

Unify OpenScape 4000 V11

OpenScape 4000 Assistant V11

As a hybrid communication solution, OpenScape 4000 V11 provides business process and workflow integration, high availability, security paired with powerful performance and cost-effective unified communications choices for any business.

The OpenScape 4000 is the convergent IP communication platform for companies with 200 to 100,000 employees.

From the proven HiPath 4000, OpenScape 4000 has already sold more than 30 million ports in 80 countries across the globe.

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 net-

works as well as standalone systems.

OpenScape 4000 V11 is designed to offer customers cost-effective communication choices to optimize and secure communications that help enterprises to increase workplace productivity and effectiveness. As a powerful and highly available communications solution, it offers a wide range of endpoints, mobility choices, survivable branch office solutions, redundancy options, open standards and protocols

and interoperability with business-critical applications and systems.

With its built-in Assistant the OpenScape 4000 supports a powerful set of system management applications, that are easy to use and provide extensive capabilities to system administrators.

Coupled with a strong global presence and the availability of a wide range of services, OpenScape 4000 allows enterprises to maintain business continuity and to focus on their own core competencies.

Architecture

Options for every need ...					System Management	
Endpoints	Unify OpenScape Desk Phone CP TDM/HFA/SIP	Unify OpenScape UC App Unify OpenScape Personal Edition Fusion Client	Unify OpenScape Xpert	Unify OpenScape DECT & Unify OpenStage WLAN Phones Analog Phones	Unify OpenScape 4000 Manager / Assistant	
Deployments Architecture	IP Distributed Architecture	EcoServer or VMWare®	OpenScape EcoBranch Enterprise Gateway	SoftGate	Unify OpenScape Fault Management	
Resilience Survivability	(Separated) Duplex	Disaster Recovery	Branch Survivability	Subscriber Redundancy Standby Gateways	Unify OpenScape Accounting	
Mobility	Unify OpenScape Cordless Enterprise	Unify OpenScape Cordless IP	Unify OpenScape UC Mobile	Unify Phone	Unify OpenScape Deployment Service	
Applications	Unified Communications	Unify OpenScape Xpressions	Unify OpenScape Contact Center	Unify OpenScape Alarm Response	Unify OpenScape Endpoint Management	
Open Interfaces	Based on open standards and public interfaces: SIP, SOAP/XML, SNMP, QSIG, CSTA and TAPI				Unify OpenScape Common Management Portal User Management	

OpenScape 4000 Assistant: Flexible, reliable, scalable and open

Flexible, reliable and scalable

OpenScape 4000 offers an ideal solution for an enterprise communications infrastructure – regardless of size and location requirements. With its modularity, the availability of scalable Access Points, pure software-based branches, plus powerful networking options it provides a perfect solution for seamless expansion and can be integrated in any IP infrastructure.

Deployments / Call control

OpenScape 4000 offers the following deployment options:

- *OpenScape EcoServer*
- *OpenScape EcoBranch*
- *VMware®*
- *Proxmox / KVM*
- *MS Hyper V*
- *Nutanix*

The first generation OpenScape 4000 EcoServer and OpenScape 4000 Branch will continue to be supported, but will no longer be marketed.

A maximum of 12,000 subscribers can be supported per OpenScape 4000. Configurations with up to 100,000 users can be implemented without difficulty in networked sys-

tems, supporting converged IP requirements involving applications with a large number of analog and TDM devices, DECT applications, or specialized industry sector applications.

The EcoServer, Unify's own call control server in a 19" housing, supports up to 15 directly connected Access Points (AP3700 Host Shelves) plus 83 IP-distributed Access Points.

The virtual solution offers the same high scalability as the EcoServer hardware.

Resilience / Redundancy

The modular structure of OpenScape 4000 also enables cost-effective resilience solutions.

The EcoServer is the high available central control unit with redundant power supplies, SSDs and redundant LAN interfaces.

OpenScape 4000 duplex options for EcoServer or virtual deployment enable complete redundancy for call control, CSTA application connectivity and administration, even in geo separated locations. Disaster Recovery and survivability func-

tionality for all branch concepts complete the solution.

