

OpenScape 4000 V7 Converged communication

As a convergent communication solution, it provides business process and workflow integration, high availability, security paired with powerful performance and cost-effective unified communications choices for any business.

From the proven HiPath 4000, OpenScape 4000 has already sold more than 25 million ports in 80 countries across the globe.

The OpenScape 4000 is the convergent IP communication platform for companies with 300 to 100,000 employees. The feature-richness of the OpenScape 4000 is proven daily in more than 25,000 customer installations. The future-proof architecture supports IP-distributed branch concepts and complex corporate networks as well as standalone systems.

With the new OpenScape 4000 V7 software architecture, it is designed to offer customers cost-effective communication choices to optimize and secure communications that help enterprises increase workplace productivity and effectiveness.

As a powerful and highly available communications solution, it offers a rich set of endpoints, mobility choices, branch office solutions, unified communications and standards-based integration and interoperability with business-critical applications and systems.

OpenScape 4000 supports this capability with its built-in assistant and powerful set of system management applications that are easy to use and provide a feature-rich capability to system administrators. Coupled with a strong global presence and availability of OpenScale services, it allows enterprises to maintain business continuity and to focus on their own strengths.

Options for every need...					System Management	
Terminal devices	OpenStage Telephones	Analog Devices	OpenScape Personal Edition Client	Video Integration		User Management
VoIP	IP Distributed Access Points	OpenScape 4000 SoftGate	Branch Survivability	SIP Service Provider		Fault Management
Mobility	OpenScape Cordless Enterprise	VoWLAN	OpenScape Mobility	Teleworking		QoS Management
Unified Communications	Unified Messaging	Instant Messaging	Voice & Web Conferencing	Presence-based Collaboration		Accounting Management
IT Architecture	Standard Server	Separated Duplex	Security	OpenScape Access		OpenScape 4000 Manager / Assistant
Open Interfaces	Based on open standards and public interfaces: Native SIP, SOAP/XML, SNMP and MIB traps, QSIG, TAPI, JTAPI, CDR and CSTA					Common Management Portal

OpenScape 4000 software: flexible, reliable, scalable and open

IT architecture

Modular, stackable, reliable and seamless expandable

OpenScope 4000 V7 offers an ideal solution for an enterprise communications infrastructure – regardless of size and location requirements. With its modularity, the availability of scalable access points, software-based branches, plus powerful networking support – analog, TDM, or IP – it provides a perfect solution for seamless expansion and can be integrated in any IP infrastructure.

The OpenScope 4000 communication server is the high available central control unit with redundant power supplies and redundant LAN interfaces. The OpenScope 4000 V7 duplex architecture enables complete redundancy for call control, CSTA application connectivity and administration, even in geo-separated locations. The AP 3700 access points and the new OpenScope Access modules fit in a standard 19-inch shelf and are integrated directly in the IT infrastructure.

The OpenScope 4000 SoftGate application offers software-based and cost-effective OpenScope 4000 VoIP functionalities running on standard x86 server platforms.

The OpenScope 4000 communication server can be flexibly implemented in configurations to support smallest to the largest enterprise. It supports up to

15 directly connected access points plus 83 IP-distributed access points, OpenScope Access or SoftGate branches. A maximum of 12,000 subscribers can be supported in these configurations per OpenScope 4000 communication server. Configurations with up to 100,000 users can be implemented without difficulty in networked systems.

The modular structure of OpenScope 4000 also enables cost-effective resilience solutions to be realized in small and mid-sized configurations.

OpenScope 4000 Server Deployments

The new architecture of the converged IP system OpenScope 4000 allows a pure software installation at a standard server that is equipped with a Linux operating system.

With this software version, existing customer solutions can be migrated to a data center and IT-based solution in which traditional TDM and analog devices as well as CO trunks are still supported.

