OpenScape Contact Center Enterprise V9 (R3)

Helping organizations engage across many communication channels, simply and efficiently, to improve business decisions at a reduced cost.

OpenScape™ Contact Center® is an omni-channel integrated contact center solution designed to improve engagement at a very competitive price. It advances an organization’s ability to more effectively deploy agent and supervisor resources, as well as providing new ways of handling interactions. It also improves engagement with vendors and partners, and expands ecosystem options with a modern REST SDK.

OpenScape Contact Center delivers intelligent routing for a mid-to-large contact center, with up to 1,500 active agents on a single site. Multiple OpenScape Contact Center servers can be networked across physical or virtual sites for increased scalability of up to 7,500 active agents. Whether using inbound or outbound interactions, single-site or multi-site, or even if you want to integrate with your existing CRM system, OpenScape Contact Center Enterprise provides the capabilities you need for your contact center. You can:

• Achieve first-contact resolution with intelligent multi-platform routing and 360 degree contextual engagement view;
• Improve interaction handling efficiency with intuitive, multi-channel agent desktops;
• Streamline contact center operations with powerful management tools;
• Deploy easily with modular growth and scalability.

OpenScape Contact Center V9R3 improves on earlier releases of V9 (R0, R1 and R2) by

• Reducing costs, improving Agent utilization with expanded chat bot/virtual agent support Integration with choice of AI providers
• Improved operational efficiency with Agent Portal Web expanded features such as support for Email, LDAP and 360° view
• Future proof, enhanced ecosystem access with REST APIs
• Expanded IT policy compliance with Windows Server 2016 support
• Improved handover success through presence awareness with UC/CC co-existence on OpenScape 4000
• Security enhancements - improved and secure password management (use of NIST and OWASP recommended mechanism to handle passwords)
• Unify platform support: OpenScape Voice V9R3, OpenScape 4000 V8R1, OpenScape Business V2 and OpenScape UC V9R3

For managers, the OpenScape Contact Center Enterprise Manager application offers next-generation visualization tools for contact center engagement management and reporting. This enables supervisors and administrators to reach optimum contact-center performance.

Multi-channel presence and collaboration tools can extend engagement to experts, decision makers and knowledgeable workers across the organization, as well as across off-site locations. OpenScape Contact Center Enterprise’s modularity and support for both traditional and IP-telephony, including SIP, provide investment protection and accelerated ROI. Whether the contact center is centralized, or users are distributed across diverse locations, departments or functions, OpenScape Contact Center Enterprise is designed to help improve your business operations and finances.

Support for Chat Bots

The Chat Bot (or Virtual Agent) is able to understand what a customer types, discern their intent, respond in a conversational manner, act on the customer’s behalf, and help extend their self-service options

Benefits include:

• Live agents can focus on more valuable customer relationship activities as chatbots can now assist customers with self-service support
• Reducing average handling times for agent-assisted support by handling some of the initial conversations with contacts;
• Expanding self-service options to some of the newer technologies, such as social media;
• Driving new revenue through improved online sales conversion;
• Leverage Artificial Intelligence capabilities with integration to vendors via the Chat Bot API interface.

In OSCC V9 R2 support for text-based communication for contacts originating only from the OSCC Open Media interface (for example Social Media – Facebook) was released. NLP (Natural Language Processing) capability was provided by integration with Google Cloud AI.
In OSCC V9 R3 support is extended to include the following:

- Provide support for connection/integration with other standard Artificial Intelligence application with Natural Language Processing (NLP).
- Support Web Chat media conversation (on top of Open Media conversation support from OSCC V9 R2)
- Support for multiple Virtual Agent profiles

In V9 R3 support was also extended to support more than one Artificial Intelligence profile per OSCC tenant. This change will allow chatbots to handle multiple areas of interest. For example, a profile can be configured to handle requests related to language (e.g. German or English) or could be used to assign chatbots to handle requests based on a company's departments (e.g. sales, helpdesk or returns).

Support for voice contacts and other media will be provided in future releases.

**Agent Portal client**

The Agent Portal client has two expressions, the Agent Portal (Java) and Agent Portal Web. The Agent Portal (Java) is Java based while the Agent Portal Web is a browser-based client both with same user-friendly graphic interface.

The Agent Portal Web is designed to meet demand for browser-based clients and was released in OSCC V9 R2 with support for voice, callback and web chat. In OSCC V9 R3 the Agent Portal Web capabilities is extended to include support for Email, LDAP (lightweight directory access protocol) and 360° view feature all delivered at feature parity as the Agent Portal (Java). Support for Open Media communication on the Agent Portal Web is planned for future release.

**Figure 1: Multiple virtual Agent Profiles per tenant**

**Figure 2: Assigning Virtual Agents to a profile**

**Figure 3: Agent Portal Web with queue status view**
REST SDK

The SDK ecosystem is enhanced with release of REST SDK capability. Previous SDK interfaces (based on COM method) will continue to be available in OSCC V9 R3. This new REST interfaces will expand OpenScape Contact Center capability to support current and future SDK integration methods and expose OSCC functionality to custom applications.

