Atos Unify OpenScape 4000 V10 Brief Overview

OpenScape 4000 V10

OpenScape 4000 provides hybrid IP communication solutions for companies with 300 up to 100.000 users in a corporate communication network. The solution offers the maturity and broad range of enterprise-grade features with a high reliable SW-architecture and security functionalities. It combines the advantages of both worlds with networking, with carrier access and the flexible connection of analog, TDM- and IP-phones, mobile WLAN- and DECT devices and soft clients.

OpenScape 4000 is designed to offer customers powerful and cost-effective choices to optimize communications that help enterprises to increase workplace productivity and effectiveness. As a powerful communications solution it offers a rich set of endpoints, mobility choices, unified communications and standards-based integration with business-critical applications and systems. It ties this capability together with its built-in Assistant application and a powerful set of management applications that are easy to use and provide comprehensive capabilities to system administrators as an additional option. Coupled with Unify's strong global presence and partner network and the availability of a wide range of services it allows enterprises to maintain business continuity and to focus on their core competencies.

Customer Benefits

OpenScape 4000 provides a highly competitive solution in the Large Enterprise Converged Communication System market. A distributed system architecture that combines VoIP and TDM, the OpenScape 4000 platform lets enterprise customers gradually migrate from classical circuit-to packet-based telephony. The highly scalable platform supports a wide range of handsets (analog, digital/TDM, IP and cordless), soft clients and several communications applications that are likewise supported by other Unify systems. The built-in SIP capabilities of OpenScape 4000 facilitate to operate as a gateway for OpenScape Voice, allowing customers to retain existing infrastructure investments when they migrate to pure SIP-based voice networks. The diversity of OpenScape 4000 components carrying the OpenScape 4000 SoftGate marks the base of the deployment flexibility and remote site survivability. OpenScape Contact Center and OpenScape Unified Communications complement the solution by providing access to an advanced set of functions matched by few other vendors.

OpenScape 4000 enables companies to operate their networks flexible, modular, secure, economically and with the greatest possible availability.

Flexibility

- Flexible workplace deployments
- Easy and flexible business expansion through easy scalability using SoftGate, OpenScape 4000 Branch / EcoBranch with corresponding Access Modules and the OpenScape Enterprise Gateway with the possibility to re-use existing subscriber or trunk interfaces/boards
- Flexible and uncomplicated user-oriented licensing concept
- Easy migration options from OpenScape 4000 to OpenScape Voice or vice versa (OpenPath) offer the customer a high degree of flexibility, planning reliability and investment protection
- SIP Trunking to Service Providers reduces the costs for traditional interfaces and provides a greater flexibility



Cost-effectiveness

- Reduced administration cost due to the advantage of IP endpoints (can be moved easily) and IP distributed architecture (single system and single admin when changing networked systems to pure IPDA systems)
- OpenScape 4000 SoftGate, OpenScape 4000 Branch/EcoBranch and OpenScape Enterprise Gateway as cost-effective and survivable branch offices
- Powerful SoftGate application with virtual gateways lead to lower hardware invest, with the chance to further reduce rack space
- Full integration into the existing IT infrastructure: Standard 19" deployment
- No need to buy additional hardware when using the OpenScape SBC: Software can be operated on EcoServer, Branch / EcoBranch and Enterprise Gateway
- Ability to use VMware® virtualization for OpenScape 4000 Call Control and OpenScape 4000 SoftGate
- Reduced TCO through integrated management application (OpenScape 4000 Assistant)
- Increased productivity by integration of 3rd party applications through open standards like CSTA
- Lower CO₂ footprint through reduced power consumption of server hardware and IP devices

Reliability and Security

- Business continuity through high reliability for main system in combination with branch resilience
- Comprehensive feature set for branch survivability with signaling and payload survivability
- Hot-Standby Duplex option for the main call control even for geo separated locations
- Warm-Standby redundancy for application connectivity and management interfaces
- Proven End-to-End Security for VoIP Calls
- Secure Networking within OpenScape 4000, OpenScape Business and OpenScape Voice deployments

Why upgrade

Customers using systems from HiPath 4000 V1.0 on can obtain upgrade licenses to the latest OpenScape 4000 V10 and benefit from a bunch of new features and a highly secure platform. Whilst OpenScape 4000 V10 consists of a lot of new SIP subscriber and SIP trunk features to support the trend towards a completely IP/SIP based solution there's always a need to keep the system software up to date regarding security functions. In parallel more insecure technologies were removed.

The SIP trunk enhancements include a better support of emergency calls in distributed architectures and the provision of geo location information together with outgoing emergency calls to comply with TR Notruf 2.0 in Germany.