OpenScope 4000 V7 now offers two different deployment options:

- Compact PCI (cPCI) OpenScope 4000 communication server
- Industry standard servers with Linux

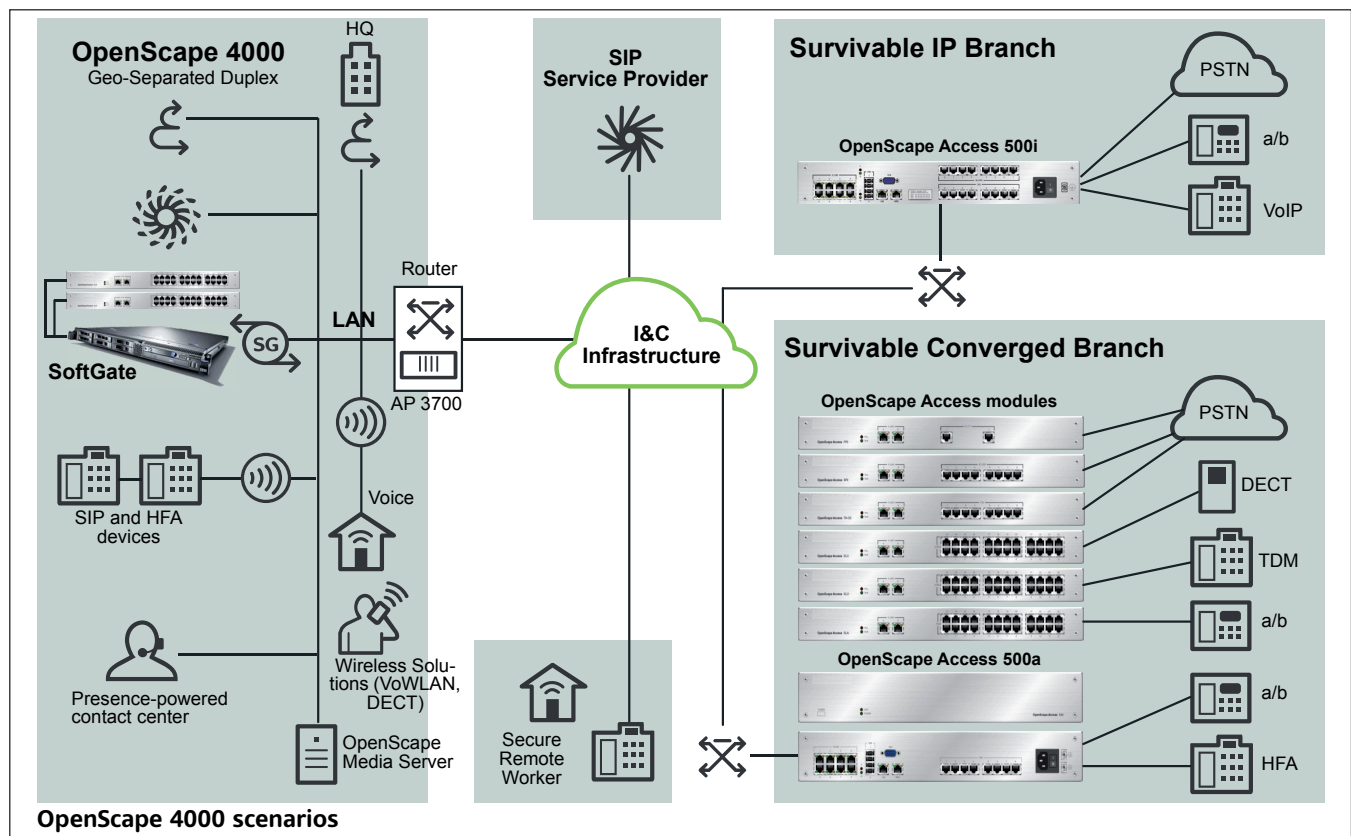
Both deployment options support up to 12,000 users per Linux server or duplex cPCI deployment. Up to 100,000 users can be managed by the OpenScope 4000 Manager system administration software.

Compact PCI Server

The compact PCI server option (cPCI) supports converged IP requirements involving applications with a big number of analog and TDM devices, DECT applications, or specialized industry sector applications. The new cPCI hardware offers new redundancy opportunities, and can be deployed highly scalable and secure in data centers.

Linux Servers

Deploying the OpenScope 4000 on industry standard Linux SLES11 SP1 servers is suited for converged IP telephony requirements and is well suited for highly-distributed deployments. It provides a low total cost of ownership for both hardware and maintenance and, like the cPCI option, is scalable and secure.