The REST SDK released with OSCC V9 R3 includes support for voice (including Events), Agent Presence, Call, Agent and Routing Controls. Support for Email, Callback, Web Collaboration, Social Media and other business process media functionality will be delivered in future releases.

Contact Media Service

The Contact Media Service (CMS) is a replacement for the Call Director SIP Service (CDSS). The CMS is built using Unify’s Media Server application, and is delivered as an appliance running in a Linux Operating system. It includes all current CDSS features with additional improvements.

The following benefits provided with CMS are:

- Reduced cost for ports - cost of media ports will be lower;
- Support for 300 ports (previous CDSS only supported 200 ports);
- Improved security - the CMS includes full TLS/SRTP encryption (for communication with switch) providing secure voice processor communication, and
- Improved configuration and management interface (GUI), making it easier to use;
- Improved patching or update process built into the CMS; this improves serviceability and management;
- Support for additional languages – more than the 6 handled by CDSS. Almost all languages can now be handled by CMS.

Figure 4: Agent Portal (java) with an active voice

Figure 5: Agent Portal view showing team list and broadcaster
Unified Communication (UC)/Contact Center (CC) co-existence for OpenScape 4000 switch platform

This feature enables agents to work with both OSCC and UC applications on the same OS 4000 extension. This will enable the use of the preferred device feature, which allows agents to use other telephony end devices (for example their mobile phone or home phone) as their contact center phones.

Improved Communication Features

Internal Chat between Agents and Supervisors

Chat between agents and supervisors can improve agent effectiveness by allowing agents to communicate with both peers and supervisors. Available in the Web Agent and Agent Portal client, this feature makes it easy to find and initiate chat sessions using the speed or team lists capability. The supervisor or manager can manage the use of this feature by enabling or disabling permissions in their configuration menu on the OSCC manager client. This chat feature is available even if the contact center is not licensed for web collaboration. An agent can initiate an internal chat with another agent, even if the peer is engaged on other calls.

“Is Typing”

The web collaboration feature “Is typing” has been implemented to improve the contact handling experience between the contact and the agent. Currently when the agent is chatting with the customer via the Web Collaboration media in OpenScape Contact Center, there is no way of knowing if the other side is typing a new message. While chatting with a customer, an agent will now be informed that the customer is typing. Conversely, the customer will now be informed that the agent is typing. This gives a more natural conversation experience and improves customer satisfaction.
Open Media Framework

The Open Media Framework is designed to integrate media types beyond the standard media available with earlier versions of OpenScape Contact Center. In earlier OSCC releases, customers were limited to pre-defined media types such as Voice, Callback, Email and Web Collaboration. Customers are now demanding features that allow integration of other types of media. Since the OSCC V9 R1, Open Media Framework has enabled the use of other applications like Twitter, Circuit or business solutions (e.g. work ticket systems). The library of licensable preconfigured-connections will continually be added to the framework with subsequent releases.

The Open Media Framework is built on the multi-platform capability of the OpenScape Contact Center. It is seamlessly integrated with our multi-channel capabilities, such as universal queue, routing, viewing, and reporting, which ensures a consistent customer experience across all media. Implementation of an optional 3rd party application for monitoring, filtering, sentiment analysis and aggregation will be supported via Atos/ Customer Services integrators. Access to this framework is enabled via Open Media user and Open Media Connector licenses.

Social Media Integration (Facebook)

Support for social media is built into the Open Media Framework, which contains an ‘out of box’ function for Facebook.

This feature is designed to deliver an omni-channel experience ensuring seamless universal queue management, routing and reporting.

Contact centers will be able to:

- Message the customer’s Facebook account – both through direct message and on timeline;
- Manage a real-time distribution (or routing) of these messages to the contact center universal queues – the same as with any other OSCC media type;
- Increase the agents’ effectiveness through the configuration of this media (as part of the contacts that can be handled using our multi-contact handling capability);

Social Media Integration (Facebook)
• Facilitate reporting – a tight integration of this media type enables seamless reporting, which leads to increased customer satisfaction and business value.
• OSCC clients - the Manager and Web Agent has been updated to enable the Contact Center to handle content published in Facebook as contact information. Filtering and routing based on other keywords (to ensure relevant social conversations) are captured and handled by the Contact Center.

Specification for these social-media-type contacts would include:
• Direct messages to the organization's user or social interaction pages – these will be routed to an agent;
• Ability to monitor posts published on the organization's social media application timeline, and to respond by routing these posts to the agent best suited to handle this;
• Intelligence that allows the contact center to recognize keywords such as brand names, and to route them to an agent. (Facebook mentions (@) can only be monitored if applied to their own company Facebook page).