Communicating by telephone is still vital to the success of today's enterprises. Whether conversing with colleagues or talking to customers, speech is still at the heart of business communication. With the introduction of OpenScape 4000 V10 the new TDM devices OpenScape Desk Phone CP200T and 400T are supported. Customers can now mix the OpenScape Desk Phone CP series phones in TDM and IP.

Adding OpenScape Unified Communications makes team communication even more effective and brings traditional telephony in Team Communication. Numerous enhancements in standard call scenarios as well as the support of WebRTC both improve the user experience and add an additional mobility option. Finally, serviceability improvements allow easier and faster system upgrades and a faster and more effective error analysis.

What's new in OpenScape 4000 V10

OpenScape 4000 V10 consists of many individual improvements and enhancements.

In summary:

Video support

- Support of video connections using OpenScape UC's Fusion client or WebRTC capability.
- Interworking with video room systems including SIP URI dialing (Poly).

Devices support

• Support of the new TDM devices OpenScape Desk Phone CP200T and CP400T

SIP trunk and SIP subscriber enhancements

- TR Notruf 2.0 (relevant for Germany): Geo location information will be provided on outgoing SIP trunks -> Postal Address
- Monitoring of the availability of configured SIP trunks with alarming
- Measures to avoid loops between OpenScape 4000 and SIP Provider ("History Info" RFC7044)
- Suppression of the "Caller Name" on incoming calls (on SIP trunks)
- Hunt Group support for Fusion client
- Remote Activation of Night Station: Allows SIP Devices / OpenScape Xpert to switch over the night service allocation to another terminal
- The feature Directed Call Park is now available for SIP Devices / OpenScape Xpert. It can be used to park a call to a designated extension anywhere within the network, whether the extension is idle or busy
- Support of multiple DDI ranges on a single trunk
- Duplex OpenScape 4000 with onboard SoftGates improves handling of multiple IP Service Providers

Security improvements

- Secure and efficient transport layer encryption by using TLS 1.3 on the admin interface
- For security reasons, TLS 1.0, H.235 and certificates based on the MD5 algorithm are no longer supported. Consequently, TLS clients which don't support at minimum TLS 1.2 (e.g. AC-Win V2 and Optipoint 4x0/600 phones) can no longer connect using Signaling and Payload encryption.

Serviceability

 Simplified hardware exchange / conversion when upgrading to V10 using Recovery ISO Image (RISO), allowing more efficient and quicker upgrades and reducing system downtime

- Make use of the improved upgrade concept (available since V7R1), which can be used from remote and which does not require a new generation of the system
- Autodetection of OpenScape Access Modules and presentation in Web Based Management
- Permanent (default) trace capabilities for RMX/Call Processing and gateways (STMIX and SoftGate), speeding up the process of analyzing faults and providing error corrections
- SIEL-ID shown in Assistant/Manager
- Activation of Fix Releases and Minor Releases within V10 is allowed during contract validity period defined by Total Care, SWA or SSP. A new license has been introduced which contains the "contract end" date provided by central contract database
- Download of announcement / .wav file from vSLMA for backup and replication purposes
- Automatic system software download via Internet SWS. More efficient and quicker process to keep the software always up to date.

Investment protection

 Migration of AP3300-IP (30" shelf) to Enterprise Gateway, in addition to already released AP3700

19" shelves

(Note: 30" HW components are in the phase-out process. The supply of spare parts is only possible for a short time. So, this migration option must be used wisely; only where no alternative solution with current components is feasible)

OpenScape 4000 Manager

• Enhanced multitenancy functionality in the Configuration Management of the OpenScape 4000 Manager to support further use cases Admins of a specific tenant only have access to the data of users belonging to the same tenant

Simplified marketing structure

- No license in V10 required any longer for:
 - AP Emergency
 - Signaling Survivability
- Otherwise basically, keeping the user-oriented marketing structure from Version 8:
 - TDM licenses (TDM, a/b, ISDN, Cordless, PSM, PSE)
 - Flex licenses for IP users (incl. 50 Flex User Starter Package)
 - No licenses needed for trunks
 - System Base License (Duplex license if required)
 - Survivable SoftGate Base License
- Simplification of upgrade licenses since order codes for older versions were condensed
- Upgrade licenses to V10 are available for systems from HiPath 4000 V1.0 on
- Partial upgrades of HiPath 4000 V1.0-5.0 are only allowed once per system

Miscellaneous

- New OpenScape EcoServer and EcoBranch (decoupled release, see separate Sales Circular)
- Enterprise Gateway: Number of DTMF sender/receiver increased from 4 to 12