OpenScape 4000 SoftGate application

The OpenScape 4000 SoftGate application provides cost-effective VoIP functionalities with reliable branch survivability options and an easy IT integration in the OpenScape 4000 solution and management suite. This new software application offers full HiPath feature access for IP endpoints and SIP connectivity for trunking and subscriber, based upon a standard server with Linux SLES 11 SP1.

Any OpenScape 4000 SoftGate site integrates seamlessly in the communication system and network like any IPDA access point (AP 3700 IP with HG 3500) – in terms of features and administration.

The open architecture of the OpenScape 4000 SoftGate application enables integration in a VMware virtualization environment. In addition, the OpenScape 4000 SoftGate application supports IPv6 SIP trunking and enables Peer-to-Peer video integrations with HD video systems or softclients. Thanks to the SoftGate Media Server functionalities, this application can also be used for the software-based implementation of music on hold as well as synchronous and asynchronous announcement texts.

The Secure Remote Subscriber function supports secure remote operating while providing the complete feature set.

With this application, customers can reduce capital cost (CAPEX) plus operational cost (OPEX) and deploy centralized applications with uniform user experience.

OpenScape Access

OpenScape Access is a cost effective, 19-inch modular solution that can be deployed in survivable branch solutions and into your IT infrastructure.

It consists of flexible, stackable and high scalable 1U modules that provide all required analog, digital and DECT interfaces of a branch solution with OpenScape Access 500 and OpenScape 4000 SoftGate.

Access Point Emergency concept for branches

OpenScape 4000 AP-Emergency completes the survivability functionality for access points (AP), OpenScape Access 500, and OpenScape 4000 SoftGate branches. With APE, continued operation is also possible in the event of a failure of the central call control or WAN Link failure to central call control. In the event of host system failure, the survivability function can assume control of one or several different access points (AP 3700, OpenScape Access 500, and/or OpenScape 4000 SoftGate); thus ensuring sustained communication capabilities within the enterprise. A prerequisite is that the APs controlled by a survivability unit still have a functional IP infrastructure. This gives you optimal security for all access points and IP branches connected to the OpenScape 4000 communication server.

Signaling and Payload Survivability for IP branches

This function performs that voice is routed via PSTN and signaling is routed via IP or PSTN survivability connections for IP branches. This expanded survivability functionality can be used as an alternative dynamic path if the IP network fails, all available VoIP resources are occupied, or IP quality is found to be poor. Also, static configuration of payload routing over PSTN can be used for smooth transformations of existing branch offices from PSTN to IP networking. This flexible mix between IP and TDM networking for payload and best possible signaling capabilities allows the migration to homogeneous branch networks and the implementation of centralized applications at individual pace. Signaling and Payload survivability allows highest flexibility in the optimization of operational expenses (OPEX) – in any market or telecommunications landscape.

Software and features

The OpenScape 4000 software installed on the Linux SLES 11 SP1 operating system offers a full set of converged enterprise-class communication features.

Easy and flexible licensing

OpenScape 4000 Flex License is the new brand name for the flexible licensing concept that is used for the enterprise-class functionalities that are supported for the different subscriber and trunking interfaces. Every analog, TDM, IP, cordless (DECT), and WLAN subscriber interface is part of the Flex License. The same is valid for every analog, TDM, and IP trunking interface.

Flex License offers the highest possible flexibility in license investments.

System features

- Integrated connectivity for analog, TDM, and VoIP subscribers
- Cost-saving Least Cost Routing for analog, TDM and IP trunks
- Integrated attendant functions
- Different time zones
- Multilingual user interfaces
- Virtual numbering plan
- Multi-tenant functionality
- Integrated FlexRouting for Contact Center
- Flexible configuration of local tones and announcements per branch office
- Branch survivability
- Gatekeeper redundancy for HFA subscribers
- Bandwidth resource manager for IP endpoints and branches
- Signaling (TLS) and Payload (SRTP) encryption for VoIP (Voice over IP) connections
- PKI integration for Signaling and Payload encryption
- CTI integration of business applications via CSTA III ASN1, CSTA XML
- XML Phones Services interface for easy and cost-effective workflow integration
- Call detail recording
- Display of a picture from an LDAP directory in a call
- Integration of SIP-based video endpoints
- Emergency dialing
- Multi-Level Precedence and Pre-emption (MLPP)

