



Avaya Workforce Optimization Select Overview and Specification

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Chapter 1: Introduction

Purpose

This document describes tested Avaya Workforce Optimization Select characteristics and capabilities, including feature descriptions, interoperability, performance specifications, security and licensing requirements.

This document is intended for people who want to gain a high-level understanding of the features, functions, capacities, and limitations of Avaya Workforce Optimization Select.

Chapter 2: Avaya Workforce Optimization Select overview

Avaya Workforce Optimization Select is a web-based suite of tightly integrated tools designed to enhance and improve all aspects of your contact center operations and performance. The solution is easy to implement, maintain, and manage in a variety of contact center deployment models from centralized contact centers to distributed branches and work-at-home agents.

It offers contact centers the ultimate workforce optimization functionality and flexibility. The comprehensive solution also provides scalable applications that synchronize and unify the entire workforce, regardless of the VoIP architecture.

Features

Avaya Workforce Optimization Select features

Avaya Workforce Optimization Select has sophisticated yet easy-to-use monitoring, recording, quality assurance, reporting, and analytic features. It provides contact center management and agents alike with all the tools necessary to effectively manage the entire agent life cycle process.

Benefits:

- Capture and review interactions, emails, and chat sessions in a secure, service-oriented enterprise portal.
- Reduce operating expenses and liability risks using analytically oriented advanced reporting framework.
- Provide all stakeholders access to valuable analytics through any device.
- Enable the management to identify and address customer and operational issues and opportunities in a timely fashion.
- Adhere to Payment Card Industry (PCI) Standards including encryption, masking, password protection, and audit trails.
- Improve revenue generation by identifying up-sell and cross-sell opportunities.

The features and functionality of Avaya Workforce Optimization Select are distributed across the following modules:

- Live Monitoring
- Interactions
- Evaluate
- Learn
- Coach
- Analyze
- Speech
- Reports
- Administration
- Workforce Management/ WFM (Optional module)
- Desktop Monitor (Optional module)

Live Monitoring

With the Live Monitoring module, supervisors and managers can silently monitor real-time interactions of agents to assess and measure agent performance. Supervisors or managers can then identify the trouble areas and take immediate steps to ensure customer satisfaction.

Benefits:

- Listen to agent and customer interactions in progress and view real-time agent information and interaction status.
- Respond to and mitigate caller objectives or complaints by providing instant feedback.
- Create different views that define individual search criteria to quickly access the required live interactions for listening.
- Customize various columns to quickly identify important interaction details, such as extension, queue, tenure, call duration, current state, current state duration, and ANI number.
- Allow supervisors to perform QA while monitoring to measure agent performance on aspects like average handling time and adherence to scripts provided by management. Supervisors can also flag an interaction for further evaluation.
- Email an interaction as a link to anyone.
- Record live interactions
- Pause or resume a recording
- Cancel and stop a recording

Interactions overview

With the Interactions module, managers and supervisors can view and manage interactions of the employees that they have access to. During interaction playback, the supervisor or the manager can view details of each segment of an interaction to determine if the call was transferred or put on hold. Employees can also view their own interactions if they have the appropriate permissions.

Benefits:

- Playback recorded interactions including recordings done by an external party, or in a legacy system in the wav-G.711aLaw-mono, wav-G.711aLaw-stereo, wav-G.711uLaw-stereo, wav-G.711uLaw-mono, wav-PCM-stereo, wav-PCM-mono, wav-G.711-uLaw-stereo, wav-G.726-stereo, wav-G.726-mono, wav G.729-mono, mp4-H.264-stereo, mp4-H.264-mono, m4a-AAC-stereo, and m4a-AAC-mono audio formats.
- Create different views to define search criteria and quickly access the interactions that you want to frequently view and listen.
- Create adhoc interactions to listen to an interaction series, voice or non-voice, between a customer and the employees of an organization. You can either create interactions by importing from an external source or group a series of interactions to form composite interactions. Composite interactions can be a combination of system interactions, imported interactions or both. The supported formats for uploading adhoc interactions are: .wav, .m4a, .mpeg-4, and .mp3.
- Add comments to a recorded interaction especially when the supervisor wants to provide important information to the evaluator or reviewer.
- Download a recorded interaction in .wav, .mp4 for audio and screens, and m4a for mp4 audio formats.
- Use existing tags or create one to apply to an interaction. Using tags, supervisors or managers can restrict specific actions on interactions such as downloading or deleting of interactions.
- Customize the Interactions page with columns to quickly identify important interaction details. For example: The columns could be interaction start time, interaction end time, duration, who ended the interaction whether the customer or the agent, number of holds, number of transfers, and hold duration.
- Get a visual depiction of the conversation graphs that provide quick identification of problem areas such as crosstalk or elevated voices.
- View all interaction segments such as conference, transfers, and caller experience details.

You can create, edit, and delete adhoc interactions only if you have the permission to manage adhoc interactions. For more information about permissions and privileges, contact your system administrator.

Adhoc Interactions overview

Using adhoc interactions, you can import interactions, both voice and non-voice. You also have the flexibility to use a series of related interactions to create a composite interaction that depict an end-to-end customer journey.

Benefits:

- Import both voice and non-voice interactions to create an adhoc interaction.
- Build a composite interaction adding the existing imported interactions, system interactions, or both. You can add up to 15 interactions to form a composite interaction.
- Playback and evaluate the different adhoc interactions.
- Use the information to create a context from a series of interactions of a particular customer with possibly different employees of an organization.
- Add comments to an adhoc interaction if the evaluator wants to provide important information to another evaluator or reviewer.
- Upload an adhoc interaction in WAV, MP4, and M4a formats.
- Use existing tags or create one to apply to an adhoc interaction. Using tags, evaluators can restrict specific actions on interactions such as downloading or mailing of interactions.

Evaluate overview

With the Evaluate module, supervisors and managers can evaluate agent performance and also view the coaching assignments assigned to them. Contact center agents can use this module to raise an appeal if they want clarification about an evaluation.

Benefits:

- Define evaluation forms with flexible criteria and scoring for tracking the quality of an interaction.
- Define quality plans so that interactions get automatically distributed for evaluation.
- View conversation graph and screen shots when performing evaluation.
- Insert text annotations in reviews.
- Calibrate evaluators by evaluating multiple users for a single interaction to maintain consistent quality criteria.
- Enable agents to add their feedback to the evaluation and raise an appeal.
- Assign quizzes or courses to users based on their scores.

Analyze overview

Using the Analyze module, a user with the appropriate permissions can create scorecards and metric views to measure and analyze the performance of employees, departments, roles, and sites in an organization.

Using Analyze module you can:

- Measure the performance of employees from raw transaction data, such as the number of interactions handled, total talk time, or number of coachings taken.
- Define metrics that determine the criteria to measure performance. You can use a variety of sources to define a comprehensive metric library that align with your business processes and strategic organizational goals.
- Generate time-based scorecards to get a snap shot of the overall performance of employees, departments, roles, or sites.

Features of the Analyze module

- Measures: For more information see, [Measures overview](#) on page 12.
- Metrics: For more information see, [Metrics overview](#) on page 12.
- Scorecards: For more information see, [Scorecards overview](#) on page 13.

Measures overview

A measure is the raw transaction data associated with an employee. For example, the number of interactions handled, the total talk time, the number of evaluations completed, or the hold time of an interaction. You can view the measures in read-only mode. All measures are calculated and stored on a daily basis. You can use one or more measures to create custom metrics, which is further used in metric views and scorecards for analyzing the performance of an employee, a role, a department, and a site.

Measures are categorized under the following Avaya Workforce Optimization Select modules:

- Interactions
- Evaluate
- Coach
- Learn

Apart from these categories, some measures are also categorized under WFM as a part of Teleopti WFM integration.