Routing criteria would include:
• Social Media page /user to which the message is sent or the post is published;
• Message /post originator;
• Error;
• Performance data;
• Categorization;
• Contact Data.

The OpenScape Contact Center Analytics application provides additional features below. These include:
• Statistics Page - Basic statistics output for your sample, by DNIS or Termcode;
• Agent Search Wizard - Search for agents on calls;
• Iconic Ranking - Ranking icons next to calls;
• Chat transcript reports
• CDR Records - Integration of call data records from Unify switch.

With Life of Call you also have the power to:
• Identify frequent callers quickly in order to resolve issues or address abuse
• Validate due diligence inquiries to settle any regulatory issues
• Quality control purposes with inline transcripts of chats and emails
• Visualize call origins, call volumes and other statistics by geography with World Heat Map
• Track Call Journeys including sources other than OSCC, such as IVR or switches

Reporting options add to existing comprehensive reporting capabilities through graphical visualizations, such as the heat map.
Mobility - Mobile Supervisor

The OpenScape Contact Center Supervisor empowers the remote worker with flexibility and mobility on their Apple or Android devices or on a web browser. The supervisor can get information about their contact center via a dashboard view that provides a summary of contact center status, agent and queue view for agent and queue details respectively.

The agent view provides the following features:
- List of logged-on and logged-off agents;
- View agent status;
- View real-time agent status data;
- View agent details;
- Change an agent’s routing state;
- Change groups/skills for agent.

The queue view provides information about:
- List of monitored queues;
- Real-time queue performance details;
- Service level status by colored icons.

The Web Supervisor extends the supervisor’s mobility and access options, providing same features available on the Mobile Supervisor App on an internet browser.

Note: The Web Supervisor is currently supported only on Google Chrome browser.

Contact Center Management

The OpenScape Contact Center management is provided by the Manager Desktop and a new Manager Web. The new Manager Web provides a browser based interface used for configuring virtual Agents and the Artificial Intelligence environment. It is the first step to eventually move all contact center management from the previous Manager desktop to a browser based interface.

The OpenScape Contact Center Enterprise Manager desktop provides a unified and easy-to-use interface for most contact center management tasks. It is a highly visual and easily customizable console, which is organized into ‘work centers’ dedicated to key contact center management tasks, including:
• Administering users and resources;
• Designing intelligent multi-channel, multi-site routing strategies and queue processing flows;
• Defining and viewing real-time monitoring and historical reporting across all channels;
• Creating wallboard views and streaming 'ticker tape' content for agents' desktops.

For multi-tenant environments, the Enterprise Manager is configurable for each tenant sharing the system.

Administration Center
The Administration Center is a convenient interface for the administration of contact center users, user profiles, skills, and virtual groups. Reason codes for work and availability are also configured here.

Using a simple point and click system, managers can assign highly flexible, permission-based profiles to users based on their different roles and functions in the contact center. These profiles can also determine which combination of channels each agent can handle, for example: voice, email, Web, outbound, callback. User templates and optional bulk uploads for multiple users can streamline the management of larger contact centers.

Skills, skill-proficiency levels, and skill preferences can be individually assigned to specific agents. By defining different skill levels to each agent, managers can ensure they maximize the use of the agent's qualifications. Skill-preference levels may reflect user preferences in contact handling, thereby improving agent satisfaction. Alternatively, they can be used to account for a supervisor's preference for the agent to handle a certain type of contact to fulfill training objectives.

Design Center
The Design Center gives managers a visual, workflow-style tool, called the Design Editor for defining routing strategies and queue-processing flows for voice, email and Web interactions. To streamline this process, it offers a library of configurable, and reusable, routing and queue processing components. Managers can then create and edit the flows using a drag-and-drop interface, where strategies are automatically checked and validated for completeness as they are created.
The Design Center offers components that can be used in multi-channel flows, such as:
- Time of day/day of week schedules;
- Source/destination routing decisions;
- Compound multi-site routing criteria;
- Performance level routing decisions;
- Data directed routing decisions;
- Read/write access to external databases;
- Custom components to execute virtually any routine or external application;
- The Create Callback function allows the manager user to use collected data to create a callback as part of the overall workflow processing of the contact;
- E-mail category decisions based on content analysis of the address, thread ID, subject line or body text of incoming e-mails;
- E-mail auto-acknowledgement, auto-response and auto-suggestion;
- Automatic web page and text message push for web collaboration interactions.

Customer calls to find out about the repair status of their car in the dealership

Chooses the option to request repair status for their car from menu prompt

Customer inputs confirmation number of repair order

Determine repair status based on confirmation number through external database lookup

Playback message to the customer indicating the repair status external database lookup

**Figure 19: The Design Center with Call Director – a simple self-service scenario**

Customer calls to stop newspaper delivery for vacation period

Customer inputs home phone number

Option presented to stop newspaper delivery

Number to speech playback of customer selection to confirm

Responses are written to external database indicate customer's requested delivery stop/restart dates

**Figure 20: Design Center with Call Director – simple transactional IVR scenario**

OpenScape Contact Center Call Director

The OpenScape Contact Center Enterprise provides a fully integrated Interactive Voice Response (IVR) system, from a Call Director to front-end incoming voice contacts. The Call Director gathers caller requirements by prompting callers with interactive navigation menus.