User features

- Redial
- Speed dialing system/individual
- Name key
- Call journal
- Toggling
- Call transfer
- Call deflection
- Callback
- Message Waiting Indication
- Call waiting
- Call park
- Directed call park
- Do Not Disturb
- Flexible and enhanced call forwarding
- Eight-party conference
- Direct station selection key function
- Override and prevention of override
- Hotline
- Mobile HFA (network-wide user mobility)
- Personal ID number (PIN)
- Executive/secretary functions
- Intercom features
- Integrated multi-line key functionality
- Network-wide hunt groups
- Network-wide pickup groups
- One-Number service – simultaneous ringing
- Charge display
- Acoustic and visual status for Signaling and Payload encryption
- ... and much more

Regardless of whether you provide the desktops of your staff with digital system phones or IP phones of the OpenStage family, the handling or, respectively, the user interface to activate the features is identical on all phones.

Networking features

OpenScape 4000 can be connected to public and private networks via different interfaces such as analog, TDM, and IP trunks, and standard protocols such as ISDN, QSIG, and native SIP.

OpenScape 4000 also enables the creation and operation of efficient, homogeneous and economical global communication networks. OpenScape Networking can be performed via ISDN or IP – always with the full CorNet-NQ feature offering. CorNet-NQ is a signaling protocol for private network solutions based on Siemens standards. It is aligned with the international QSIG private network protocol for private networks.

SIP-Q based networking provides a full feature offering in any networking scenario between OpenScape 4000 and in combination with OpenScape Voice. With OpenScape 4000, the SIP-based IP networking is the preferred, secure, and future oriented standard networking mechanism of OpenScape 4000 systems.

The most significant advantages of these homogeneous networks include the following:

- Central administration with OpenScape 4000 Manager
- Deployment of central applications like OpenScape Xpressions and OpenScape UC
- Enhanced voice features such as call pickup group, call park, directed call pickup, call forwarding, callback on busy and callback no answer
- SIP trunking networkings via IPv4 and IPv6 networks
- SIP trunking to certified providers
- Optimized use of the corporate network through cost-optimized routing (Least Cost Routing, LCR) LCR ensures that the most economical route is selected, Time-based to different carriers, Central administration of all LCR data with OpenScape 4000 Manager, Local and network-wide administration of all outgoing, incoming, and internal calls

VoIP gateways

IP Gateway functionalities for seamless migration to VoIP infrastructure are available with HG 3500 peripheral cards in the OpenScape 4000 access points, or with virtual software-based HG 3500 in the OpenScape 4000 SoftGate application and OpenScape Access 500.

The VoIP gateways offer:

- HiPath Feature Access (HFA) for IP Endpoints, such as OpenStage HFA or AC-Win IP
- SIP-Q trunking for connections to OpenScape 4000, OpenScape Voice and other HiPath platforms
- Native SIP subscriber interface for SIP applications, such as OpenScape Xpert
- Native SIP trunking which is the communication protocol to connect to SIP service providers or 3rd-party applications
- Flexible and economical SIP connectivity with service providers
- Signaling and Payload encryption based on TLS and SRTP
- Up to 120 simultaneous connections
- Simultaneous use of several functions, e.g. subscribers and trunking
- A-law/ μ -law conversion capabilities
- Resilience for HG 3500 functions with HG 3500 standby board
- IP connectivity resilience with redundant LAN interfaces
- High voice quality via integrated G.168-compliant echo cancellation and end-to-end payload connections
- T.38 fax transmissions for SIP subscribers, SIP trunking, and IP connectivity between IP branches (AP 3700 IP, SoftGate, or OpenScape Access 500)
- G.729 voice compression
- Adaptive jitter buffer
- Voice activity detection
- Self-maintenance
- Comfort noise generation
- Packet loss concealment
- SNMP network management support
- QoS in accordance with IEEE 802.1p/q (VLAN tagging) and DiffServ (IETF RFC 2474)
- Support of QoS Data Collection (QDC) for VoIP quality monitoring

The vHG 3500 virtual gateway for OpenScape 4000 SoftGate and OpenScape Access also offers:

- IPv6 networking links to OpenScape 4000 communication server
- IPv6 support for SIP-Q trunking and native SIP trunking
- TLS and SRTP encryption for native SIP trunking
- OpenScape 4000 SoftGate Loadbalancer for native SIP trunking large deployments (more than 120 channels) with OpenScape UC conferencing server and SIP service provider
- Zero Config SoftGate

Management

OpenScape 4000 Assistant

OpenScape 4000 Assistant is an integrated management application with web-based administration interface for local configuration, necessary service tools, and an integrated SNMP Proxy agent (for sending OpenScape 4000 error messages and alarms as SNMP trap).