Metrics overview

Metrics are performance indicators. The Analyze module provides a predefined set of system metrics. You can also create custom metrics based on your specific business needs. If you want to give importance to a metrics that drives performance improvements, you can flag the metric as a Key Performance Indicator (KPI) in the system. One or more metrics are used to build scorecards for assessing the performance of an employee, role, department, or site in an organization over a period of time. As a part of integration with Teleopti WFM, both the predefined and custom metrics are divided into two sets.

Avaya Workforce Optimization Select system metrics

- Interactions Handled
- Average Quiz score

- Coachings Taken
- Average Talk Time
- Average QA score
- Coachings Delivered
- Average Handle Time

WFM system metrics

- Availability
- Occupancy
- Adherence
- Attendance

Custom metrics

Custom metrics are created from the following sources:

- **Measures:** One or more measures are used as the source to create a custom metric. You can tie multiple measures by a formula that defines how the system must calculate the custom metric. For example, to calculate the average talk time for employees, you choose the Total Talk Time measure and the Number of Interactions measure, and specify Average as the formula.
- **Derived:** An existing metric is used as the source to create a custom metric. You can specify an aggregation and a formula to define how the custom metric is calculated.
- **Data Entry:** Manual data entries are used as the source to create a custom metric. You can add values for a metric for a specific period of time. You can define an aggregation to specify whether you want the system to calculate the sum, average, minimum, or maximum range of the values that you enter. For example, you might want to create a custom metric where you manually enter values for the number of interactions or evaluations completed by all departments every quarter. In this case, you must use Data Entry as the metric source, define the time period as quarterly, and aggregation as Average.
- **External Import:** External data is imported in a specified template to create a custom metric. For example, if you are using an HR system to track the attendance of employees, you can use External Import as the metric source to import that data as a custom metric. Depending on the parameters that you define for the custom metric, the system provides a template, which you can download to enter values for the custom metric and import the same into the system.

*** Note:**

You cannot delete a custom metric if it is used in any metric view or is a part of a scorecard.

Scorecards overview

Scorecards are statistical templates that are used for deriving performance data by using various metrics . Scorecards provide a systematic approach to measure, monitor, and act upon the different metrics in a contact center environment. These metrics are used by supervisors and managers to track and manage the performance of employees. You can build a scorecard at role, department, employee, or site level by adding metrics to analyze the performance during a specific period within your organization .

Depending on the kind of performance scorecard report you want to generate, you can build customized scorecards by using various filters. You can build time-based scorecards by associating one or more metrics, adding categories to group multiple metrics, and defining grades. The grades are defined at the metric level, category level, and at the scorecard level based on your specific requirements. The grading level in scorecards is used only for the purpose of grouping metrics.

Scorecards can be divided into two types depending on their views:

- Scorecard view: To generate reports for generic performance measurement based on employee, role, department, and site.
- Performance view: To view the relative performance of an employee at role and department levels. For example, using a performance scorecard, you can view the top or bottom performers in a department.

Speech overview

With the Speech module, you can precisely search and analyze recorded interactions based on the keywords and phrases from the actual conversations between agents and customers. A third-party transcription engine transforms audio recordings into actionable assets by producing search-optimized text output from a single or multi-speaker audio file. A dedicated SpeechMiddleware service acts as a liaison between the user interface, database, and the speech engine. Phrase, Interaction, and Employee selection criteria act as user inputs. The SpeechMiddleware service fetches the interactions and parses these inputs to the speech engine.

When the user performs a speech search, the request is stored in the database. The master SpeechMiddleware service assigns a speech service (node) to every request depending on the available nodes. The node then picks the request, fetches the corresponding interactions, and stores the interactions separately for further processing. Each speech service has a dedicated Media Manager service that runs on the same machine to provide the physical files when requested. The Media Manager service is mapped to a storage location from where the service downloads the interaction.

