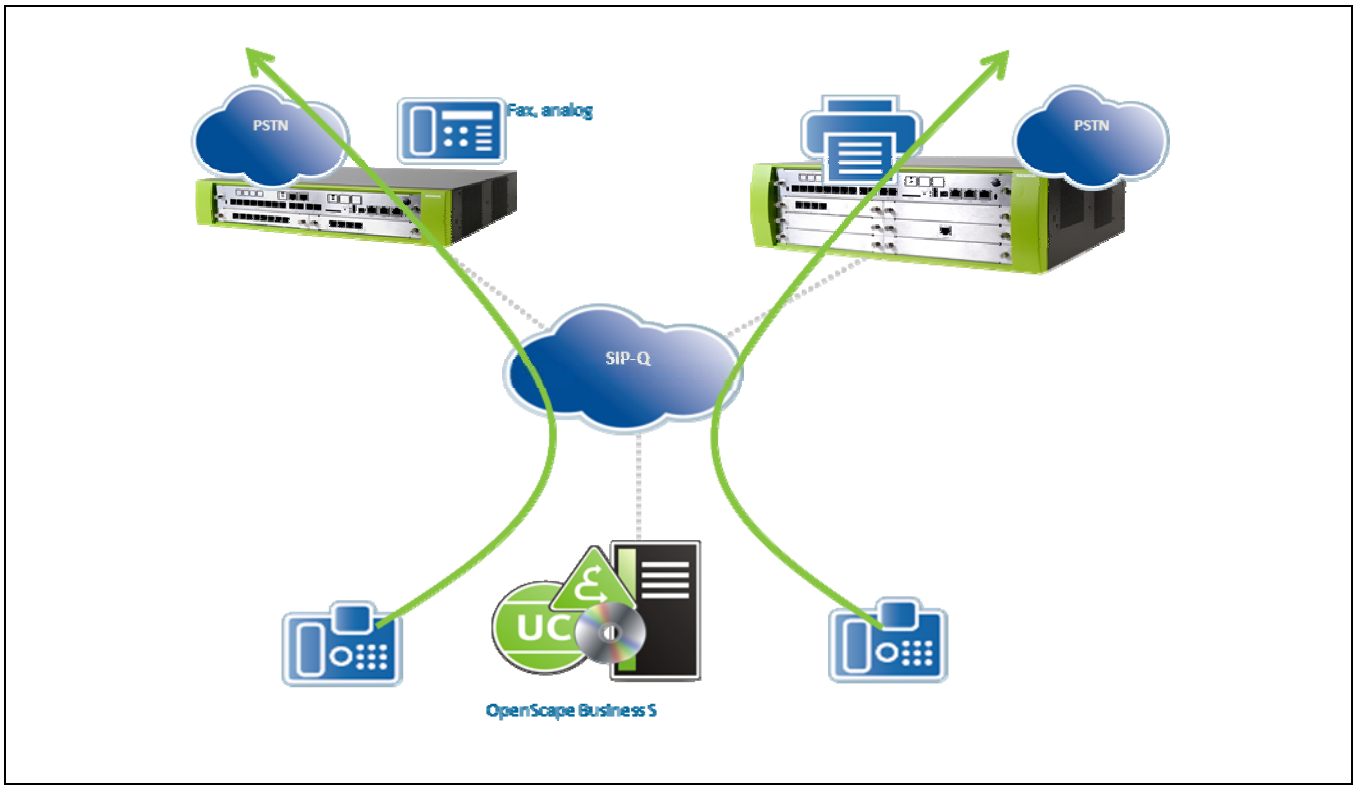


Network Data

- Closed numbering
- Network-wide voice and UC functionality with UC Suite configuration via WBM (wizards)
- The UC functionality is implemented either through the UC Booster Server or via the UC Booster Card
- The UC functionality of OpenScape Business S is integrated
- Several OpenScape Business S in one internetwork are allowed.
- Up to 32 networked systems, 1000 users with UC Smart (UC Smart functions are available network-wide) (> 32/1000 on project-specific basis)
- Up to 8 networked systems, 1000 users with UC Suite (> 8/1000 on project-specific basis)

1.9.2.4 Scenario 3: Networking OpenScape Business X3/X5/X8 and OpenScape Business S (Multi-Gateway) ***NEW***

Up to 32 OpenScape Business X3,X5,X8,S communication systems can be networked with one another. Multi-gateway means that every IP station registered at OpenScape Business S is assigned to exactly one specific gateway.



Network Data

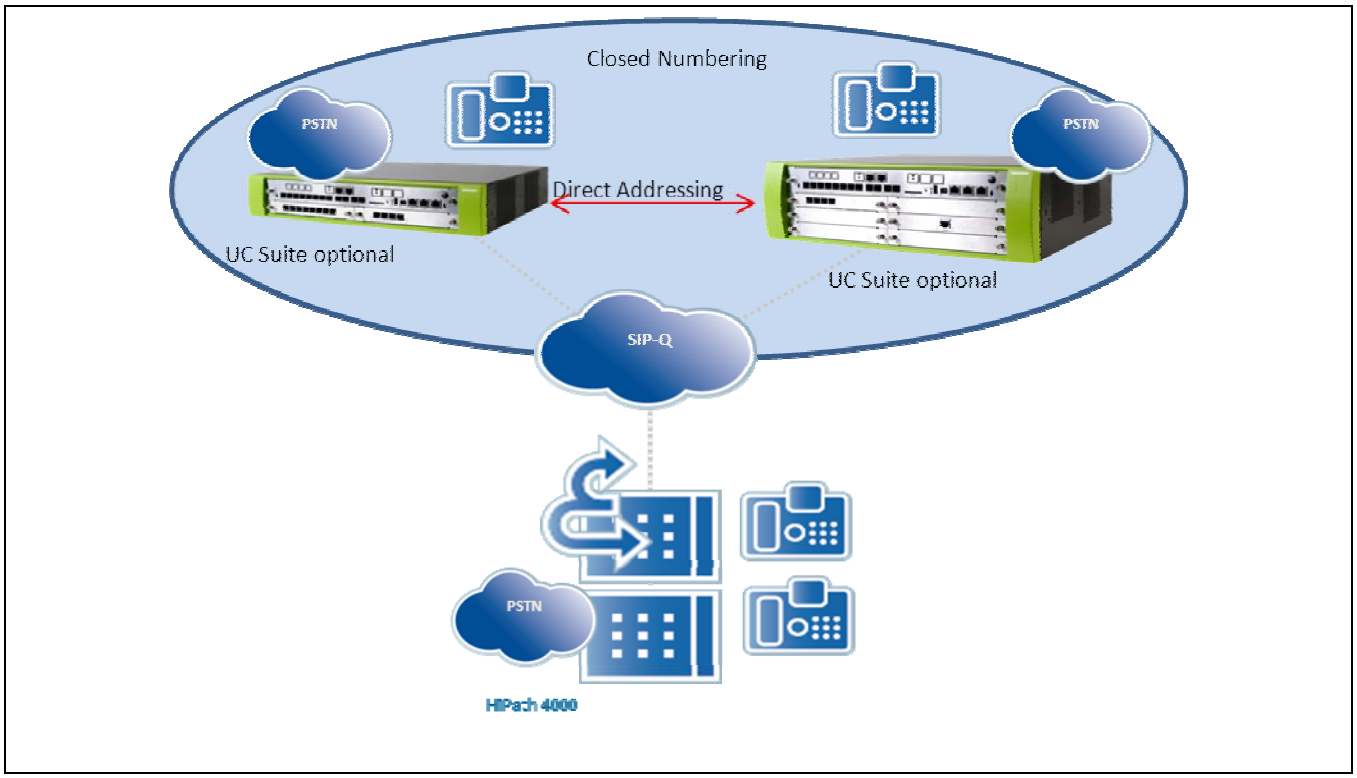
- Closed numbering
- Network-wide voice and UC functionality with UC Suite configuration via WBM (wizards)
- The UC functionality is implemented either through the UC Booster Server or via the UC Booster Card
- The UC functionality of OpenScape Business S is integrated
- Only one OpenScape Business S in the internetwork is allowed.
- All systems must have the same country code
- All systems must be located in the same time zone
- Only a single CO access code (e.g., 0) must exist in the entire network.
- Up to 32 networked systems, 1000 users with UC Smart (UC Smart functions are available network-wide) (> 32/1000 on project-specific basis)
- Up to 8 networked systems, 1000 users with UC Suite (> 8/1000 on project-specific basis)