Existing OpenScape 4000 Assistant functionalities:

- Common platform for service and administration with single sign-on, and inherent part of each OpenScape 4000 system
- Automated synchronization with system database
- Configuration Management
- OpenScape 4000 CSTA configuration
- Inventory management
- Backup&Restore
- Switch diagnosis support
- Realtime diagnosis system
- Error message interpreter
- Integrated fault management
- Integrated performance management
- Web client
- Integrated configurator for linear extensions

OpenScape 4000 Manager

The OpenScape 4000 Manager is the central management platform for OpenScape 4000 networks. As Element Manager, it is an integral component of the OpenScape MetaManagement architecture.

OpenScape 4000 Manager offers:

- Configuration Management (CM) supporting many different languages
- Performance Management (PM)
- Collecting Agent (COL)
- Application Programming Interface (API)
- SNMP Proxy Agent

Additional OpenScape MetaManagement applications:

- OpenScape/HiPath Fault Management (FM)
- OpenScape/HiPath Accounting Management (HiPath AM)
- OpenScape/HiPath User Management (UM)
- HiPath QoS Management

The HiPath MetaManagement architecture enables the efficient and cost-effective management of the OpenScape/HiPath communication network within managed service solutions:

- Open and flexible for adaption to any operator model
- From self maintenance to complete outsourcing models

OpenScape Deployment Service

The Deployment Service (DLS) provides a solution for customers and service personnel to administer IP devices (IP phones and clients) in OpenScape networks. This includes HFA and SIP based networks also including OpenScape Voice. DLS is the central system where device and QoS related parameters of OpenScape IP devices are administered for the customer's entire network. Additionally, DLS takes over the distribution of certificates for deploying TLS (Transport Layer Security) and is also able to create certificates where there is no existing customer PKI (Public Key Infrastructure) framework.

Desktop productivity

OpenStage phone family

The OpenStage product family enables innovative user solutions with its intuitively designed functionality and operability. The devices are open for access to different services and applications through interoperability with other devices.

OpenScape 4000 supports the various OpenStage telephone families: OpenStage T (TDM) and OpenStage HFA (HiPath Feature Access). OpenStage Key Modules and OpenStage Busy Lamp Field Module with 90 programmable keys are also supported.

The OpenStage family is designed to be extremely user friendly and simplifies feature implementation. Innovative operating elements based on advanced technologies were used in designing the user interface. Touch/sensor buttons with integrated color LEDs, TouchSliders for volume control, TouchGuide navigation and large, swiveling graphic color TFT displays with backlighting go far to simplify user interaction.

Customized telephony functions, speed dial (by name) or line buttons are easy to operate using freely programmable touch/sensor buttons with the function appearing on the display.

Access to the most frequently used telephony functions such as separation, call forwarding, loudspeakers and to dedicated applications such as the phone book, caller list, and answering machine is simplified via fixed function buttons.

OpenStage works with the latest developments in the field of acoustics and therefore offers superb voice quality in the hand-held unit and handsfree operation (through handset design, loudspeakers, housing volume, and wide-band codecs G.722).



OpenStage 40



OpenStage 60



**OpenStage 30 with
OpenStage Key Module 15**

OpenScape Personal Edition

OpenScape Personal Edition is the latest IP-based softphone software that can be used with OpenScape 4000. The Personal Edition is ideal for all mobile and stationary applications. It offers the option of integrating corporate directories and personal call lists via LDAP. Powered by a highly sophisticated and intuitive user interface, OpenScape Personal Edition is a constant companion for customers who also need to receive and make calls via their notebook/laptop on the way.