Access Points

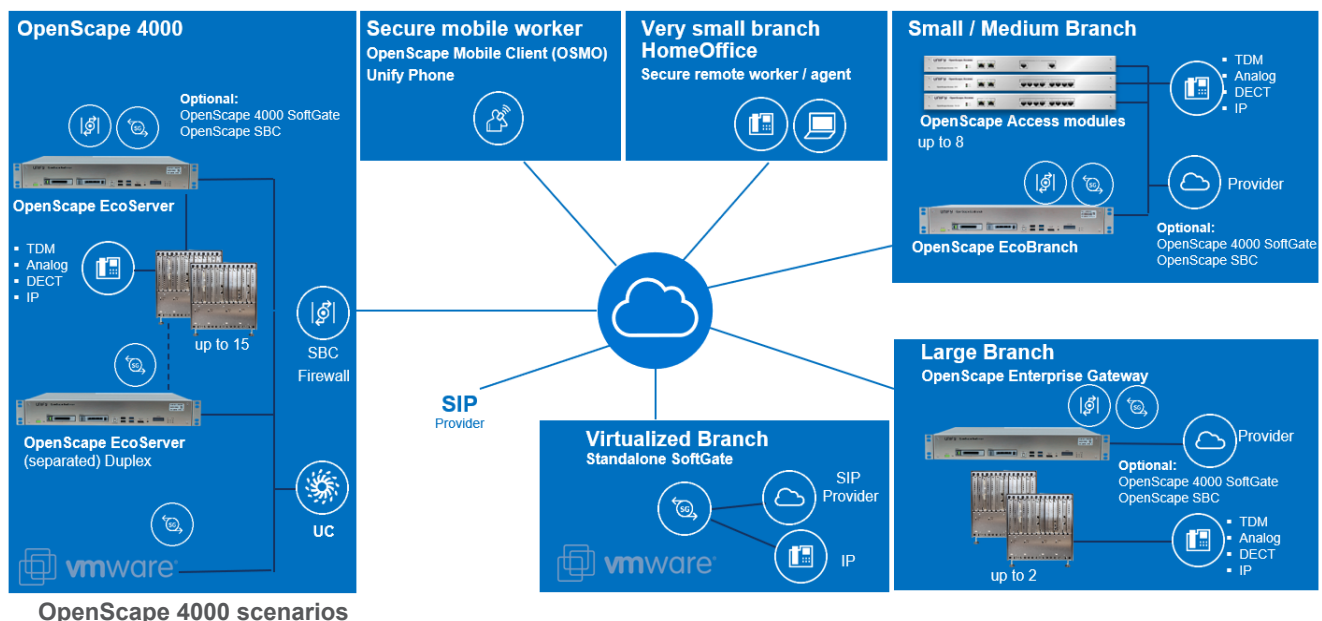
Various Access Points are available to meet every customer requirement.

The AP3700 with 13 slots for subscriber or trunk cards connects directly to the EcoServer and is ideal to hold a large number of analog/TDM devices or trunk connections or to connect DECT base stations. The 19" housing of the AP3700 can easily be integrated into the customer infrastructure.

The older AP3300 with 16 slots and a width of 30 inches is still supported by the OpenScape 4000 V11 but is not available for new sales.

IP Distributed Access Points

For each application we're able to offer an appropriate branch solution; either the OpenScape Enterprise Gateway, OpenScape EcoBranch, or the pure software based OpenScape 4000 SoftGate application.



OpenScape Enterprise Gateway

OpenScape Enterprise Gateway is the preferred solution for larger branches with the need to connect a high number of legacy devices or trunks (analog, TDM) or to deploy larger classical DECT installations.

Since the hardware of the OpenScape Enterprise Gateway is based on the AP3700, AP3700 IP or even the AP3300 IP all subscriber and trunk cards as for the host system can be used and moved and exchanged in the network if required.

The EcoServer serves as control unit for the OpenScape Enterprise Gateway and provides further functionality like branch survivability. The OpenScape Enterprise Gateway can serve at max. 2 AP3700 (IP) shelves.

OpenScape EcoBranch OpenScape Access Modules

Offering redundant AC or DC power supplies and redundant SSD drives OpenScape EcoBranch is a high performance EcoServer-based solution for small to midsized branches, which can also be deployed as a autonomous OpenScape 4000 system.

Up to eight OpenScape Access modules can be connected to an OpenScape EcoBranch. This flexible and stackable 19"-solution provides connection to analog/TDM devices or trunk connections or to DECT base stations.