1.9.2.5 Scenario 4: Networking OpenScape Business V1 and HiPath 4000

An internetwork of OpenScape Business X3/X5/X8 with HiPath 4000 can take different forms. On the one hand, it can be implemented using direct addressing between the OpenScape Business nodes (as in example 4a), and on the other hand, all connections could be routed via HiPath 4000 (as in example 4b).

For details about the release, please refer to the notes in section 1.3.13, "Certified Products and Applications".

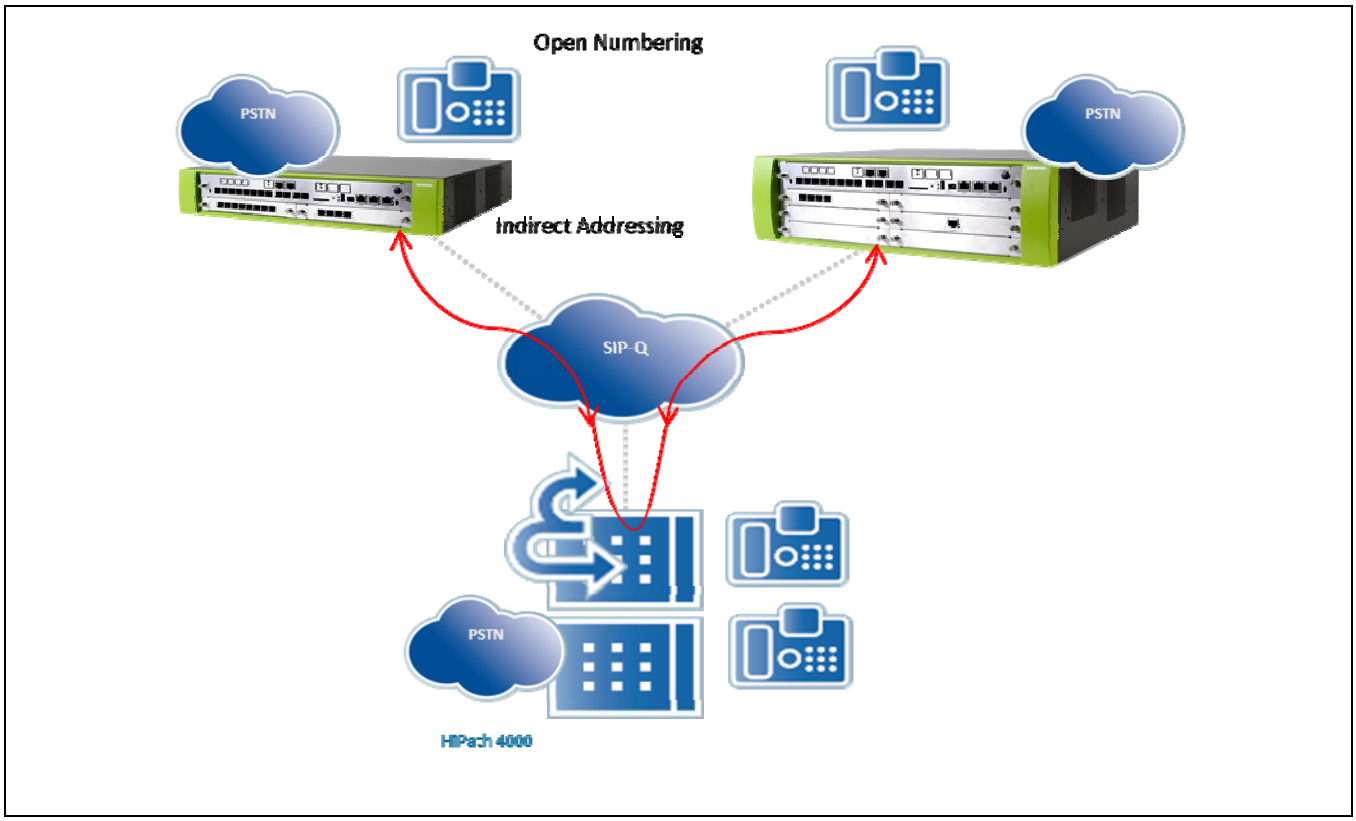
Scenario 4a: Internetwork with HiPath 4000 and Direct Addressing Between the OpenScape Business Nodes



Network Data

- Closed numbering within the OpenScape Business internetwork
- Network-wide voice and UC functionality within the OpenScape Business network (UC Suite); configuration via the Networking wizard for the OpenScape Business network
- Configuring the HiPath 4000 network components in Expert mode
- The Small Remote Site (SRS) concept is not supported
- The UC functionality is optional; it is implemented either through the UC Booster Server or the UC Booster Card.
- OpenScape Business S can be integrated in single or multi-gateway mode.

Scenario 4b: Internetwork with HiPath 4000 (all Connections Routed via the HiPath 4000)