OpenScape Xpert

For the trading and financial markets of today it is of vital importance that decisions can be made quickly. Efficient and reliable communication technology is crucial for success. OpenScape Xpert offers dealers and brokers a decisive competitive advantage with its innovative architecture, its enhanced graphical user interface and its extensive feature set. The OpenScape Xpert solution provides the known HiPath Trading functionalities as a SIP-based IP solution.

Attendant Console (AC-Win)

The attendant console AC-Win IP is a PC-based application for Microsoft

Windows XP, Windows Vista, and Windows 7 that permits the convenient traffic management by live attendants, using a USB headset/handset.

AC-Win IP can be used with two (AC-Win 2Q IP) or twelve queues (AC-Win MQ). The PC-based attendant console is connected to the OpenScape 4000 via IP.

Busy Lamp Field (BLF-Win)

The Busy Lamp Field BLF-Win is an application for the PC-based attendant console, AC-Win IP. The constant availability of information about the current status of the extensions enables more efficient and faster handling of incoming calls.

Directory Service (DS-Win)

DS-Win increases the efficiency and the communication quality of the telephone switch by quickly forwarding incoming calls to the AC-Win attendant console or OpenStage phones. Through optional connection with the Outlook or Lotus Notes calendar, the operator can check whether the intended call recipient is currently present or absent. In combination with OpenScape 4000 Manager, DS-Win is integrated in the directory data as a single entry point concept.

OpenScape 4000 Phone Services

In conjunction with a OpenScape 4000 system phone (e.g. OpenStage T), the integrated phone services provide new kinds of features to increase workplace productivity. The functions can be set up on the end device to be called up either by separate keys or via a menu that is called up via a single application key. The connection between OpenScape 4000 and the corporate directory is generated by the OpenScape 4000 platform. Some uses include:

- EasyLookup: Simple access to the corporate directory (LDAP) via search parameters, output of results on the display, and direct dialing of the displayed phone number
- EasySee: Output of information from the corporate directory as PhoneCard on the PC
- Easy UC: Setting OpenScape UC presence status and preferred device from your OpenStage HFA/TDM or cordless device

Mobility

Cordless Enterprise

OpenScape Cordless Enterprise V7 enables cordless telephony with the user-friendly features of the system. Compliance with the international Digital Enhanced Cordless Telecommunication (DECT) standard guarantees first-class sound quality, wide-area coverage, high user density, and privacy.

The modular extendible system architecture is based on integrated radio switching boards and base stations which are connected to the OpenScape 4000 communication system via digital interfaces. This allows the planning and implementation of cost-effective installations that meet coverage and demand needs.

The full incorporation of OpenScape Cordless Enterprise into the existing administration and maintenance concept designed for OpenScape 4000 makes OpenScape Cordless Enterprise an extremely service-friendly product.

User-friendly handsets with excellent voice quality and an interactive user interface are extremely popular with users of mobile telephones and increase productivity in the workplace by providing greater availability and more flexible communication.

OpenScape UC Mobile Client

The OpenScape UC Application includes a Mobile Client, enabling mobile users to benefit from presence awareness of key contacts, quick access to conferences, setting their presence status and preferred device – among many other features. The Mobile Client runs on the most popular mobile operating systems RIM (BlackBerry), Symbian (Nokia), Android, Windows Mobile* and iOS (Apple).

* restrictions are possible.



Unified Communications

OpenScope UC Enterprise

OpenScope UC Application is at the heart of Unify's unified communications portfolio; enabling presence-based, real-time communications so your teams can collaborate like never before. This means you can offer greater customer service, bring products to market faster, and respond to new challenges as they arise.

Seamless integration into your current infrastructure means you can exploit and maximize your current investments, and benefit from enhanced unified communications right now.

Highlights:

- Comprehensive presence management for both users and phones
- Preferred device to control availability
- Integrated voice messaging
- Powerful, software-based conference management with innovative features
- Support for Windows, web, and mobile clients and provision of a voice portal
- HFA Softphone functionality
- Well-designed user interface that is very easy to use and is harmonized for all customers
- Modular product structure with the option of increasing functionality as needed in steps
- Instant messaging and web conferencing via OpenScope Web Collaboration or third-party products

OpenScope Xpressions

The OpenScope 4000 V7 delivers cost-effective choices in unified messaging functionality. It enables built-in voice messaging, unified messaging, voice conferencing, web conferencing, instant messaging, text messaging, presence, and fax. These unified communications options coupled with CTI services help embed powerful communications capability directly into business processes creating an efficient and effective workplace.