The speech engine transcribes the interaction and stores the transcript against that interaction in the database. After the speech engine transcribes the last interaction in the speech request, the speech service searches for phrase sets and phrases occurred in the interaction, and stores the phrases.

*** Note:**

The speech engine does not process an interaction that is already transcribed. The installation of the speech engine on a different server ensures that there are enough system resources available all the time. You can install multiple speech services. If the interaction volume is large, the master speech service automatically shares the interaction load between the available nodes..

Coach module

With the Coach module, supervisors and managers can take advantage of an automated framework for building personalized agent training programs using quality and performance data. The alerts and reports in Avaya Workforce Optimization Select ensure follow-up is done on time.

Benefits:

- Address coaching needs of an agent by identifying areas of focus and define parameters to specify skills and reasons for coaching.
- Build a coaching plan to define the number of coaching sessions agents need to complete within a specified period.
- Create task-oriented action plans in the form of coachings and assign them to agents to improve specific areas. Coachings are usually Instructor Led Training (ILT) sessions that are tracked in Avaya Workforce Optimization Select. Supervisors and managers can also link coachings to e-Learning courses and quizzes.

As a result, supervisors can generate relevant summary reports to view a snapshot of all the accepted and completed coachings in the system.

Learn overview

With the Learn module, contact centers can put knowledge in the hands of those who need it, when they need it the most. Contact centers can have better trained, motivated, and empowered agents, resulting in improved customer satisfaction, retention, advocacy, and profitability.

Benefits:

- Upload videos, slide presentations, and other courseware to assign to selected employees.
- Attach a quiz with randomization of questions for courses to help improve agent efficiency.

Reports overview

With the Reports module, contact centers executives can gain insight into how the organization as a whole is performing. Supervisors and managers can use this module to generate different types of reports for getting access to statistics around individual or team performance.

Benefits:

- Use predefined set of report templates for each module. Supervisors and managers can get a consolidated report on interaction and evaluation summary, details, and trend. Administrators can generate appropriate reports on user privileges, voice configuration options, and web application access and user activity.
- Generate report outputs in various formats such as PDF, Excel, HTML, and CSV.
- Schedule reports to run automatically at a specified time.

- Share reports with selected employees or groups, or all employees.
- Assign intuitive titles in the report output.

Adhoc reports overview

Using adhoc reports, a user can access, and generate reports in the following modules of Avaya Workforce Optimization Select view criteria.

- Interactions
- Evaluate
- Learn
- Coach

Adhoc reports are ideal for users who do not have access to the Reports module or who want to use the comprehensive view criteria to generate a report.

Each module contains a Reports tab from where you can access the adhoc reports. You can also access these reports from the Reports module from the Adhoc Reports tab. The adhoc reports data in any interface is specific to the module in which it is placed. For example, the Reports tab in the Interaction module contains only those reports that are generated using Interaction View.

Using adhoc reports, you can:

- View the data generated by using Views in the respective modules.
- Edit the adhoc reports depending on your business needs.
- Select and generate any report and view the reports in the Results screen of the Reports module.
- Schedule the adhoc reports based on user preferences by providing email options.
- Export the data from the adhoc reports to Excel and PDF formats and print, email, or download the files for future use.
- Share the reports with selected employees or with everyone. • Delete and run the reports in the respective modules without navigating to the Reports module.

Administration overview

With the Administration module, an administrator or anyone with administrative privileges can create and update system configuration information for employees.

Benefits:

- Create a placeholder to mirror the organizational structure using Sites, Organization Units, Departments, and Roles. This simplifies administration and reduces cost.
- Create employee profiles with the Employee feature and associate employees with sites, organization units, departments, and roles. The provision to configure voice settings to decide what interactions must be recorded for employees.
- Use Queues to configure support channels for voice, email, and chat. Set threshold values for business rules, such as average handle time, number of holds, and hold duration. Alerts are triggered when the employee crosses the threshold value.