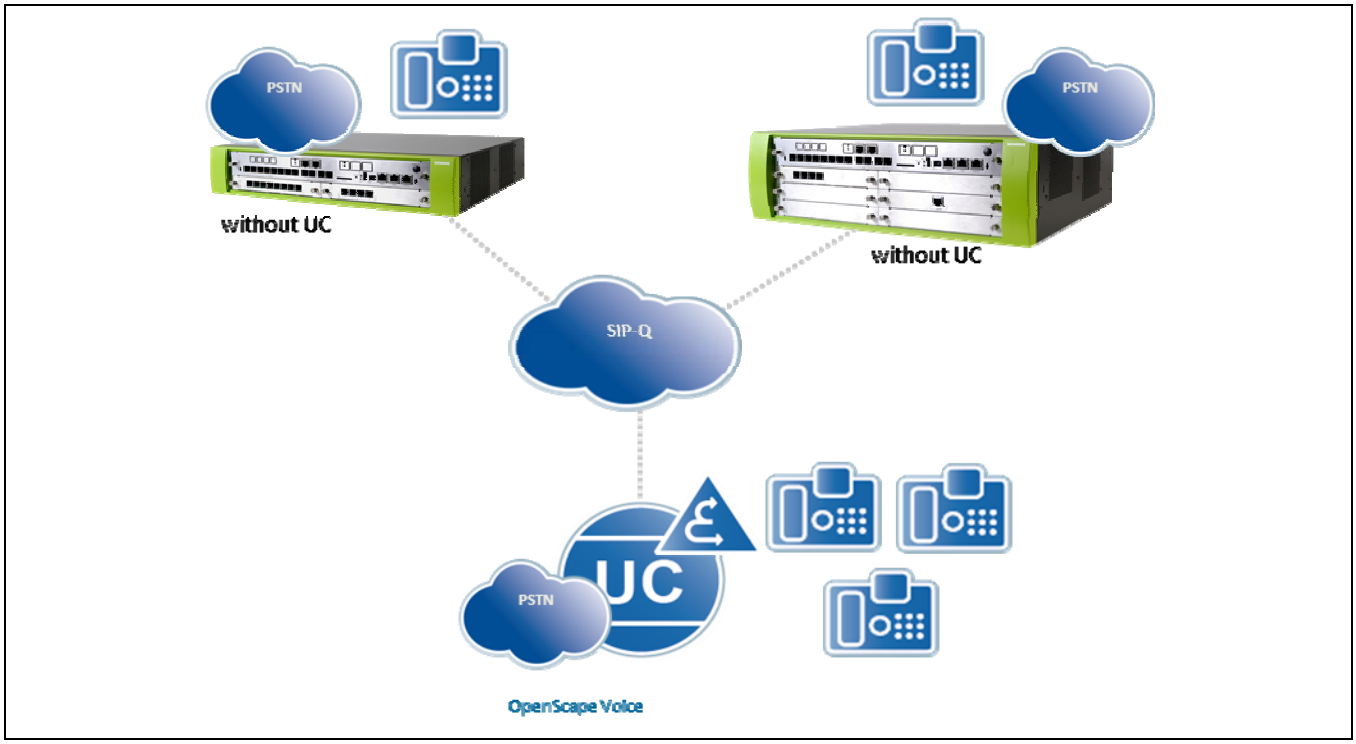
Network Data

- Open numbering
- Network-wide voice functionality
- Every call to another node is routed via HiPath 4000
- No UC Suite in OpenScape Business because the internetwork uses open numbering
- The Small Remote Site (SRS) concept is not supported
- The configuration must be done in Expert mode for each node
- OpenScape Business S is not allowed in networks with HiPath 4000 that use open numbering since the UC Suite is always integrated in OpenScape Business S.

1.9.2.6 Scenario 5: Networking OpenScape Business V1 and OpenScape Voice

OpenScape Business can be networked with OpenScape Voice.

For details about the release, please refer to the notes in section 1.3.13, "Certified Products and Applications".



Network Data

- OpenScape Business provides network-wide voice and gateway functionality for OpenScape.
- UC is generally not supported by OpenScape Business in this networking scenario.
- Each call from one node to another is routed through OpenScape Voice.
- The Expert mode is used for configuring each of the nodes.
- The OpenScape Voice dial plan is based on E.164, which explains why neither open nor closed numbering is available.

Supported Scenarios

- One or more OpenScape Business systems as a gateway for digital Central Offices (ISDN, T1, CAS)
- The connection of OpenScape Business gateways with analog CO trunks is only released for Brazil (due to the support for line reversal and backward release of analog CO trunks in Brazilian COs).

The following devices can be operated at OpenScape Business gateways:

- Analog and digital devices
- DECT devices
- IP devices with the HFA protocol

Supported Features

The supported features are described in the Administration manual.

Restrictions to be observed:

- The connection of analog CO trunks at the OpenScape Business gateway is not released (except for Brazil; see the related statement under "Supported Scenarios")
- A network of OpenScape Business gateways with one another or with systems other than OpenScape Voice is not supported. The networking of the OpenScape Business gateways with OpenScape Voice must occur through a star-shaped network structure.

- Path replacement (route optimization) via SIP-Q V2 is not supported for the devices connected to an OpenScape Business gateway.
- To avoid poor voice quality on transit line connections, it is recommended to use the G.711 voice codec. The use of the G.729 codec is not recommended because transit line connections can be caused by features such as conferencing and call forwarding (since path replacement (route optimization) is not supported).
- No cross-system support between OpenScape Voice and OpenScape Business gateways is available for features such as call pickup groups, group calls and hunt groups. The groups may include only subscribers of either OpenScape Voice or OpenScape Business, but not both.
- Encryption (SPE) between OpenScape Voice and OpenScape Business gateways is supported. The connection between OpenScape Voice and OpenScape Business must be made by means of the TLS encryption protocol.
- Networking is supported only with the E.164 numbering plan.

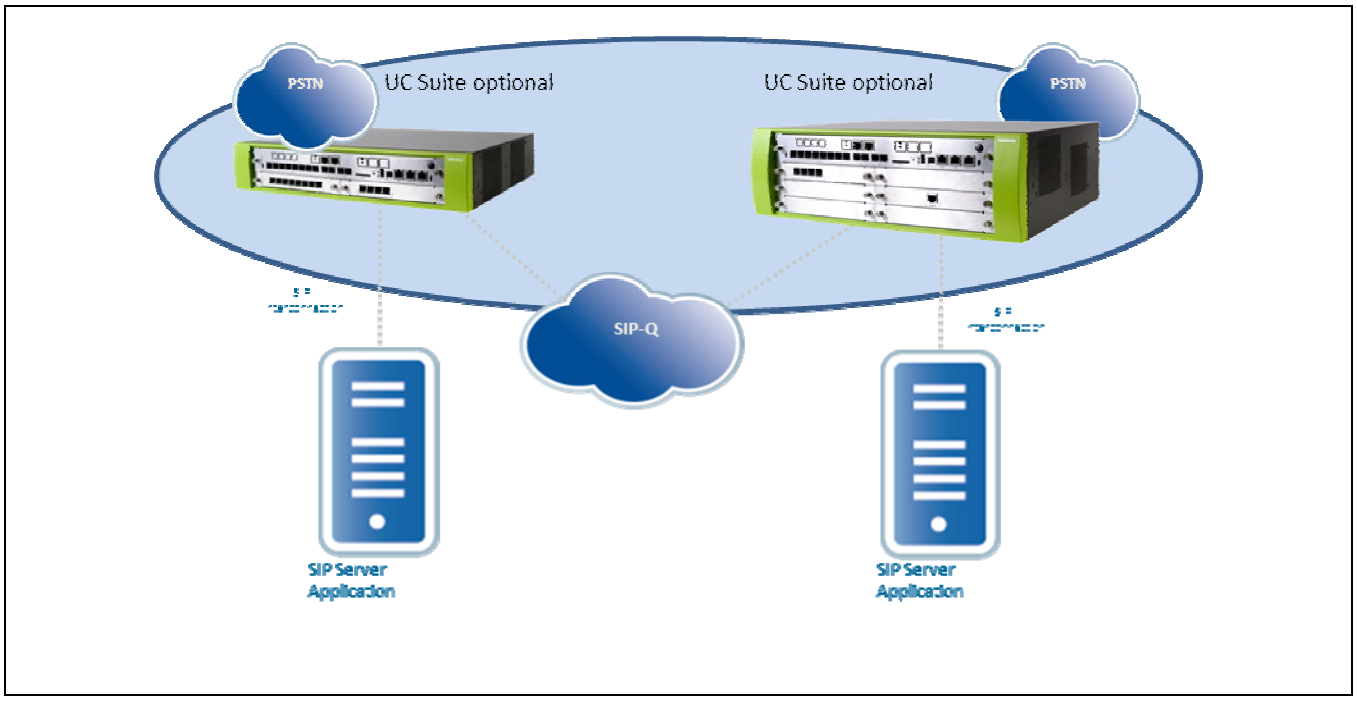
Additional information for IP devices (HFA) connected to the OpenScape Business gateway:

The need for the following additional DSP resources should be reviewed and taken into consideration:

- For each active H3K / OSV connection, two B channels per HFA device are required (one B channel per TDM device)

1.9.2.7 Scenario 6: Connecting External Auxiliary Equipment to OpenScape Business via SIP Interconnection

External auxiliary equipment can be connected to OpenScape Business via a SIP Interconnection, e.g., to use applications such as OpenScape Alarm Server, HiPath 4000, OpenScape Voice or other certified SIP servers.