OpenScape 4000 SoftGate application

The OpenScape 4000 SoftGate application provides cost-effective VoIP functionalities with reliable branch survivability options and easy IT integration in the OpenScape 4000 solution and management suite. The software provides full feature access for IP endpoints with the comprehensive HFA protocol (HiPath Feature Access) and SIP connectivity for trunking and subscribers.

This software-based branch solution can either run as virtualized solution on hardware or on the EcoServer, OpenScape EcoBranch or OpenScape Enterprise Gateway. OpenScape 4000 SoftGates can also be installed on both EcoServers of a Duplex system.

Any OpenScape 4000 SoftGate site integrates seamlessly in the communication system and network like any IPDA Access Point in terms of features and administration.

Standby Gateway

To reduce any impact from a defective board, it is possible to configure a standby board within the same OpenScape 4000 system that takes over the HG3500 board functionality completely.

Gatekeeper Redundancy for IP subscriber

Gatekeeper redundancy is a SoftGate-based functionality to enhance the availability of VoIP clients and devices in the event of a connection loss between SoftGate and host system, a hardware failure of the SoftGate server or an error at SoftGate application level.

Access Point Emergency (APE) for IP branches

The Access Point Emergency (APE) functionality for IP Distributed Access Points is another important building block to guarantee the high availability of the overall solution and can be used as standard with every system.

With APE, branch survivability (Warm-Standby) is ensured in the event of a failure of the host system or an outage of the WAN connection to the host system.

Session Border Controller

The software based OpenScape Session Border Controller (SBC) can be activated in a Linux Container on either the EcoServer, the OpenScape Enterprise Gateway or the OpenScape EcoBranch. Designed specifically to address security and interoperability issues of SIP-based VoIP traffic, OpenScape SBC is architected for SIP trunking termination from multiple Service Providers, makes teleworker and contact center home agent deployment scenarios easy and cost-effective.

Software and features

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

Licensing

OpenScape 4000 V11 requires the following subscriber licenses in addition to a basic license for the respective platform:

- *Standard licenses:*
This category comprises analog devices, TDM/UP0-based devices, Cordless Enterprise (DECT Base Stations), and ISDN/S0 devices.
- *Flex licenses:*
This category can be used for all devices, including IP-based devices.

If several devices/clients are assigned to a subscriber under one main number, the first device requires a Flex license and all others (up to 3) each, a Standard license, regardless of the technology.

No licenses are required for trunk lines

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*
- *Integrated FlexRouting for Contact Center*
- *Flexible configuration of local tones and announcements per branch office*
- *Branch survivability*
- *Gatekeeper redundancy for HFA and SIP 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*
- *Integration of SIP-based video endpoints*
- *Emergency calling*
- *Multi-Level Precedence and Preemption (MLPP)*

User features

- *Number redial*
- *Speed dialing system/individual*
- *Name key*
- *Call journal*
- *Alternate*
- *Call transfer*
- *Call deflection*
- *Return call*
- *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 – Parallel ringing*
- *Charge display*
- *... and much more*

Networking features

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

OpenScape 4000 also enables the creation and operation of efficient, homogeneous and economical global communication networks.

OpenScape Networking can be performed via IP or ISDN – always with the full CorNet-NQ feature set.

SIP-Q based IP networking offers extensive features in any networking scenario between OpenScape 4000, OpenScape Voice or OpenScape Business.

In homogeneous OpenScape 4000 networks SIP-Q is being used to tunnel all CorNet-NQ features.

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

- *Central administration with Open-Scape 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 call-back no answer*
- *SIP trunking networking via IPv4 and IPv6 networks*
- *SIP trunking to certified providers*
- *Optimized use of the enterprise network through Least Cost Routing (LCR) guarantees the cheapest route, based on time at different operators, central administration of all LCR data with OpenScape 4000 Manager, local and network-wide administration of all outgoing, incoming and internal connections*

VoIP gateways

IP Gateway functionalities for seamless migration to VoIP infrastructure are available with HG 3500 peripheral cards in the OpenScape 4000 Host Shelves or Access Points, or with virtual software-based vHG 3500 in the OpenScape 4000 SoftGate application.