- Configure settings such as recording rules and recording filters to apply to employees globally. Define multiple recording rules for employees based on departments, organization units, sites, agent ID, extension, and other filters.
- Create heterogeneous groups of employees using the Groups feature associating them with different operations and business processes within the organization.
- Manage storage of contact center data across multiple physical locations using the Storage Manager feature.
- Provide optimal security by configuring password policies and defining privileges.

Group-level privileges overview

Using the group-level privileges feature, you can restrict an employee's access to selected groups. For example, if a user has the privilege to manage comments for interactions, the administrator can restrict him from managing comments for a particular group. By default, the privileges defined for an employee cascade to all the groups that the employee has access to. You can also modify group-level privileges of the groups that the employee has access to. The group privileges can only be same or less than the overall privileges defined for an employee. When you modify a permission at the employee level, the same cascades down to the group level too. Group-level privileges are module specific. Each permission defines one or more actions that a user can perform for a given module. With view permissions, users can only view an object. However, with manage permissions, users can view, add, edit, and delete a particular object in the system. You can either select the group-level privileges based on individual modules or you can select all the modules at one go. For more information, see *Administering Avaya Workforce Optimization Select*.

Dashboard overview

Using Dashboard, you can see real-time widgets of important functions in Avaya Workforce Optimization Select. Currently, you can add six placeholders for widgets on your Dashboard that include the following categories:


- **Favorites**
- **Reports**
- **Scorecards**

Apart from these categories, you can also embed external links into Dashboard.

You can also see the live interactions of a logged-in user with the recording controls available for the respective interactions. From the Dashboard recording widget, you can get direct access to the recording controls. Depending on your user privileges, you can use these indicators to do the following:

- Start recording a live interaction.
- Pause or resume a recording.
- Stop a recording.
- Cancel a recording.

You can access the screen:

- From the **Dashboard** tab on the Avaya Workforce Optimization Select Home page.
- From the  icon in the header next to the username and notification icons.

You can opt to have Dashboard as your default Home page depending on the permissions assigned to you by the administrator. Based on the need of the organization, an administrator can also make Dashboard the default landing page for a user.

Notifications overview

With the Notifications feature, users can receive real-time alerts and notices for predefined contact center conditions, both mission-critical and informational. Based on the Avaya Workforce Optimization Select modules purchased, users can subscribe to alerts for managing and controlling contact center activities. Users can also specify whether these alerts and notices must appear in the notification inbox or sent through email. The notifications inform users about issues or situations that require immediate attention or notify them about general information on interactions.

Notifications can be system generated or created by supervisors and managers as custom messages to users that they have access to.

Benefits for supervisors and managers:

- Assess and measure employee performance to improve customer satisfaction.
- Send custom notices to employees that supervisors have access to, apart from system-generated alerts.
- Broadcast messages to users through email or have messages delivered to the notification inbox. Supervisors can broadcast messages as an alert or a notice and also send a custom message to members in the team.
- Send notifications during live monitoring of interactions to provide instant email feedback to the employee.

Benefits for contact center agents:

- Receive notices about general feedback or information during live interactions.
- Receive notifications on quizzes and courseware assigned by the respective supervisor and manager.

Workforce Management overview

Workforce Management (WFM) is an optional application that is a part of the integration of Avaya Workforce Optimization Select with Teleopti. Avaya Workforce Optimization Select integrates with WFM at the data or reporting level, and users can log in by using a single sign-on for both applications.

Benefits:

- Leverage an advanced forecast algorithm to accurately forecast and optimize staffing for the day, week, month, quarter, season, or the year across all interaction channels.
- Generate staff schedules that consider agents' skill sets, work schedules, and preferences such as working hours to plan the most efficient staffing schedule for the needs of customers and the overall business.
- Monitor agent adherence to schedules and send alarms to supervisors when non-compliance occurs.
- Adjust schedules with drag-and-drop capabilities based on real-time agent status.
- Track Key Performance Indicators (KPIs) and agent scorecards for metrics such as absenteeism and adherence.