Note: In OSCC V9, the OpenScape Contact Center Call Director is the system used for controlling and designing the voice responses. It is managed using the OpenScape Contact Center Manager client application. The Contact Media Service (CMS) is the replacement of the Call Director SIP Service (CDSS) and provides voice processing responses for the system. It is installed on a different machine and has its own user interface for configuration.

The OpenScape Contact Center Call Director is a fully integrated self-service and transactional call processing platform. Managers can use the Design Center's convenient drag-and-drop interface to integrate the following components into routing and queue processing flows:
- Auto-attendant with navigation menu prompts;
- Caller input digit collection;
- Messages and greetings;
- Estimated wait time or position in queue messages;
- Dynamic, multi-format 'numbers-to-speech' playback.

The Call Director can be easily combined with other design center components. For example, it can be used to read from, and write to, external databases. This facilitates basic transactional or self-service applications that would previously have required a more complex and expensive external IVR integration.

Multi-channel Skills-based Routing

The OpenScape Contact Center Enterprise is built on a patented, industry-leading skills-based routing engine that ensures incoming contacts are matched with the best qualified agent on a contact-by-contact basis. Skills-based routing enables your managers to optimize the use of your most valuable contact center resource: your agents. By providing the optimal balance between skill requirements and service levels for each contact, contact center performance targets can be met or even exceeded. Recent improvements now support reservation of a minimum number of multi-skilled agents for critical contacts which is an important requirement for emergency services. With the OpenScape Contact Center Enterprise Skills-based routing option, multi-channel customer interactions are managed and routed through a unified queue. Voice, email, web, social media, outbound contacts, and callback, as well as any other text or non-text-based media channel, are intelligently routed to blended agents, which can give managers fully integrated reporting.
Regardless of channel, the OpenScape Contact Center Enterprise automatically identifies a virtual group of agents who are fully qualified to handle the contact.

Having gathered the requirements for the media channel (for example: voice, email, social media or any supported media), via an interaction through your routing strategy, the skills-based routing engine matches each contact to the best available agent.

To ensure consistent service levels, the virtual group readjusts, depending on the contact queuing time, or as the real-time performance of the contact center dictates.

To meet service level targets, even during times of higher-than-usual incoming traffic, the Performance Routing feature can speed up the pace at which the virtual group is redefined. When the definable real-time performance thresholds are met, the queue steps are automatically accelerated, so that more agents become eligible faster to handle the waiting contacts.

Managers and administrators can optimize this routing depending on which criteria they judge the most important for interaction handling in their contact center environment.

Using predefined skill-scoring schemes, an intuitive interface permits the fine-tuning of the routing paradigm by biasing the weighting of specific parameters (for example: time), choosing either by queue or agent skill preference, which will then influence the routing process.

**Multi-site Networking**

The OpenScape Contact Center Enterprise offers optional multi-site networking to optimize skills-based routing and load balance calls across site locations. This can also provide centralized real-time monitoring, as well as consolidated reporting across all sites.

Multi-site routing strategies are fully integrated into the Design Center, providing flexible compound criteria such as schedules, service levels, and resource availability, as the basis for multi-site call distribution.

**Multi-tenancy**

The OpenScape Contact Center Enterprise multi-tenancy function allows you to create separate business units within your enterprise to securely and independently co-exist on a single contact center system. This tenant self-administration system enables each individual ‘business unit’ to manage its own contact center.

Multi-tenancy is the ideal configuration for managed service providers, outsourcers and distributed multi-business unit enterprises that want the cost savings and increased control of consolidating their call centers in one convenient virtual contact center platform.

**Reporting**

The OpenScape Contact Center Enterprise provides reporting via the OpenScape Contact Center Analytics, including ‘Duration of Call’ reporting (powered by Softcom) by the Report Center in the OpenScape Contact Center Manager.

**Manager Report Center**

The Manager Report Center runs on a customizable, visual reporting engine which can display a virtually unlimited number of real-time, cumulative and historical reports for all channels. The flexible interface makes tailoring specific reports or formats easy, without the need for an external report writer. The Report Center can provide insight into your contact center operations, allowing for better operational monitoring, more effective decision making, and the ability to proactively spot patterns and respond, before problematic issues arise.

**Historical Reporting**

Historical reports can be created quickly simply by pointing and clicking to select data elements and report parameters. Managers can choose from a comprehensive range of statistical values for blended or channel-specific reports, for example by user, group, queue, contact type, or site. The Report Center provides graphical, as well tabular, historical reports. Displaying historical reports in OpenScape Contact Center Enterprise’s Report Viewer allows managers to adjust the report output even after the reports have been run. They can re-order and re-sort content, as well as tailor the level of detail required. Multiple reports can be opened in the Report Viewer concurrently, and are accessible with just one mouse click.