The VoIP gateways offer:

- *HiPath Feature Access (HFA) for IP Endpoints, such as OpenScape DeskPhone CP, older IP endpoints or AC-Win SL*
- *SIP-Q trunking for connections to OpenScape 4000, OpenScape Voice and OpenScape Business*
- *Native SIP subscriber interface for SIP applications, such as OpenScape Xpert. WLAN handsets or the OpenScape. This interface also supports redundancy.*
- *Native SIP trunking to connect to SIP service providers or 3rd-party systems or applications, like Microsoft Teams or Cisco CUCM*
- *Signaling and Payload encryption based on TLS and SRTP*
- *Up to 120 simultaneous connections*
- *Simultaneous use of multiple functions, e.g. subscribers and trunking on the same board*
- *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*
- *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 offers on top:

- *IPv6 networking links to OpenScape 4000 communication server*
- *IPv6 support for SIP-Q trunking and native SIP trunking*
- *OpenScape 4000 SoftGate Load-balancer for native SIP trunking for large deployments (more than 120 channels) with OpenScape UC conferencing server and SIP service provider.*

Management

OpenScape 4000 Assistant



The OpenScape 4000 Assistant is an integrated management application with a web-based user interface for single systems and enables an administrator to carry out all necessary administration tasks. An intuitive graphical user interface and comprehensive online help make it easy to familiarize yourself with the system and perform daily routine tasks. Comment fields with plain text descriptions also make it easier to use technical parameters. Regardless of whether subscribers move or phone numbers are changed, whether trunks or boards need to be configured, the OpenScape 4000 Assistant supports you in this as well as in the maintenance of personal data.

Predefined sample configurations can be easily assigned to new subscribers. The OpenScape 4000 Assistant also supports you with system diagnostics and troubleshooting. With the help of OpenScape Administration, the system can be easily backed up and restored if necessary.

The following functions are available:

OpenScape 4000 Assistant functionalities:

- *Configuration Management*
- *Collecting Agent*
- *Performance Management*
- *Software Management*
- *Logging & Tracing*
- *Alarming*

Configuration Management

Configuration Management enables efficient and comprehensive configuration of the entire OpenScape 4000 system. This includes the administration of subscriber lines (TDM, IP and cordless telephones), the setup of central office trunks and the management of personal information (subscriber, company, location).

Individual key layouts as well as line and trunk configurations can be managed easily and securely. The user-friendly graphical user interface with extensive logical checks and numerous help options supports the user in making the necessary changes simply, efficiently and economically. Up to 85% of administrative tasks can be carried out using the Windows-oriented graphical user interface. Additional configuration tasks can be carried out in expert mode through the direct use of operational commands. Subscriber Administration is used to administer all properties assigned to a subscriber line.

- *Subscriber data (name, display text etc.)*
- *Classes of service*
- *Feature Set*
- *Group relations*
- *Subscriber lines*
- *Device parameters*
- *Key layout on terminals*

Mass changes can be conveniently made in tabular form. This includes values such as:

- *Subscriber classes of service*
- *Default key assignment*
- *Routing tables*
- *Spreadsheets for speed-dialing number destinations*

Collecting Agent

The Collecting Agent collects all call data records from a OpenScape 4000 system, filters them and makes them available to other applications as individual files. Call data recording refers to Enhanced Call Data Records (CDRe), which in addition to calculating call charges, also provides the Performance Management with necessary information.

Performance Management

Performance management is based on the evaluation of call data records and provides statistical analysis for the utilization of lines or trunk groups, the call behavior of subscribers and hunt groups, as well as the utilization of attendant consoles and attendant console groups.

Software Management

Software Management is the component that takes care of the provision and distribution of software for several areas. This includes the device software for TDM- and IP phones, software packages for the gateways and OpenScape 4000 system itself as well as the distribution of certificates.

The creation of automatic, time-controlled backups (and restore) of configuration data and software are also part of the software management tasks.

Logging & Tracing

Logging Management provides a logging service for applications running on the OpenScape 4000 platform that stores all error and activity events. These can be, for example, activities on a system on a specific

day or errors send by an application.

Extensive tracing options allow the recording of diagnostic data for specific use cases or components, which are summarized in so-called profiles.

Alarming

The alarm configurator is used to set up and manage a wide variety of events, e.g. for specific components, subscribers or lines.

The SNMP proxy agent converts alarm and error messages from the OpenScape 4000 into standard SNMP messages and forwards them to an umbrella management system.

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 Fault Management (FM)*
- *OpenScape Accounting Management (HiPath AM)*
- *OpenScape User Management as part of Common Management Platform CMP*

OpenScape Deployment Service

The OpenScape 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.