As a part of Teleopti WFM integration with Avaya Workforce Optimization Select, the WFM schedule reports are available as a widget in Dashboard. The WFM dashboard displays the logged in user schedule and the team schedule for supervisors and managers in the Schedule widget.

Desktop Monitor overview

Desktop Monitor is a client-server solution to capture and monitor employee desktops and identify the quality of employees' daily interactions. The solution provides access to customer information from native and web-based applications. No additional programming or customization is required.

Desktop Monitor operates in two modes:

- **Monitoring mode:** The mode running on desktops of employees who are attending to voice and non-voice interactions in the contact center. This is the default mode.
- **Learning mode:** The mode installed on the supervisor or manager's desktop for monitoring interactions of employees. When Learning Console is started, the monitoring mode automatically changes to the learning mode.

Benefits

- Enables PCI compliance and security during event monitoring.
- Monitors web and native applications for compliance and adherence.
- Improves business processes, workflow, and rules.
- Identifies and measures training requirement for employees.
- Enhances organizational productivity with constant monitoring and recommending related coaching requirements.

Features

- An easy-to-use, browser-based interface to configure the projects that require monitoring.
- Automatic detection of confidential data, such as credit card details, and masking of the information for optimal security.

- Real time availability of user actions, events, triggers, and navigations.
- Integration with third-party applications, such as a Workforce Management tool.

Multitenancy support overview

The Avaya Workforce Optimization Select hosted solution provides multi-tenancy capabilities to support multiple database instances for each web tenant. Avaya Workforce Optimization Select uses the master database to store common data, and you can associate tenants to a database instance.

The components such as web, recorder, adapters, and other utilities, connect to the hosted or master database to fetch the tenant information from the `Hosted_Tenant` and `Hosted_Databases` tables. Tenant information includes tenant name, status, tenant database server IP address, database name, and database password. Depending on the status column in the `Hosted_Tenant` table, agent information is loaded from the tenant database only if the tenant status is active. Agent information includes agent extension, agent peripheral ID, and security keys for encryption and decryption.

For newly added tenants, the components check the tenant status in the `Hosted_Tenant` table at regular intervals. The tenant and agent information is accordingly loaded for the newly added active tenants. If the tenant status is changed from active to inactive, the agent information such as agent extension and peripheral ID is not loaded by the components. However, when the tenant status is changed from inactive to active, the agent information is loaded by all the components.

Multiplicity overview

Multiplicity is defined as the ability of an agent to handle multiple concurrent contacts, improving the customer experience and enhancing agent productivity and efficiency. Avaya Workforce Optimization Select supports multi-channel communication such as voice, email, and chat. With multiplicity, a single agent may have multiple data records describing the current agent status. For example, each contact being worked concurrently by the agent will have a record. In addition, if the agent has not yet reached their multiplicity limit(s), the agent record for that agent may indicate the agent is also available for additional work assignment.

Avaya Workforce Optimization Select supports multiplicity in the following deployment scenarios:

- Avaya Aura® Contact Center on Communication Manager
- Avaya Contact Center Select on IP Office 10.x
- Avaya Oceana® Solution on Communication Manager with Call Center Elite

 **Note:**

You can configure multiplicity in the Voice Settings page of the Administrator module of the Avaya Workforce Optimization Select application. For more information on how to configure multiplicity, see *Administering Avaya Workforce Optimization Select*.

System Management Service overview

The System Management Service (SMS) is a web service API that fetches the Station Security Code from Communication Manager through the AES server. Avaya Workforce Optimization Select uses the station security code to monitor an extension and record calls for Multiple Registrations. Avaya adapter fetches the station password from Communication Manager and updates the password in the respective extension in the Avaya Workforce Optimization Select tenant database. For Single Step Conference, as the recording device is different from the actual agent extension, Avaya Workforce Optimization Select uses the same password for the stations in Communication Manager.