Reports can be viewed on-demand or scheduled to run on a daily, weekly, or monthly basis. Additional output options include email, printing, or content export to Excel, HTML, PDF or text file.
Broadcast Center

The Broadcast Center offers a fully-integrated interface for defining rule-based streaming statistics for wallboards, as well as ticker tape views for the agent desktop or external plasma displays.

With the integrated Broadcaster, real-time statistics and performance data for all channels can be streamed selectively to any agent’s desktop.

Managers can configure rule-based thresholds for wallboard or broadcaster views, to alert agents visually of changes in the operational conditions of the contact center.

Easy-to-define distribution lists for broadcaster views ensure that the relevant data is sent to a selected group of recipients.

Agents – Empowered for improved contact quality

Agents have access to the Agent Portal (java) or the Agent Portal Web client. The OpenScape Contact Center Agent clients provide tools and information for handling multi-channel interactions more efficiently while enhancing customer service experience.

Agent Features include:
- A fresh new look with intuitive, blended desktop for multi-channel contact handling;
- Support for open media connectors (including icons and tooltips for related Open Media items);
- Ease of deployment – the agent’s software will be updated each time it is used;
- Real-time statistics and personal performance data are presented in a single window;
- A 360 degree feature which will enable the entire contact history of a customer to be viewed;
- Contact history is across all channels
- Agents can add individual contact data;

- Unique presence and collaboration tools to drive first-contact resolution;
- A visual ‘Contacts Waiting Indicator’ for all channels;
- Availability status and wrap-up reasons which can be reported on.

Voice Handling (Inbound, Callback, Outbound)

A full set of telephony controls and tools can now streamline the handling of incoming calls. In addition, callback or outbound calls can be created by the agent, after either being generated from a campaign list, or requested by the customer using a web-based interface.

A ‘Create Callback’ component enables managers to use collected data to create a callback as part of a routing strategy or queue-processing flow.

The agent receives a screen pop-up on the desktop which shows customer data and contact details synchronized with the arrival of all interactions.

A built-in interface to third-party or in-house CRM systems can be used to automate customer file retrieval for display on the agent’s screen.
Email Handling

With OpenScape Contact Center Email, the Agent Portal and Agent Desktop clients can offer tools to handle incoming and agent-initiated email interactions in both HTML and Plain Text format. A screen pop-up (figure 24) will be displayed for routed email contacts, which can track internal, as well as external, email forwarding and consultation. This enhances responsiveness and expedites resolution. To further streamline email handling, agents can now receive auto-suggestions based on email subject matter. Alternatively, they can use text modules, choosing from a library of selectable email templates.

The email history tool provides a range of search criteria which can track the progress of interactions and search within existing email threads. This will enable agents and managers to understand the sequence of interactions, leading to a satisfactory resolution. Agents can reach out to customers by initiating new emails. For determining the success of an email campaign or the reactivation of customer relationships, agent-initiated emails and related replies can be tracked and reported on. Information can also be emailed to a caller even while on a call or web collaboration session, improving the quality of customer service, and reducing the need for later follow-up actions by the agent.

Web Collaboration Handling

The OpenScape Contact Center Web Collaboration feature is a fully integrated solution for effectively handling real-time customer dialog online, while leveraging agent clients. With the OpenScape Contact Center Web Collaboration feature you can automatically categorize, route, and queue live web interaction requests. This establishes a session which allows customers and agents to communicate in real-time via web text chat, screen-sharing, or simultaneous voice communication.

To speed up interaction times, the agent can choose text from a stock of ready-made content, as well as linking web pages directly from a selection, so that these items instantly appear in the customer’s browser. This allows the agent to synchronize the customer’s browser to specific content. Each web interaction and transcript will be stored in the server database.

Callback Handling

If your contact center is restricted to handling inbound customers, you may be missing opportunities to enhance customer relationships, as well as getting the full use of your agents. OpenScape Contact Center Callback helps you to fully leverage your contact center investments by providing a blended-agent desktop, which can handle inbound calls and callbacks. This helps optimize agent productivity by providing a more balanced contact volume for agents throughout the day.

If required, your agents can also make sure that customer interactions are followed up on by defining callbacks. A web interface enables your customers to request callbacks at a time convenient for them. OpenScape Contact Center Enterprise also provides built-in functionality to automatically create a callback if a customer has hung up while waiting to speak to an agent.

Outbound Call Handling

With the OpenScape Contact Center Outbound option, managers can automatically import call lists for up to 10,000 outbound calls. Outbound calls are routed to agents according to their skill-set and availability, to pursue campaigns or make one-to-one marketing calls during times of lower incoming traffic. Outbound calls can also be used for customer surveys. Real-time and cumulative views will enable managers to monitor outbound calling activity and campaign status in real-time.