OpenScape Endpoint Management (OSEM)

OpenScape Endpoint Management is a new, powerful application integrated into OpenScape 4000 V11 for our customers and partners to manage and maintain IP phones. It can be used as an alternative to DLS and provides support from initial installation to decommissioning of IP phones.

Desktop productivity

Regardless of which technology you use today or will use in future: Unify always offers the appropriate devices.

OpenScape 4000 V11 supports the following IP and TDM device families:

- *OpenScape DeskPhone CP HFA, SIP & TDM*
- *OpenScape Desk Phone IP HFA*
- *OpenStage HFA & TDM*

- *optiPoint 4x0/600 HFA*
- *optiPoint 500/600 TDM*
- *OpenScape WLAN Phone WL4*

When using the newest IP based OpenScape DeskPhone CP devices, OpenScape 4000 will automatically update the pre-installed SIP Software to HFA, depending on the user configuration.

SoftClients

OpenScape UC WebRTC

VoIP and UC client with audio, video and screen share support and integration with Microsoft Teams.

Available as a desktop app or browser-based.

OpenScape Personal Edition

OpenScape Personal Edition is IP-based softphone that can be used with OpenScape 4000, either with HFA or SIP. It offers the option of integrating corporate directories and personal call lists via LDAP.

OpenScape Fusion Client

OpenScape Fusion Client is the standard UC client for voice and video telephony, based on SIP, which integrates UC functionality into business applications.

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.

Attendant Console (AC-Win SL)

The attendant console AC-Win SL is a PC-based application for Microsoft Windows 8, 10 that permits the convenient traffic management by live attendants, using a USB headset/handset. AC-Win SL can be used with two or twelve queues. The PC-based attendant console is connected to the OpenScape 4000 via IP/HFA.

Busy Lamp Field (BLF-Win)

The Busy Lamp Field BLF-Win is an application for the PC-based attendant console, AC-Win SL. 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)

The Directory Service DS-Win is a telephone directory application for the AC-Win SL to increase the efficiency and the communication quality.

Display Telephone Book (DTB)

Display Telephone Book is an OpenScape 4000 integrated application to provide directory and call log features for TDM and HFA desktop phones, as well as cordless DECT devices. The user can look up names in a central directory or in his personal directory.

OpenScape 4000 Phone Services

The following OpenScape 4000 integrated phone services provide a set of features to increase workplace productivity:

- *EasyLookup: Simple access to the corporate directory via LDAPS*
- *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 HFA/TDM desktop phone 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/TDM 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 Cordless IP

OpenScape Cordless IP is the DECT over IP solution for pure IP and hybrid platforms. This enables the customer also to use the competitive DECT handset portfolio on all Unify platforms. Unlike the long-established OpenScape Cordless Enterprise solution, the DECT over IP base stations used in the OpenScape Cordless IP V2 solution are connected to the LAN.

DECT Handsets

A high degree of flexibility and mobility makes the OpenScape DECT Phone S6, SL6 and R6 handsets for office environments, and the OpenStage M3 / M3 Ex handsets for industrial environments to favorites among the cordless telephones. The handsets offer excellent digital speech quality, a high degree of immunity to eaves-dropping, and a long range (up to 50 meters indoors and up to 300 meters outdoors).

OpenScape Contact Center

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

OpenScape 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, OpenScape 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.

Unified Communications

OpenScape UC

OpenScape 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*
- *Softphone functionality*
- *A 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 with Voice, Video, Screensharing and Remote Desktop Control*
- *Guest access to conferences*
- *Provide Web Browser video and audio communication by support of WebRTC.*

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.

OpenScape Xpressions

The OpenScape 4000 delivers cost-effective choices in unified messaging functionality. These unified communications options coupled with CTI services help embed powerful communications capability directly into business processes creating an efficient and effective workplace.

Alarming and Positioning

OpenScape Alarm Response Professional

OpenScape Alarm Response Professional (OScAR-Pro) is a powerful system for flexible alerting and communication solutions.

OScAR-Pro reliably distributes information and alerts in connection with emergency calls, malfunctions and other triggers and supports efficient crisis communication as well as everyday business processes.

The solution offers a wide range of applications to allow the implementation of individual and highly complex scenarios.