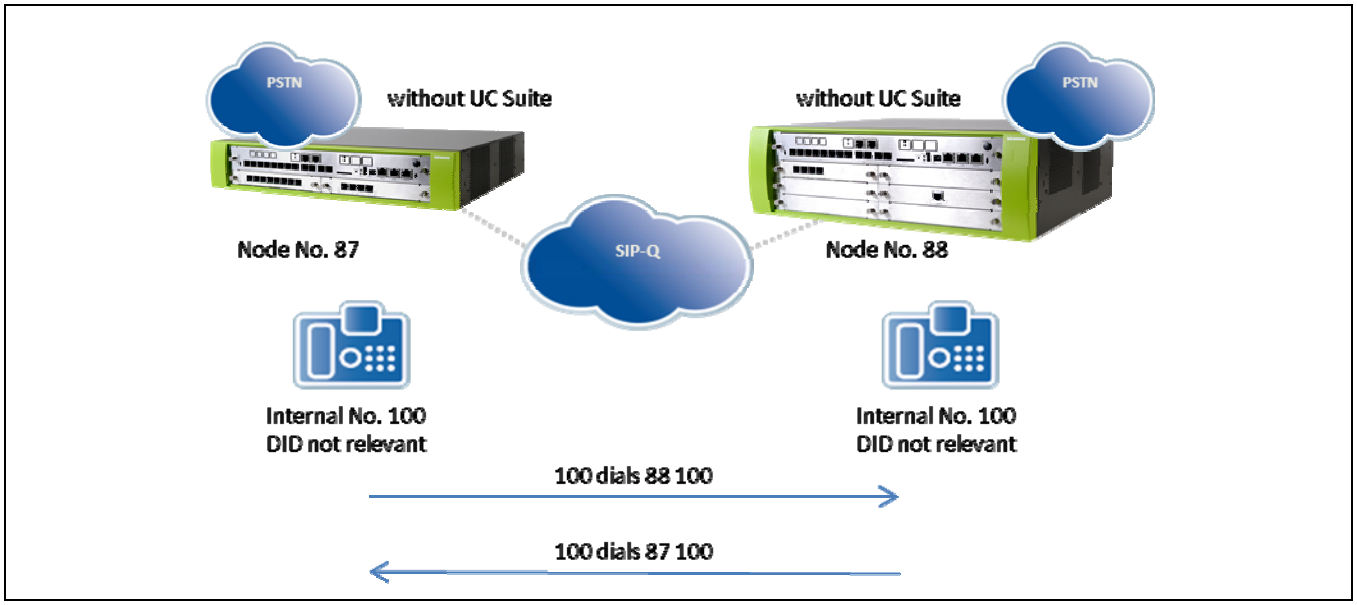


Prerequisites

- Only certified applications may be connected, for example, OScAR-Eco.
- The external SIP server can be connected via SIP or the SIP-Q protocol.
- A maximum of two routes are available for SIP interconnection. One of them is required for the UC Suite, if available.

1.9.2.8 Scenario 7: Open Numbering in OpenScape Business X3/X5/X8 Networks

A internetwork with open numbering can be set up by networking two (or more) communication systems whose numbering schemes overlap one another (i.e., not unique throughout the internetwork).



Network Data

- Network-wide voice networking via OpenScape Business
- UC Suite is not supported.
- Every call within a node occurs with an internal call number
- Every call to another node occurs with a node number (plus an internal number)
- Each node must be configured in Expert mode. The Networking wizard is disabled once a node number for open numbering has been configured.
- Local access to PSTN and ITSP from each node
- No OpenScape Business S is allowed, since the integrated UC Suite does not work together with open numbering

1.9.2.9 Networking via ISDN

OpenScape Business systems can be networked with one another as well as with HiPath 4000 systems via digital trunks. Both S_0 as well as S_{2M} lines can be used for the connection.

Networking with telecommunication systems from other manufacturers is possible with the multi-vendor protocol QSIG. The following must be noted when connecting external systems with the QSIG protocol:

- Check the QSIG variants of the systems involved for compatibility (QSIG V1, also called QSIG as per the ECMA Standard, and QSIG V2, also called QSIG as per the ISO Standard)
- Compare the feature sets of the relevant systems. This should help to determine to what extent the theoretically expected scope of functionality, i.e., the intersection of both feature sets, corresponds to the customer's wishes.
- Furthermore, to guarantee the expected functionality, an on-site test of the connection is recommended. In particular, interworking with other networking and PBX protocols must be taken into account.

1.10 Project-specific Releases

- Networked systems with more than 8 nodes or more than 1,000 stations (when using UC Suite - NEW)
- Networked systems with more than 32 nodes or more than 1,000 stations (without UC Suite)
- Contact Center in terminal server environments (agents on terminal server)
- Activation of Signaling and Payload Encryption (SPE) for secure calls between OpenStage telephones.

INFO: Remote access (SSDP) must be configured for project-specific releases.

1.11 Positioning within the Unify Product Portfolio

OpenScape Business combines the best features from the established HiPath 3000 and OpenScape Office world in a single software solution architecture based on modern and innovative communication technologies.

OpenScape Business provides UC solutions for companies and customers that typically operate in an environment with up to 350 stations. The maximum number of stations in a standalone scenario is 500, and the maximum number in networks of multiple sites is up to 1,000 stations.

Companies and clients with typical requirements exceeding 350 stations should be addressed with the OpenScape Enterprise UC solutions for the mid-market.

1.12 Migration

This section describes the technical migration of HiPath 3000 V9 standalone systems and HiPath 3000 V9 internetworks to OpenScape Business V1.

The following communication systems and internetworks can be migrated:

- HiPath 3000 V9 standalone system
- HiPath 3000 V9 Standalone System with OpenScape Office HX NEW
- HiPath 3000 V9 Internetwork
- HiPath 3000 V9 internetwork with HiPath 5000 RSM
- HiPath 3000 V9 Internetwork with OpenScape Office LX NEW

1.12.1 HiPath 3000

It is also possible to migrate from HiPath 3000 V7 and HiPath 3000 V8 to OpenScape Business V1. In such cases, an upgrade to HiPath 3000 V9 must be performed before migrating to OpenScape Business V1.

INFO: Before a HiPath 3000 V9 system can be migrated to OpenScape Business, the HiPath 3000 V9 system, including all connected devices, must be fully operational. Only then can a proper upgrade to OpenScape Business be performed.

If an OpenScape Office HX NEW is additionally connected to the HiPath 3000 V9 communication system, this can be upgraded to an external UC Booster Server or to a UC Booster Card integrated in the OpenScape Business V1 communication system. The choice depends on how many UC users are required.

The upgrading of a HiPath 3000 V9 communication system occurs by replacing the mainboard, converting the CDB and subsequently migrating the license.

INFO: All of the steps listed below to install the new hardware are described in detail in the Hardware Installation chapter of the Service Documentation.