OpenScope Web Collaboration

Enjoy feature-rich multimedia collaboration at an affordable price with our scalable, secure, and highly reliable web conferencing solution.

Offering integrated text, data, web and multi-party desktop video conferencing, OpenScope Web Collaboration is a cost-effective and efficient way to deliver meetings with up to 1,000 session participants.

Typical applications include:

- Webinars
- Training sessions
- Project meetings
- Sales meetings
- Product demonstrations
- Basic remote support to customers and end users

OpenScope Web Collaboration features an easy-to-use and intuitive desktop client that uses "media morphing" to transition between media with a single click, and offers quick access to its functionality, including:

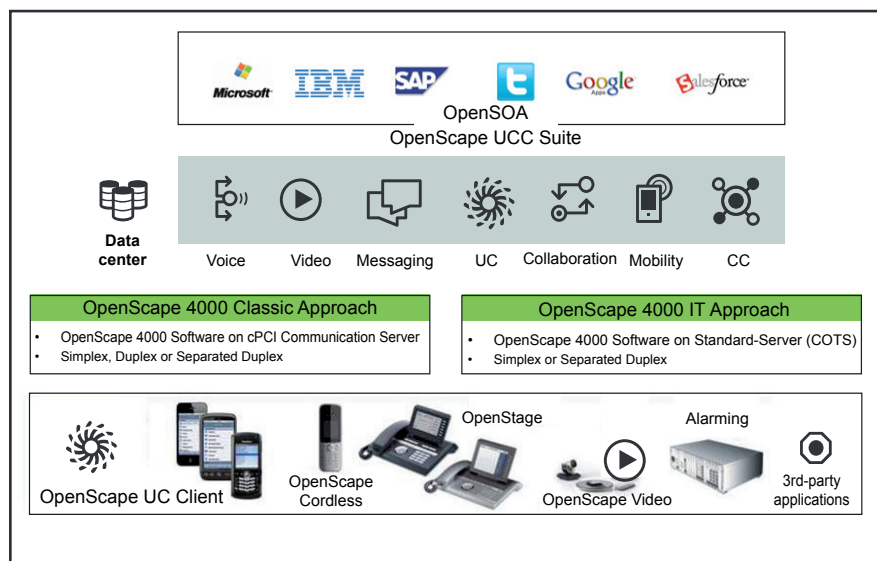
- Desktop and application sharing
- File sharing
- Co-browsing
- White-boarding
- URL push
- IM chat
- Multi-party video chat

Users are kept secure with 256-bit AES encryption.

OpenScope Contact Center

OpenScope Contact Center solutions allow you to interact with customers at the highest level, improving satisfaction, increasing revenue and loyalty and enhancing productivity.

OpenScope Contact Center is a set of packaged software applications that improve the effectiveness and efficiency of a company's contact center operations through intelligent skills-based routing, universal queuing, routing and tracking across all your media channels, agent and management tools, and comprehensive reporting. Integrated with your other customer relationship management systems, OpenScope Contact Center will deliver a world-class customer service experience. It is market-proven, fully scalable and can accommodate small 10-agent environments right up to very large multi-site enterprise installations.



Alarming and Positioning

OpenScape Alarm Response Professional

OSCAR-Pro is the successor of the well-known HiPath DAKS. Thus, it is a modular system that can operate with various applications and is scalable within a wide range. OSCAR-Pro offers the following applications on its server:

- Broadcast/alerting with serial interface
- Broadcast/alerting with ESPA-X interface
- Emergency and high-performance conferences
- Call profiles
- Info telephone
- Internet-Controlled Telephony Conference (ICTC)

OpenScape Alarm Response Economy

OSCAR-Eco is the ideal mini-server for alarms for low and customer needs, suitable for nursing homes, small branch offices and limited use in larger enterprises. Initiators for alarms can include door contacts and sensors as well as external systems (e.g. nurse call systems in the hospital), phones and single-button medallions. OSCAR-Eco raises alarms with information on the cause including positioning data, thus guaranteeing fastest mobilization of support staff and service technicians.