- *Broadcasting / Alerting-Pro*
- *Personal Security-Pro*
- *Conferences-Pro*
- *Info-Telephone-Pro*
- *Call-Profiles-Pro*
- *Intelligent Calls-Pro/alerting with serial interface*

OpenScape Alarm Response Economy

OpenScape Alarm Response Economy (OScAR Eco) V5 is the ideal mini server for alarms for law 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. OScAR-Eco raises alarms with information on the cause, thus guaranteeing fastest mobilization of support staff and service technicians.

Upgrade/Conversion to OpenScape 4000

Migrating and Upgrading

Older HiPath and OpenScape 4000 systems can be migrated and upgraded to V11. Upgrade licenses are available for systems from HiPath 4000 V2 on.

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 fixes, 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.

Software Support

The Software Support (co-delivery) provides remote support and software upgrade entitlement to updates and future releases in a fused offering with options that are simple to buy, manage and renew. Customer investment is protected by the combination of technical assistance, software updates and upgrades and access to comprehensive online resources.

Co-delivery allows Partners with Master and Professional specializations to leverage Unify's support capability within their own service offering to customers. This required support experience includes Level 2 maintenance & support, an Expert Assistance hotline for certified technicians covering dedicated products, and software license upgrade entitlement included for a complete, industry standard software support package.

Software Support (Resale) from Unify provides comprehensive, flexible support services for Partner resale to their customers. Packages include software support with SLA options for specific customer needs priced as a percentage of software, so it is simple to buy, manage and renew. Customer investments are protected by the combination of technical assistance, software updates and upgrades and access to comprehensive online resources.

Resale allows Partners with Authorized, Master or Professional specializations to leverage Unify's support capabilities including Level 1, 2 and 3 remote support, software license upgrade entitlement and options for a complete yet flexible industry standard support offering.

System interfaces

Trunks

- *Native SIP (SIP service provider)*
- *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)*

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/Open-Scape platforms with SIP-Q protocol*
- *Native SIP trunking for IP interoperability with third-party technology partners*

User interfaces

- *U_{P0/E}*
- *Two-wire interface for connecting TDM telephones and Cordless Enterprise Base Stations*
- *HiPath Feature Access (HFA) for HFA/IP endpoints, e.g. Open-Scape DeskPhone CP*
- *SIP for IP Endpoints, e.g. Open-Scape Xpert or OpenScape WLAN Phone WL4*
- *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 phases	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 EcoBranch	482.6 x 66.7 x 360 (1.5 U)	max. 7 kg
OpenScape EcoServer	482.6 x 66.7 x 360 (1.5 U)	max. 7 kg
OpenScape AP 3700	482.6 x 445 x 433 (10 U)	Without cards and power supply: 15 kg Fully assembled: max. 36 kg
OpenScape Access Modules	482.6 x 44 x 360 (1 U)	max. 3.8 kg

Product Compliance

Safety	IEC 62368-1, EN 62368-1, CSA/UL 62368-1, IEC 60950-1
EMC Emission	CISPR 32 Class B, EN 55032 Class B, FCC 47 CFR Part 15, Subpart B, Class B, ICES-003, Class B

Technical details

OpenScape EcoServer OpenScape EcoBranch	<ul style="list-style-type: none">• <i>CPU: AMD EPYC 3151</i>• <i>DRAM: 16 GB with ECC</i>• <i>SSD: 240 GByte</i>
Power supply	Input: <ul style="list-style-type: none">• <i>AC: 100 V to 240 V</i>• <i>DC: - 48 V</i>• <i>Hot plug is supported</i>• <i>Mixed power supplies as redundancy option</i>
Energy consumption OpenScape EcoServer (with OpenScape 4000 software)	<ul style="list-style-type: none">• <i>Power consumption in standby: approx. 35W</i>• <i>Power consumption in operation: approx. 37W</i>• <i>Maximum power consumption: 120W</i>
Energy consumption OpenScape EcoBranch (with OpenScape 4000 software)	<ul style="list-style-type: none">• <i>Power consumption in standby: approx. 39W</i>• <i>Power consumption in operation: approx. 43W</i>• <i>Maximum power consumption: 120W</i>
Environmental conditions	<ul style="list-style-type: none">• <i>Operating temperature: 0 °C to +40 °C</i>• <i>Storage/transport temperature: -20 °C to +70 °C</i>• <i>Relative humidity: 10 % to 95 %; non condensing</i>• <i>Sound pressure level: <45 dB(A)</i>• <i>Waste heat: approx. 50 °C</i> <i>(at an ambient temperature of 40 °C, CPU@TDP)</i>