The following points must be considered before a HiPath 3000 V9 migration:

- **Hardware compatibility check**
  Please verify whether the existing hardware can still be used. Discontinued components or devices which are no longer supported must be removed and replaced by their respective successors if required.
- **Power supply**
  When migrating a HiPath 33xx/35xx to OpenScape Business X3/X5, the original power supply unit (PSU) which may still be in use must be replaced by a newer UPSC-D/-DR power supply.
  Since an OpenScape Business mainboard requires more power than a HiPath 3000 mainboard, the power requirements for HiPath 3000 systems without an HG1500 must be determined before migrating (see the Appendix "Power Requirements of a Communication System" in the Service Documentation), and the OpenScape Business Powerbox should be deployed if required.
- **Function compatibility check**
  Please inform yourself about which features are longer supported or have changed as compared to HiPath 3000 V9.
- **License migration**
  Please note the information on the license migration so that all existing features can be correctly identified and transferred to the new system.
- **Protective Grounding**
  Protective grounding via an additional ground wire is mandatory for all OpenScape Business communication systems!
- **EVM module**
  The EVM module is no longer needed. The functionality is integrated on the new mainboard in the form of UC Smart (voicemails, announcements, AutoAttendant). The voice messages and announcements of the EVM module cannot be migrated.
- **HG1500 / DSP channels**
  The HG1500 board is no longer required. The functionality is integrated on the new mainboard. Please determine the number of DSP channels required. DSP channels are required to implement network transitions from TDM telephony to VoIP. With HiPath 3000, the DSP channels were provided by the HG1500 and its PDM modules. OpenScape Business has eight integrated DSP channels on the mainboard. For additional DSP channels, the DSP module OCCB1 (up to 40 channels) or OCCB40 (up to 100 channels) can be used.
  For more detailed information on DSP and T.38 resources, refer to chapter on *Configuration Limits and Capacities in the Administrator Documentation*.
- **Dial plan in the internetwork**
  In a pure voice network, open and closed numbering are possible. When using the UC Suite, closed numbering is required in the internetwork (network-wide UC functionality). When using UC Smart, open and closed numbering are possible (node-wide UC functionality).

1.12.2 HiPath 3000 with OpenScape Office HX NEW

The migration of OpenScape Office V3 HX to OpenScape Business Booster Server is supported as follows:

- **License migration**
  OpenScape Office HX licenses are part of the HiPath 3000 license file. Please note the information on the license migration so that all existing OpenScape Office features can be correctly identified and transferred to the new system.

– **Installation**
  A new installation of the Linux software (SLES 11 SP2 64 bit on server or virtualized) as well as the OpenScape Business software, incl. the OpenScape Office customer configuration, is required. Customer data of the OpenScape Office application, such as saved voicemails, for example, cannot be transferred.

Any connected HiPath 3000 systems must also be migrated.

1.12.3 Upgrading from Booster Card to Booster Server

All licenses and the UC Suite customer data are taken over. However, when downgrading from the Booster Server to the Booster Card, no UC Suite customer data is taken over.

1.12.4 OpenScape Office LX NEW

The migration of the OpenScape Office V3 LX to OpenScape Business S is supported as follows:

- **License migration**
  Please note the information on the license migration so that all existing features can be correctly identified and transferred to the new system.

– **Installation**
  A new installation of the Linux software (SLES 11 SP2 64 bit on server or virtualized) as well as the OpenScape Business software, incl. the customer configuration, is required. The transfer of some mass data, e.g., phone numbers with names, is supported via a CSV import. Customer data such as saved voicemails cannot be taken over.

Any connected HiPath 3000 systems must also be migrated.

1.12.5 License Migration

The license migration is required to upgrade from HiPath 3000 V9 to OpenScape Business V1. Any OpenScape Office HX and OpenScape Office LX V3 systems connected to HiPath 3000 V9 can also be migrated.

1.12.5.1 Prerequisites for License Migration

The following preconditions must be satisfied for a successful license migration:

– An upgrade license to upgrade from HiPath 3000 to OpenScape Business V1 has been ordered and procured; this also includes the migration of an OpenScape Office HX, if available.

– For the license migration of OpenScape Office LX V3, a separate upgrade license to OpenScape Business S NEW and the OpenScape Business S/Booster Server software on DVD (SLES 11 SP2 64 bit) NEW, incl. three years of free SLES upgrades, has been ordered.

– In order to migrate from HiPath 3000 V7 or HiPath 3000 V8 to OpenScape Business V1, it is necessary to first upgrade to a running HiPath 3000 V9 system with all terminal devices connected to ensure that all TDM stations are transferred correctly.

– The LAC for the upgrade license, which is required to retrieve the new license from the license server, is available.

Info: Migrations of OpenScape Office MX gateways are currently not supported.

1.12.5.2 Upgrade License for HiPath 3000/OpenScape Office HX NEW

Using the upgrade license, the following licenses can be transferred from the existing HiPath 3000 license file to OpenScape Business:

– IP stations (ComScendo)

– S2M channels

– Mobility Entry (for the DISA-based mobility function)

– Xpressions Compact Announcements, Conferencing, Mobility

The following applies to the OpenScape Office HX connections:

– Per OpenScape Office Standard User: 1x myPortal for Desktop, 1x Voicemail; 1x Fax
  Valid for standard user licenses in the HX base licenses 5/10 and individual licenses

– Per system: 1x Company AutoAttendant, 1x Web Collaboration

– For the following other OpenScape Office HX licenses, the corresponding number of OpenScape Business licenses are generated: myPortal for Outlook, myAttendant, Application Launcher, Gate View cameras, OpenDirectory Connector, myAgent, Contact Center Fax, Contact Center E-mail, myReports
  INFO: Station licenses and user-oriented licenses are permanently assigned to subscribers. Please ensure that an adequate number of licenses are available for myAgent and myAttendant users.

– In the case of an OpenScape Office HX Voicemail license (voicemail functionality for all users), 500x OpenScape Business Voicemail licenses are generated

1.12.5.3 License Migration of TDM Stations (only HiPath 3000)

In OpenScape Business, subscriber licenses of type "TDM User' are required for all TDM stations (UP0, a/b, S0, DECT). **No new licenses need to be purchased for existing TDM stations.**

During the CDB conversion, the number of active TDM stations in the HiPath 3000 system is determined automatically. The required TDM User licenses are then automatically added to the new OpenScape Business license file that is generated during the upgrade at the Unify Central License Server

The number of TDM user licenses is determined as follows:

- 1x TDM User license per active UP0 port - Phone ready, call number available
- 1x TDM User license per registered DECT phone - Call number available
- 1x TDM User license for each active a/b port (call number) for inserted boards
- 1x TDM User license for each active S0 port (call number) for active boards

The CDB conversion can only be performed **once**. The steps for the technical migration must hence be followed precisely. A description of how to perform the migration can be found in the *Administrator Documentation under Licensing*.

1.12.5.4 Upgrade License for OpenScape Office LX ***NEW***

Using the upgrade license, the following licenses can be transferred from the existing OpenScape Office LX license file to OpenScape Business:

- OpenScape Office V3 LX Base 5/10/20 Comfort Plus User
  1x OpenScape Business Base, 5/10/20x IP User, 5/10/20x Mobility User (max 200 per system), 5/10/20x myPortal for Desktop, 5/10/20x Voicemail, 5/10/20x Fax, 5/10/20x Conference
- Per system: 1x Company AutoAttendant, 1x Web Collaboration
- Per OpenScape Office Comfort User: 1x IP User, 1x myPortal for Desktop, 1x Voicemail
- Per OpenScape Office Comfort Plus User: 1x IP user, 1x Mobility User (max. 200 per system), 1x myPortal for Desktop, 1x Voicemail, 1x Fax, 1x Conference
- For the following other OpenScape Office LX licenses, the corresponding number of OpenScape Business licenses are generated: myPortal for Outlook, myAttendant, Application Launcher, Gate View cameras, OpenDirectory Connector, myAgent, Contact Center Fax, Contact Center E-mail, myReports
  INFO: Station licenses and user-oriented licenses are permanently assigned to subscribers. Please ensure that an adequate number of licenses are available for myAgent and myAttendant users.