Historical reports for outbound interactions allow for the documentation of outbound campaigns or outcome of customer survey calls.

Unique Presence and Collaboration Tools

To help drive first-contact resolution and responsiveness, agents can use the Team List and Team Bar features to view real-time presence and the availability status of their peers, managers, or even experts, outside the contact center. Available users can be included in a call transfer, consultation, or conference, with just a single mouse click. Detailed presence and availability information is displayed for all channels, so that agents can easily find the right person to collaborate with, as well as being able to resolve voice, email, and web contact issues in real-time.

Using Presence Tools to Drive First-Contact Resolution

The OpenScape Contact Center Enterprise offers unique presence and collaboration tools, which can extend the customer service community even further:

- Agents in the contact center can observe the availability of their peers, experts, and supervisors;
- Home-based agents and users in remote locations will be visible with real-time presence information;
- Experts, decision makers or knowledge workers anywhere in the business can easily be made available when required;
- The availability of business users can automatically be controlled by the system (e.g. by displaying a talking, logged off, available status), or the user can select a ‘specific reason caption’ (in a meeting, at lunch, working on research, etc.)
Beyond the formal contact center, there are many people who may be able to help resolve customer situations: knowledge workers, experts, back office personnel, second level support or account managers. Their availability status may need to be visible to the contact center agents and accessible for collaborating on customer issues or opportunities as they arise.

The agent’s desktop provides the Team Bar and Team List features. These innovative real-time presence and availability tools visually track and display the availability of other users, regardless of their physical location. Even agents in remote locations, such as home-based or roaming agents, are as easy to collaborate with as a colleague located in the next room.

**Evolve to IP with investment protection**

Users in the Team List can be sorted and displayed by job role, department, group or current availability status by field, making the location of the appropriate user easily available.

The optional, non-intrusive Agent desktop provides a streamlined user interface, while still being tied into the routing and communication framework of the contact center. This desktop feature offers ‘soft phone’ productivity tools as well as streaming real-time contact center statistics, and the ability to monitor the presence and availability of other users within the OpenScape Contact Center Enterprise system.

**Contact Center Scenarios Using Presence and Collaboration**

When the need for assistance arises during a customer interaction, the agent can engage the right person on the first attempt.

**Example 1:**
- **Problem:** An important customer has a complex technical question, requiring immediate resolution.
- **Solution:** The answering agent uses the Team List to locate and conference in an available expert at the remote office.

**Example 2:**
- **Problem:** A loyal customer calls the sales team asking for a questionable service charge to be removed from their bill.
- **Solution:** Using the Team Bar, the answering agent quickly identifies an available supervisor on duty, who can authorize the removal of the service charge in real-time.

**Evolve your Contact Center to IP with Investment Protection**

The OpenScape Contact Center Enterprise is designed for traditional (TDM), hybrid, or pure-IP Telephony environments. This enables you to evolve to a completely IP-enabled contact center when you are ready, while protecting your investment with infrastructure independence. OpenScape Contact Center Enterprise’s flexibility in converged environments allows for the deployment of individual IP agents, whenever and wherever needed, independent of their physical location. Due to the power of OpenScape Contact Center Enterprise’s skills-based routing engine, home-based agents, branch offices or remote locations are seamlessly tied into the routing strategies of your contact center. Distributed users can be deployed with IP soft clients or IP phones.

To drive first-contact resolution, mobile solutions with voice over wireless LAN end-user devices can be leveraged to un-tether enterprise users, while still allowing them to collaborate on incoming calls. Presence and availability information for mobile decision makers, subject matter experts, and remote users, will enable your agents to collaborate with any user participating in the virtualized contact center.

**OpenScape Contact Center Enterprise CRM Ready Integrations**

To streamline integration with your CRM systems, OpenScape Contact Center Enterprise offers the following optional CRM integrations:

**CRM Ready Integration for SAP**

The certified integration for SAP ICI provides a single, unified desktop with screen pop-up and CTI functionality, fully integrated into the SAP interface. It enables personalized customer service through automatic customer identification. It also allows intelligent routing of customer voice calls and emails to the best available agent based on skill-set, job role, subject knowledge, customer data, or business rules, from mySAP CRM.

**CRM Ready Integration for Siebel**

The validated OpenScape Contact Center Enterprise integration with Siebel 7.8 provides a unified agent view and desktop with embedded telephony controls. Agents receive a screen pop-up for each incoming customer call. To ensure optimal handling, customer needs are matched to agent qualifications based on OpenScape Contact Center skills-based routing and Siebel business rules.

**Microsoft Dynamics CRM**

Screen pop-ups with Microsoft dynamics CRM are included at no extra cost in OpenScape Contact Center V9. Customer records are identified and retrieved based on caller ID or IVR inputted digits, and automatically forwarded to the agent.