- 4-channel connection to OpenScape Business, OpenScape 4000 and OpenScape Voice via ISDN/TDM or VoIP/LAN
- Variable activation of broadcasts by host systems (ESPA 4.4.4 or ESPA-X) via contact inputs, a console or phones, or by a GMD single-button emergency medallion
- Digital I/O and serial data interface
- Various LAN services
- Hassle-free administration via browser with leading-edge security concept
- Positioning of GMD Medallions in WiFi or DECT networks
- Flexible broadcast strategies with multitasking
- Detailed logging
- ... and much more

Upgrade/Conversion to OpenScape 4000

Migrating and Upgrading

The declared development objective of Version 7 was the unconditional reuse of the HiPath 4000 V6 hardware. This makes the changeover to the UC version especially easy for V6 customers.

All existing HiPath 4000 cPCI systems can be migrated to OpenScape 4000.

Investment protection of existing HiPath 4000 licenses can be guaranteed with OpenScape Software Assurance or cost-effective upgrades to OpenScape 4000 Flex Licenses.

OpenScape Software Assurance

A customer who joins this OpenScape Software Assurance program benefits from all future software versions. These can be improved security features or innovative functionalities. Continuous software upgrades guarantee long-term software stability, up-to-date security features, and improve the OpenScape Unified Communication interfaces towards other products and solutions.

OpenScape Software Assurance is based on a recurring payment scheme. All future investments for software releases are already integrated in this billing model. Therefore, the OpenScape Software Assurance program improves your budget planning reliability.

Compared to traditional version upgrades, customers can realize considerable cost savings with OpenScape Software Assurance.

System interfaces

Trunks

- S₀ (basic rate interface, BRI)
- E1 (S_{2M}) (primary rate interface 30 channels)
- T1 (primary rate interface 24 channels)
- Analog (e.g. HKZ, E&M)
- Native SIP (SIP service provider)

Networking interfaces

- Basic Rate S₀ / Primary Rate E1 / T1
- The following protocols are supported:
CorNet-NQ, QSIG, DSS1, CAS
- Analog, e.g. MFC-R2, E&M
- SIP trunking to HiPath/OpenScape platforms with SIP-Q protocol
- Native SIP trunking for IP interoperability with third-party technology partners

User interfaces

- U_{P0/E}
- Twin-wire interface for connecting OpenStage T telephones and Cordless Enterprise Base Stations
- HiPath Feature Access (HFA) for OpenStage HFA endpoints
- Native SIP for IP Endpoints, e.g. OpenScape Xpert
- S₀ bus
S₀ port for ISDN terminal devices
- a/b port (CLIP, name display, and MWI possible) for analog terminal devices

CSTA standards

- ECMA-269: Services for Computer Supported Telecommunications Applications (CSTA) Phase III
- ECMA-323: XML Protocol for CSTA Phase III
- ECMA-285: ASN1 Protocol for CSTA Phase III
- ECMA TR/82: Scenarios for CSTA Phase III

Integral service platform

- Web protocol https
- Remote access
- SNMP Proxy Agent
- SFTP for Backup&Restore

Technical Data

Variant	Number of directly connected access points	Number of IP-distributed access points	Number of digital/IP subscribers
OpenScape 4000	up to 15	up to 83	up to 12,000

Environmental/Operating conditions

Air temperature in operation (air cooling)	+5 °C to +40 °C
Relative air humidity	max. 85 %

Power supply voltage

Single phase	100 V - 240 V
Three phase	190 V/400 V

A "buffered" 48-volt direct current power supply can also be used.

Dimensions and weight

	Width x Height x Depth (mm)	Weight
OpenScape 4000 Communication Server	440 x 170 x 300 (5 U)	max. 13 kg
OpenScape AP 3300	773 x 645 x 515	max. 30 kg
OpenScape AP 3700	440 x 445 x 433 (11 U)	max. 25 kg
OpenScape AP 3300 IP	773 x 645 x 515	max. 30 kg
OpenScape AP 3700 IP	440 x 445 x 433 (11 U)	max. 22 kg

Compatibility

Safety	EN60950
EMC emission	EN55022 Class A
EMC immunity	EN55024 and EN1000-6-2