- Enterprise Gateway: Support of two shelves per EcoServer
- The feature Virtual Numbering (VNR) has been enhanced, so that it's now possible (as an option) to display a phone number consisting of node code plus station number within one virtual node. This allows to extend the maximum length of an extension number to allow up to 12 digits internal numbering (previously only 6 digits were allowed).
- Creation of a recovery hard disk for the Standby EcoServer in a Duplex Deployment via SoftRAID
- OpenScape DeskPhone CP600 HFA can be used as a hands-free unit for mobile devices via Bluetooth. Functionality is already part of the HFA devices software
- Not OpenScape 4000 V10 related, but the new OpenScape DeskPhone CP600 HFA V1R4 now integrates Unified Communications functionality. E.g. a user can now set his "Preferred Device" from his desk phone.
- Improved handling of Attendant intercepts in a multi-tenant switch
- Access from DeskPhone CP400/600/700 HFA to OpenScape 4000's directory

Discontinued components

• The optiset E TDM phones will no longer work with OpenScape 4000 V10 These phones can be either replaced with the new Desk Phone CP TDM models or a change to the

CP IP phones can be considered

Remark: The PNTE, which has been used to convert U_{POE} into S_0 is still supported by V10

• The cPCI architecture will not be supported any longer (reaching M5 milestone in June 2020).

Existing DSCXL2/2+ processors in the host system need to be replaced by an EcoServer and AP Emergency units/cassettes in 19" IPDA shelves need to be converted into an Enterprise Gateway If the APE functionality should be retained

- STMI2 gateways need to be replaced either with an STMIX or with a SoftGate. Using
 virtual gateways via the SoftGate application is the more future oriented and costeffective way. Especially when replacing older TDM phones with new IP phones the
 usage of a SoftGate, which runs on all new OpenScape 4000 HW platforms, as well as a
 virtualized SoftGate, can significantly reduce the number of HW-boards (SLMO, STMI)
 in the shelves
- All other HW / boards being officially supported by OpenScape 4000 V8 will also be supported with V10
- Advance notice:

V10R0 fully supports the OpenScape Access 500a/i as mentioned above. Starting with the introduction of V10R1 (estimated in H2 2021) the variants with 4GB RAM will not be supported any longer. In this case an OpenScape EcoBranch will replace the OpenScape Access 500.

This only affects the first samples of the OpenScape Access 500a/i. The changeover in production to 8GB RAM took place in December 2012.

What's new in OpenScape 4000 V10 Feature Pack 2021

Improved UC attractiveness

- Multiple improvement regarding GUI and logging of names and numbers in OpenScape UC. The following call features are affected:
- Callback, Call Transfer and Single Step Call Transfer in all call situations, Call Forwarding • WebRTC support in cooperation with OpenScape UC
- This is a Basic Call including video and screen sharing support but without call features. Call features will be added with version 10 R1.

- Present dialable numbers and the respective names of Hunt Groups, DNIT, Attendant Groups.
- OpenScape UC V10 R3 is required for a full feature support.

Interworking with Microsoft Teams using OpenScape SBC

 OpenScape 4000 offers native SIP trunking capabilities to connect to Microsoft Teams using OpenScape SBC V10. Supported Features include: Basic Call, CLIP/CLIR, Hold / Retrieve, Toggle after consultation, Transfer (attended/blind), Conference, Call forwarding, Send/receive DTMF tones

Phone access to OpenScape 4000 directory information

- CP 400, CP 600 and CP 700 in their HFA SW variant support this via their built-in WSI interface
- OpenScape 4000 synchronizes its directory with its Assistant and the OpenScape 4000 Manager
- STMIX or SoftGate required. The older STMI boards do not support this feature.
- The phones will retrieve names from the incoming number information unless already provided. Users can search the directory to initiate normal calls as well as consultation calls.
- Any other phone type must continue to use the internal DTB.

Improved Attendant intercepts

• In OpenScape 4000 deployments with multiple tenants, intercepts will only be made if the tenant has an attendant. Otherwise, the call will remain at the current destination.