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**Figure 28: Evolve to IP with investment protection**
OpenScape Contact Center Enterprise V9 R3

System Features
• Contact Media Service (voice processor);
• Chat Bot (virtual agent);
• Support for WCAG (2.0 AA) – accessibility for disability. Available only on browser-based clients;
• Single Sign-On Authentication (support for SAML 2);
• Open Media Framework – support for social media platforms such as Facebook (and up to 10 media platforms). Support for non-text media with V9 R2 enhancement;
• OpenScape Contact Center Analytics Life of Call (duration of call) – included in our Base License;
• UC/CC co-existence on OpenScape Voice (OSV & OS 4000);
• Advanced skills-based routing for voice, e-mail, web collaboration, outbound calls, callbacks, and open-media connector media;
• Improved security and serviceability;
• Integrated database;
• Wall-board support;
• CTI integration;
• Multiple language and time-zone support;
• Data management server with configurable retention periods for reporting, e-mail and Web collaboration;
• Supports IP-Telephony, converged or TDM (circuit-switched) platforms;
• LDAP support.

Manager Desktop
• Users, skills, virtual groups, queues, and data source administration;
• Design of contact processing flows, routing strategies, queue processing, and related capabilities for all media platforms;
• Monitoring, reporting, alerts, and notifications, using real-time and historical infographics;
• Rules-based, streaming broadcast capabilities for wall-boards, client desktops, or client-connected plasma displays;
• Telephony platform synchronization and related capabilities.

Web & Mobile Supervisor
• The Web Supervisor provides mobility and browser access with the same features as the Mobile Supervisor;
• The Web Supervisor supports Google Chrome browser. Support for other browsers will be announced at a later date;
• The Mobile Supervisor empowers the remote worker with either Apple or Android device access;
• Provides a quick summary, as well as real-time agent and queue status;
• Accesses more detailed agent status information, and changes routing status of agent;
• Supervisors can add or remove skills in an agent’s profile.

Agent Client (optional)
Web Agent
• Supported on Google Chrome, MS Edge, and Firefox Mozilla browsers*;
• Support for disability Accessibility (WCAG 2.0 AA) *
• Integrated 360° customer view consolidating all channels into one historical catalog;
• Blended multi-channel agent client (incoming voice, email, web, outbound/callback, social media Facebook, Open Media channels [up to 10]);
• Chat between agents and supervisors;
• “Is Typing” chat feature;
• Unique multi-channel presence management and collaboration tools;
• Full desktop telephony controls, plus click-to-dial speed dialed, directory, multi-channel contact log;
• Contact details screen pop-ups;
• Work and availability reason codes;
• Wrap-up codes assigned to queues;
• Visual, channel-specific Contacts Waiting indicator;
• Real-time statistics and personal performance data;
• System tray icon mode;
• Customizable launch pad with ‘cut and paste’ toolbars;
• Optional streamlined Associate desktop;
• Presence integration – show UC status;
• Broadcaster ‘ticker tape’;
• Fully configurable Hot Key support;
• Taskbar – show team;

• Web Collaboration – co-browsing via URL Push*;
• Callback – managing appointments;
• Resend historical e-mail message.
*Agent Portal Web only

OpenScape Contact Center Call Director (optional)
• Integrated IVR;
• Call menu prompting;
• Caller input digit collection;
• Multi-format numbers to speech playback;
• Read/write access to external databases;
• Dynamic passing of call data to agent application;
• Intelligent announcements in queue (e.g. expected wait time);
• Contact Media Service (CMS) supporting up to 300 sessions;
• Full routing design integration.

OpenScape Contact Center Networking (optional)
• Load balancing and call distribution for up to 5 sites (7500 active agents);
• Flexible, multiple distribution criteria;
• Centralized monitoring and reporting;
• Multi-site routing strategies fully integrated into Design Center flows.

OpenScape Contact Center Multi-tenancy (optional)
• Single-license deployment of multiple business unit entities with up to 1,500 active agents on one OSCC server;
• Separate administration and security;
• Separate design and routing;
• Monitoring and reporting;
• Support of multiple time zones;
• Enhanced security permissions for manager and supervisor at the business unit level.

1. Will be delivered in future OpenScape Contact Center releases
OpenScape Contact Center

I. Social Media

• Social media integration (Facebook - out of box);
• Support for Facebook (released with earlier OSCC V9 R1) is built into the Open Media Framework containing an 'out of box' implementation of this social media application;
• This feature is seamlessly integrated into the universal queue management, routing, and reporting, which ensures a multi-platform experience for users.
• Contact centers can handle:
  • Messaging to the customer’s Facebook account – both direct message and on timeline;
  • Real-time viewing of these messages on the Contact Center's universal queues – the same as with any other OSCC media type;
  • Configuration of this media as part of contacts’ record that can be handled using our multi-contact handling capability, thereby increasing agent effectiveness;
  • Reporting – a tight integration of this media type enables seamless reporting that can empower decision-making, which, in turn, can provide increased customer satisfaction and business value;
  • OSCC clients - Manager and Agent Portal have been updated to enable the handling of content published in Facebook as contacts by the Contact Center. Filtering and routing is based on keywords to ensure the relevant social conversations are captured and handled by the contact center.