1.12.5.5 Products and Features without License Migration

HiPath 3000 / OpenScape Office LX products and features that cannot be migrated to OpenScape Business

No migration is performed for the following products and features:

- OpenStage Gate View on the Plug PC can continue to be operated with OpenScape Business.
- HG1500 B-channels are dropped, since they are integrated on the new mainboard.
- optiClient Attendant V8: does not run on OpenScape Business.
- optiClient BLF V1/V2: does not run on OpenScape Business.
- HiPath TAPI 120/170 V2: does not run on OpenScape Business.
- The Entry VoiceMail module is dropped, since it is integrated on the new mainboard
- Entry Web Services Communication Clients of the Plug PC
- HiPath 3000 BS4: licenses for base stations are no longer required.

In order to migrate networks, networking licenses must be additionally ordered per node. For Internet telephony, additional trunk licenses are required.

1.12.5.6 Additional Notes

Please also note the following information:

- In OpenScape Business systems, all user-oriented licenses are permanently assigned to call numbers and are thus bound to a user.

1.12.5.7 Licensing Procedure for Migration of an Internetwork

An existing HiPath 3000/5000 internetwork with a shared network license file must be split into standalone systems with individual license files at the CLS. After this, each node is upgraded and licensed as a standalone system. If necessary, the OpenScape Business systems can then be recombined into an internetwork with a single network license file at the CLS.

OpenScape Office LX with HiPath 3000 gateways are upgraded and licensed as stand-alone systems. If necessary, the OpenScape Business systems can then be recombined into an internetwork with a single network license file at the CLS.

1.12.5.8 SLES 11 Subscription (Linux Software for OpenScape Business Server/S) ***NEW***

For migrations from OpenScape Office V3 LX/HX, an SLES subscription can be set up with OpenScape Business Server/S. The required Novell registration key is provided as a LAC on purchasing the OpenScape Business Server/S DVD.
INFO: The registration key used for the OpenScape Office V3 LX/HX (hosting via the Unify server) is no longer required.

1.12.6 Changed/Enhanced Features and Interfaces

Some HiPath 3000 features and interfaces have been adapted for OpenScape Business and enhanced in functionality.

Enhanced SIP Functionality

The following SIP features have been additionally implemented as compared to HiPath 3000 V9:

- Call completed elsewhere
- Message Waiting Indication for Voicemail
- Calling Name Presentation (CNIP)
- Distinctive Ringing (internal/external calls)
- 3rd Party Call Control
- Call Forwarding busy/no reply/unconditional (handset controlled)

Extension of SIP Trunking

To connect external SIP servers (e.g., OpenScape Alarm Server, HiPath 4000, OpenScape Voice or UC Suite) two SIP routes are available in OpenScape Business (as opposed to only one SIP route in HiPath 3000). Thus, in addition to the classical routes for the CO, networking and ITSP, two independent SIP trunk interfaces (called the SIP Interconnection) are provided for certified SIP applications.

See also the *Administrator Documentation, Networking.*

VoIP over PPP via ISDN

Routed voice calls over lines with low bandwidth are no longer supported.

G. 723 support

G.723 codecs are no longer supported.

Babyphone

The Babyphone (room monitoring) feature is no longer supported

Number of Base Stations and DECT Telephones at OpenScape Business X3

The number of base stations at OpenScape Business X3 was increased from 3 to 7 as compared to HiPath 33xx. The number of DECT telephones at OpenScape Business X3 was increased from 16 to 32 as compared to HiPath 33xx.

SSDP based on the Plug PC

SSDP is integrated in OpenScape Business. The Plug PC is no longer required.

Accounting Interface

The interfaces of the accounting data have changed compared to HiPath 3000.

V24 applications

V24 applications are no longer supported.

Other External Applications

Please observe the notes listed in the Release Notice for externally connected applications.

HiPath 5000 RSM

HiPath 5000 RSM is no longer supported. The functionality of HiPath 5000 RSM has been integrated into OpenScape Business. Consequently, no separate server is required.

Feature	HiPath 5000 RSM	OpenScape Business
Network-wide licensing, assignment of licenses to the individual nodes	All system licenses of the network are combined at the CLS into a network-wide license.	All system licenses of the network are combined at the CLS into a network-wide license.
Network-wide administration	DB Feature Server: all nodes of the network are combined into a network CDB using Manager E. The numbering scheme is synchronized across the network.	All nodes of the network are recorded through the WBM with a network wizard. The numbering scheme is synchronized network-wide (closed numbering).
Connection to external nodes or external applications	SIP-Q connection of up to 4 external nodes	Up to 2 SIP interconnection routes with SIP-Q or Native SIP
Resilience / Survivability	User survivability for HFA phones with closed numbering	User survivability for HFA phones with closed numbering (change from OSBiz S <-> OSBiz X3/X5/X8)
Backup / Restore	Netwide	Local
Inventory function	Netwide	Local
Presence Manager	Network-wide function with the provision of 5000 RSM	Network-wide function with the provision of a multi-node CSP based on the OSBiz UC Booster Card, the OSBiz UC Booster Server or OSBiz S
TAPI 170 on a standalone system	TAPI 170 on a standalone system runs on a Windows computer with its own licensing (separate license file for the TAPI 170).	TAPI 170 on a standalone system runs on a Windows computer. The license request and supply of the TAPI 170 database occurs from the SQL DB of OSBiz. The connection of the TAPI 170 occurs via the CSP of the system (OSBiz UC Booster Card, OSBiz UC Server Booster or OSBiz S)
TAPI 170 in an Internetwork	TAPI 170 runs on 5000 RSM with its own licensing (separate license file for the TAPI 170). The TAPI 170 database is obtained from the DB Feature Server of the 5000 RSM.	As with the standalone system, but the connection of the TAPI 170 occurs at the multinode CSP of a master node (i.e., network-wide).

Mixed Networks

Mixed internetworks consisting of OpenScape Business und OpenScape Office are not supported.

1.12.7 Unsupported HiPath 3000 Boards

Some boards and devices cannot be used in the OpenScape Business X3/X5/X8 communication systems for technical reasons.

These boards and devices must therefore be removed when migrating from HiPath 3000 V9 to OpenScape Business V1. If required, the respective successor board and device types should be used instead.