OScAR

- Depending on configuration, Speaker call will be directed to the UC Preferred Device instead of the physical device.
- Speaker call also for UFIP devices, e.g. OSMO

Internal DTB

• Available in French language

Kari's law support

- Send notification anytime an emergency number was dialed
- Specific HISTA message

Email client for notification of error and warning (HISTA) messages

• Selected error and warning messages will be sent to predefined email destination

Serviceability enhancements

- Allow import of classic STMI backup data to STMIX
- GUI for license import on OpenScape Enterprise Gateway

What's new in OpenScape 4000 V10 R1

Security

- Operating System upgrade to SLES 15 SP3 Any OpenScape Access 500 must have 8GB RAM. Older boxes with only 4GB RAM must be replaced by an OpenScape 4000 Branch.
- Replace Oracle Java with OpenWebStart

• Support ECDSA ciphers and certificate

OpenScape Enterprise Gateway

- Supporting two shelves
 - Mix of AP3700 and AP3700 IP

Improved OpenScape UC attractiveness

- Interworking with 3rd party video conferencing systems (Poly room systems) PSR required
- Additional features for Browser based communication (WebRTC): Consultation, Hold & Toggle, Transfer, Conference, Hunt Groups, Pickup Group

Serviceability

- Move subscribers directly from one IP board to another
- Download a Recovery ISO image to your Admin PC
- Support of Google Chrome, Microsoft Edge and Mozilla Firefox

Interworking with Microsoft Teams using OpenScape SBC

• Support emergency calls from MS teams users.

Support next generation phone family

- Support of OpenScape Desk Phone CP110.
- The other members of the phone family will be supported as soon as they are released. Please also consult the release notes.

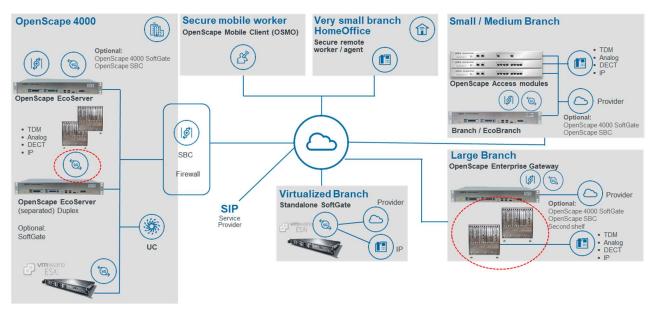
iDTB enhancements

- iDTB to integrate in external LDAP services
- iDTB to include a Company Name and prefix List When this feature is active, names will only be resolved if the user's prefix matches the caller's prefix providing a multi-tenant behavior.

Miscellaneous

- Improve interworking with 3^{rd} party systems \rightarrow Transparent transport of SIP response codes
- Internal BLF-Win integrated with OpenScape 4000 Manager to provide network wide status information. Any external BLF-Win server is therefore obsolete.
- Support applications to toggle calls on SIP devices: Added CSTA Alternate Call Service
- Automatically update names on phone's digital name keys after a subscriber's name was changed by administrators
- Improved support for service teams: Present Public Name & Number (i.e., the team's name and number) instead of name & number of the team members
- Allow early Speech path switching to provide announcements from external devices.
- Improved keep-alive test for SIP devices for an earlier recognition of Out-Of-Service conditions.
- Number of source groups increased to 255 to support more sophisticated routing
- Usage of KNDEF PD replaces usage of Digit Prefix Allow KNDEF node assignments to Hunt Groups and DNIT (Directory Number Information and Translation, ACD, site specific modification of calling party numbers)
- SoftGate can be installed on both EcoServer2 of a Duplex system. This helps in resolving redundant SIP Service Provider requirements.
- Verification that the following applications run on Windows 11: AC-Win, BLF-Win, DS-Win, CAP Server, HiPath 4000 Expert Access (aka ComWin), Message Doctor, CA-Tool

Configuration Overview



Target Group

Companies, customers and partners with the following requirements/characteristics are the primary target group to create customized solutions based on OpenScape 4000:

- Companies with the need to deploy and operate large, scalable and robust hybrid communication systems or networks with up to 100.000 users
- Whenever there is a need to connect a huge variety of devices and interfaces, like analog, 2-wire TDM/U_{P0} or ISDN devices
- Companies that want to equip large areas or many employees with a Cordless / DECT solution, who would like to have the choice between a variety of powerful cordless devices
- In the first place, of course, existing Unify customers with the ability to protect their investment by upgrading existing HiPath or OpenScape systems according to their needs. This could include a change of the overall system/network architecture to a pure IP solution based on OpenScape 4000
- Customers who do not want to innovate their telephony solution in one step but stepwise, for example by replacing older devices or system components with more modern approaches, e.g. soft clients, or virtual gateways
- Also new customers could directly start with a pure IP deployment and benefit from the great variety of OpenScape 4000 features and functions with the ability to connect lots of different devices and applications
- Customers with complex requirements when it comes to integrating multiple locations (branch offices, home offices, mobile workers, etc.) that can be distributed worldwide
- Customers who need to integrate and operate different manufacturers and solutions in one network thanks to the availability of standard interfaces and protocols
- Customers who would like to add value to their existing solution in order to meet the needs of the users, for example by adding Unified Communications

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Let's start a discussion together



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