II. Other Media

• Other text media such as ticket systems can be handled when integrated with Open Media Framework;
• Non-text media support on the Open Media framework such as audio and video media types. The signalling (media negotiation) shall be handled external to OSCC. Connections with applications such as Skype/Microsoft Teams are more easily supported.

Email (optional)

• Automatically analyze, categorize and route incoming email;
• Intelligent auto-acknowledgement, auto-response capabilities;
• Library of configurable text templates;
• Intelligent routing and queuing based on agent skills profile and blended queue;
• Fully integrated into Design Center flows and the Agent Desktop client;
• Support of HTML and Text formats.

Web Collaboration (optional)

• Real-time text chat, linked browsing, and web page forwarding;
• Library of configurable text templates and push URLs;
• Intelligent routing and queuing based on agent skills profile and blended queue;
• Fully integrated in Design Center flows and the Agent Desktop Client.

Callback (optional)

• Blends callbacks with inbound traffic;
• Preview Dialer fully integrated with the Agent Desktop client;
• Agent-initiated and web-requested callbacks;
• Customer-requested callback in routing strategy, or while waiting in queue;
• Automated creation of callback on call termination while in queue;
• Intelligent routing and queuing based on agent skills profile and unified queuing.

Outbound (optional)

• Import of outbound dialing campaigns from externally generated lists;
• Upload up to 10,000 contacts into the campaign manager;
• Intelligent routing and queuing based on agent skills' profile, and blended inbound/outbound queue.

CRM Ready Integrations (optional)

• Pre-built, certified CRM desktop integration with mySAP CRM and SAP ICI;
• Pre-built, validated CRM desktop integration with Siebel.

Software Development Kit (SDK) (optional)

• Updated with new REST API architecture;
• Enables integration with existing or custom application development;
• Exposes OpenScape Contact Center system variables and statistics to other applications for custom integration;
• Enables access to user presence information for custom or third party applets/ons;
• Monitors and exposes agent and channel state information via APIs.

Included feature at no extra cost:

• Pre-built screen pop-up integration for Microsoft Dynamics CRM.

System Capacity

• Defined Users per System: 6000
• Active Agents per System: 1500
• Managers per System: 180
• Maximum number of systems: 5
• Total number of agents across systems: 7500
• Maximum # of Skills: 1000
• Maximum # of Queues: 2000

Software Platform

Server

• Windows Server 2012 Standard Edition
• Windows Server 2012 Datacenter Edition
• Windows Server 2012 R2 Standard Edition
• Windows Server 2012 R2 Datacenter Edition
• Windows Server 2016 Standard Edition
• Windows Server 2016 Datacenter Edition

1. communication platform dependent
2. system configuration dependent
Client
- Windows 7 Professional or Enterprise Edition (32 bit and 64 bit)
- Windows 8 and 8.1 Professional Edition
- Windows 8 and 8.1 Enterprise Edition
- Windows 10 Professional and Enterprise Edition

Virtualization
Support for VMware V5.5, V6 and V6.5

For OpenScape Contact Center Email
- IBM Lotus Domino 8.0, 8.5, 9

For OpenScape Contact Center Web Collaboration
- Microsoft Internet Information Server (IIS) 7.0, 7.5, 8.0, 8.5, 10
- Oracle iPlanet Web Server 7.0
- Apache Tomcat 6.0 on Red Hat Enterprise Linux 6

SAP CRM 7.0 with the SAP ICI interface version 3.07
Note: The support for SAP CRM 4.0, 5.0 and SAP CRM 2007 (6.0) continues unchanged as the interfaces for SAP CRM 7.0 are backwards compatible.
Support for TrendMicro Antivirus.
Java 8 u192 is required for Agent Portal installation.

Server Hardware Platforms
- Two Intel Xeon E5-2609v2, 8GB RAM, 1 TB HD SATA, 1Gbps Ethernet, 16x DVD-ROM, recommended

Standard Pre-Integrations
- Microsoft Dynamics CRM screen pop-ups
- XML interface for Work Force Optimization (e.g. Verint)
- Spectrum Wallboards
- LDAP Directories

Standard Interfaces
- CRM screen pop-up API
- Third party IVR API (HPRI)
- Voice XML, ODBC, SQL
- LDAP
- REST SDK
- Custom function component

Supported Communication Platforms
- OpenScape Business V2
- OpenScape 4000 V7 R2, V8, V8 R1
- OpenScape Voice V7 R1, V8, V8 R1 and V9 (R3 and earlier)

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1. System configuration and load dependent