Board	Part Number	Used in	Function	Notes / Successor
ALUM4	S30817-Q935-A	X3W X5W	Switching of up to 4 analog CO trunks to up to 4 analog phones in the event of a power failure	ALUM4 must be removed. TLANI2 (S30810-Q2953-xxxx) and TLANI4 (S30810-Q2953-xxxx) to provide 2 trunk switches each.
ANI	S30807-Q6917-A103	X3W X5W	Provision of CLIP for up to 4 CO trunks	ANI must be removed. CLIP function integrated on TLANI2 (S30810-Q2953-xxxx), TLANI4 (S30810-Q2953-xxxx) and TLANI8 (S30810-Q2954-xxxx)
ANIR	S30807-Q6917-Z103	X3R X5R	Provision of CLIP for up to 4 CO trunks	ANIR must be removed. CLIP function integrated on TLANI4R (S30810-K2953-xxxx)
CBCC	S30810-Q2935-Axxx	X3W X5W	Mainboard (central control)	CBCC must be removed. OCCM (S30810-Q2959-X)
CBRC	S30810-Q2935-Zxxx	X3R X5R	Mainboard (central control)	CBRC must be removed. OCCMR (S30810-K2959-Z)
CBSAP	S30810-Q2314-X	X8	Mainboard (central control)	CBSAP must be removed. OCCL (S30810-Q2962-X)
CMS	S30807-Q6928-X	X3R X3W X5R X5W X8	Provision of a high-precision clock	CMS must be removed. Functionality integrated on OCCL/ OCCM/OCCMR
EVM	S30807-Q6945-X	X3R X3W X5R X5W	Provision of Voicemail	EVM must be removed. Functionality integrated on OCCL/ OCCM/OCCMR
EXMNA	S30807-Q6923-X	X3W X5W	Enables the connection of an external music source	EXMNA must be removed. Use of a different option for the connection of an external music source required

Board	Part Number	Used in	Function	Notes / Successor
GEE12, GEE16, GEE50	S30817-Q951-Axxx	X3W X5W	Call detail recording with 12 kHz/16 kHz/50 Hz pulses for up to 4 CO trunks	GEE12, GEE16 and GEE50 must be removed. Call detail recording integrated on TLANI2 (S30810-Q2953-xxxx), TLANI4 (S30810-Q2953-xxxx) and TLANI8 (S30810-Q2954-xxxx)
HOPE	S30122-Q7078-X S30122-Q7079-X	X3W X5W	Provision of Hicom Office PhoneMail Entry	HOPE must be removed. Use of a different VoiceMail required.
HXGR3	S30810-K2943-Z1	X3R X5R	HG1500 Board	HXGR3 must be removed. Functionality integrated on OCCMR
HXGS3	S30810-Q2943-X1	X3W X5W	HG1500 Board	HXGS3 must be removed. Functionality integrated on OCCM
IMODN	S30807-Q6932-X100	X3R X3W X5R X5W X8	Analog modem	IMODN must be removed. Functionality is no longer available.
LIM	S30807-Q6930-X	X3R X3W X5R X5W	Provision a LAN interface, 10 Mbit/s	LIM must be removed. Functionality integrated on OCCM/OCCMR
LIMS	S30807-Q6721-X	X8	Provision of two LAN interfaces, 10/100 Mbit/s	LIMS must be removed. Functionality integrated on OCCL
LUNA2	S30122-K7686-A1-3 or lower S30122-K7686-A1-B1 or lower S30122-K7686-M1-<10	X8	Power supply	
MMP3	S30122-K7730-X	X3W X5W	MP3 player for Music On Hold, A-law version	MMP3 must be removed. Use of a different MP3 player for music on hold required
MUSIC module	S30122-K5380-T200	X3W X5W	Provision of MOH (Music On Hold)	MUSIC plugin module must be removed. Use a different option for the provision of Music On Hold required

Board	Part Number	Used in	Function	Notes / Successor
PBXXX	S30810-Q6401-X	X8	CAS protocol converter for 1 S_{2M} interface	PBXXX must be removed. CAS protocol converter integrated on TMCAS2 (S30810-Q2946-X)
PDM1	S30807-Q5692-X100	X3R X3W X5R X5W	Provision of a DSP (digital signal processor)	PDM1 must be removed. OCCB1 (S30807-Q6949-X 100) or OCCB3 (S30807-Q6949-X)
PSU	S30122-X5658-W S30122-X5661-W	X3W X5W X3R X5R	Power supply	PSU must be removed. UPSC-D (S30122-K5660-A300) UPSC-DR (S30122-K7373-A900)
PSUI	S30122-X5083-X	X3W X5W X3R X5R	Power supply	PSU must be removed. UPSC-D (S30122-K5660-A300) UPSC-DR (S30122-K7373-A900)
PSUP	S30122-K5658-M	X3W X5W X3R X5R	Power supply	PSU must be removed. UPSC-D (S30122-K5660-A300) UPSC-DR (S30122-K7373-A900)
STBG	S30817-Q934-A	X3W X5W	Current limitation for up to 4 CO trunks	STBG must be removed. No follow-up board
STMI2	S30810-Q2316-X100	X8	HG1500 Board	STMI2 must be removed. Functionality integrated on OCCL
TLA2	S30817-Q923-Bxxx	X3W X5W	Analog trunk board with 2 a/b interfaces	TLA2 must be removed. TLANI2 (S30810-Q2953-Xxxx)
TLA4	S30817-Q923-Axxx	X3W X5W	Analog trunk board with 4 a/b interfaces	TLA4 must be removed. TLANI4 (S30810-Q2953-Xxxx)
TLA4R	S30817-K923-Zxxx	X3R X5R	Analog trunk board with 4 a/b interfaces	TLA4R must be removed. TLANI4R (S30810-K2953-Xxxx)
TLA8	S30817-Q926-Axxx	X3W X5W	Analog trunk board with 8 a/b interfaces	TLA8 must be removed. TLANI8 (S30810-Q2954-Xxxx)
TMDID	S30810-Q2452-X	X8	Analog trunk board with 8 a/b interfaces	TMDID must be removed. TMDID2 (S30810-Q2197-T)

Board	Part Number	Used in	Function	Notes / Successor
TMGL2	S30810-Q2918-X100	X3W X5W	Analog trunk board with 2 a/b interfaces	TMGL2 must be removed. TLANI2 (S30810-Q2953-Xxxx)
TMGL4	S30810-Q2918-X	X3W X5W	Analog trunk board with 4 a/b interfaces	TMGL4 must be removed. TLANI4 (S30810-Q2953-Xxxx)
TMGL4R	S30810-Q2918-Z	X3R X5R	Analog trunk board with 4 a/b interfaces	TMGL4R must be removed. TLANI4R (S30810-K2953-Xxxx)
TMQ4	S30810-Q2917-X	X3W X5W	Digital trunk board with 4 S_0 interfaces	TMQ4 must be removed. No follow-up board
TS2	S30810-Q2913-X100	X5W	Digital trunk/tie-traffic board with one S_{2M} interface	TS2 must be removed. TS2 (S30810-Q2913-X300)
TS2	S30810-K2913-Z100	X5R	Digital trunk/tie-traffic board with one S_{2M} interface	TS2 must be removed. TS2 (S30810-K2913-Z300)
UAM	S30122-K7217-T	X3W X5W	Provision of Music On Hold (MOH)	UAM must be removed. The functionality is Software-based.
UAMR	S30122-K7402-T	X3R X5R	Provision of Music On Hold (MOH)	UAMR must be removed. The functionality is Software-based.
V24/1	S30807-Q6916-X100	X3W X5W	Provision of a V.24 interface	V24/1 must be removed. No follow-up board

2 Sales Information

2.1 Area of Application, Commencement of Marketing and Delivery

2.1.1 Information on Commencement of Marketing and Delivery

As a customer of Unify, you can obtain further information about this from your country-specific Unify organization.

OpenScape Business is being released to market simultaneously in the following countries: **

Afghanistan*	Hungary	Rwanda
Algeria	Iceland	Saudi Arabia
Angola*	India	Senegal
Argentina	Indonesia	Serbia-Montenegro
Australia	Iraq	Singapore
Austria	Ireland (via UK)	Slovakia
Azerbaijan*	Israel	Slovenia
Bahrain	Italy	Somalia*
Bangladesh	Jordan	South Korea
Belarus*	Kazakhstan	Spain
Belgium	Kenya	Sri Lanka
Benin	Krygyzstan	Sweden
Bolivia	Kuwait	Switzerland
Bosnia and Herzegovina	Latvia	Taiwan
Botswana	Lebanon*	Tajikistan
Brazil	Lesotho	Tanzania*
Bulgaria	Liberia*	Thailand
Burkina Faso	Libya	Togo
Burundi*	Lithuania	Tunesia
Cameroon	Luxembourg	Turkey
Canada	Macedonia	Turkmenistan
Central African Republic	Madagascar	Uganda*
Chad	Malawi	Ukraine
Chile	Malaysia	United Arab Emirates
China	Mali	United Kingdom
Columbia	Malta	Uruguay
Congo, Democratic Republic*	Mauritius	USA
Costa Rica	Mexico	Uzbekistan*
Cote d'Ivoire*	Morocco	Venezuela
Croatia	Mozambique*	Vietnam
Cyprus	Namibia	Yemen
Czech Republic	Netherlands	Zambia
Denmark	New Zealand	Zimbabwe*
Djibouti	Nicaragua	
Dominican Republik	Niger	

Ecuador	Nigeria*	
Egypt	Norway	
El Salvador	Oman	
Eritrea*	Pakistan*	
Estonia	Palestina Terretory Occupied	
Ethiopia*	Panama	
Finland	Paraguay	
France	Peru	
Gabon	Philippines	
Gambia	Poland	
Germany	Portugal	
Ghana	Qatar	
Greece	Romania	
Guatemala	RSA	
Honduras	Russian Federation	
Hong Kong		

* Individual Export License required (Individual Validation IVL License).

** For countries subject to approval, after the required approvals are obtained. Details can be found in the UPP Unify Partner Portal or on the intranet of Unify: https://intranet.unify.com

2.1.2 New Functions in Product Introduction Phase 2 NEW

With the second product introduction phase STEP 2 (V1 MR2), the following new features are being additionally released for marketing. The functions already released earlier remain unchanged.

	Functions Step 2 New
OpenScape Business Models	
OpenScape Business Booster Card (OCAB board)	x
OpenScape Business UC Booster Server (Linux Server)	x
OpenScape Business S (Linux Server)	x
UC Suite (with Booster Card, Booster Server, Server)	
Voicemail and Company AutoAttendant	x
myPortal for Desktop	x
myPortal for Outlook	x
myPortal for OpenStage	x
myPortal for Mobile/Tablet	x
myAttendant	x
Contact Center: myAgent, myReports, Fax, E-mail	x

	Functions Step 2 New
Other (with Booster Card, Booster Server, Server)	
OpenScape Business TAPI	x
OpenScape Gate View	x
CSTA for the connection of external applications	x
Directory Service Connector ODS	x
Networking Scenarios	x
OpenScape Business X3,X5,X8 Network-wide voice and UC functionality with UC Suite	x
OpenScape Business S Network-wide voice and UC functionality with UC Suite	x

The table below shows the hardware requirements for specific applications. For example, if the customer uses UC Smart and requires an additional CSTA connection, the Booster Card is needed:

	Mainboard	**With Booster Card**	**With Booster Server NEW**	**S (Server) NEW**
UC Smart	x	x*	-	-
UC Suite **NEW**	-	x*	x	x
Combinable with:				
OpenScape Business TAPI 170 **NEW**	-	x	x	x
CSTA for the connection of external applications **NEW**	-	x	x	x
Directory Service Connector ODS **NEW**	-	x	x	x
OpenScape Gate View **NEW**	-	x	x	x
Application Launcher	x	x	x	x

* With the UC Booster Card, UC Smart or UC Suite can be optionally used.

2.2 Sales Objectives and Target Groups

2.2.1 Target Group

OpenScape Business is the new SME platform from Unify and the follow-up product for HiPath 3000/OpenScape Office HX in the Products and Solutions business.

OpenScape Business offers small and medium-sized companies the answer to their individual and diverse communication needs in a unified, flexible and scalable solution. It is optimized for the partner business.

From classical hybrid to modern IP technology, from powerful telephony to a comprehensive UC solution, OpenScape Business always provides the right solution for enterprises with up to 500 stations or 1000 stations in a network.

2.3 Marketing Structure

OpenScape Business V1 is marketed via licenses and hardware and software order items.

2.3.1.1 Licenses

OpenScape Business has a user and feature-oriented system-based licensing with uniform licenses across all models (X3/X5/X8 and S **NEW**).

For software migrations from HiPath 3000 and OpenScape Office LX, the appropriate upgrade licenses and possibly other licenses are required. Please read the corresponding notes in section 1.12, "Migration".

Several evaluation licenses are available for evaluating UC features such as UC Smart / UC Suite or the Contact Center.

2.3.1.2 Hardware and Software

The hardware items include OpenScape Business X3/X5/X8 models with their associated boards, optional modules and accessories

Some boards and options are also used for HiPath 3000 systems (same order number for HiPath 3000 and OpenScape Business).

For hardware migrations of HiPath 3000 systems, upgrade items are offered consisting of the mainboard with software on an SDHC card

The OpenScape Business S **NEW**/ Booster Server **NEW** software, OpenScape Business Attendant software and the OpenScape Business TAPI software **NEW** are each delivered on separate DVDs.

2.4 Supporting Sales Information

Documentation	Language	Medium	Source of supply	Order number
Data Sheet	German English French*	E-Doku Paper	Internet Online Shop	German: A31002-P3010-D101-*-29 English: A31002-P3010-D101-*-7629

* Only electronically via Unify Partner Portal

Ordering through the Open Communications Shop: http://62.26.5.13/KOMM-ordering-tool/webstore30/scripts/Katalog.asp

Additional information can also be found in the UPP Unify Partner Portal under https://www.unify.com/partnerportal

For other language versions, please contact your country-specific Unify organization.

3 Pricing and Commercial Handling

As a customer of Unify GmbH & Co. KG, you can obtain further information about this from your country-specific Unify branch office.

3.1 Export Regulations

Certain products in our sales program are subject to the regulations governing export permits required under EU / German / US law [in accordance with the Export List (in German 'AL') and Export Administration Regulations (EAR)].

When submitting an offer or confirming of an order, it cannot be assumed with certainty

- the required export license will be granted in every case
- that existing export/re-export licenses will be extended for a period that encompasses delivery dates resulting from planning or delays.

Your offers, order confirmations and contracts for your customers, which are known to involve or can be assumed to involve deliveries intended for export/re-export - in other words, indirect exports and transactions with dealers - should therefore include the following proviso:

"This offer (contract or order confirmation) and the fulfillment of the contract are subject to the proviso that the required export licenses have been issued and that there are no other impediments arising from German or other export regulations".

4 Data Protection and Information Security

4.1 Customer Information on Data Protection and Information Security

The respective country-specific provisions regarding data protection must be complied with.

5 Training Concept

5.1 Information on the Training Offer

As a customer of Unify GmbH & Co. KG, you can obtain further information about this from your country-specific Unify organization.

Further information on the trainings offered in Germany can be found at the following URL:
https://training.unify.com/enweb/cms/get_content.php