Avaya adapter sends an alert when the registration fails due to security code denial. Avaya adapter then fetches the security code for that extension from Communication Manager and updates the same in the database.

Avaya Workforce Optimization Select supports the SMS feature only for Call Center Elite on Communication Manager deployments.

Consent based recording

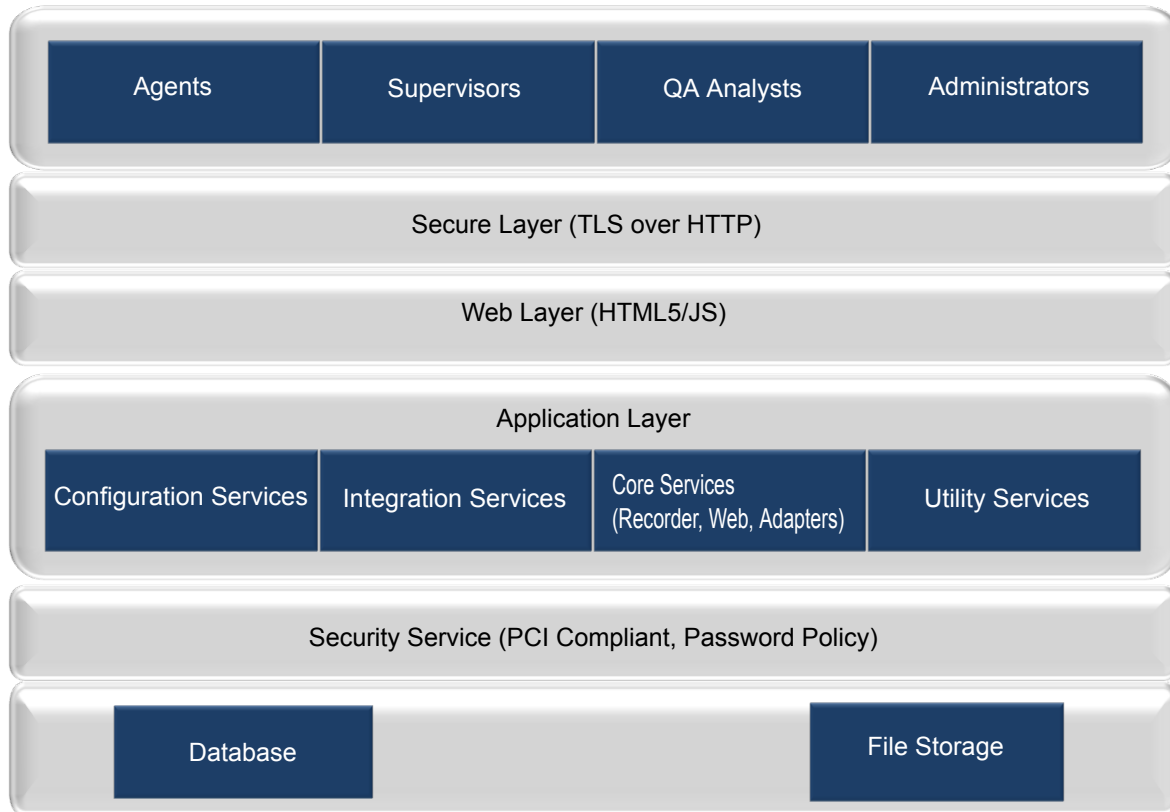
Avaya Workforce Optimization Select supports recording based on customer and/or agent consent. You can configure call vectoring commands in Communication Manager that allows the caller to enter digits from a touch-tone or an internal rotary phone. An optional announcement is used to request the caller to enter these digits. You can also retrieve Caller Information Forwarding (CINFO) digits from the network.

When a customer makes a call, an IVR is played to receive the consent of the customer. The customer presses the appropriate key to confirm or reject consent for recording the call. The call is then routed to an agent. Once the agent picks the call, Communication Manager sends the consent information to AES adapter through the AES server. The AES adapter sends the consent information to the Recorder. Based on the consent value configured in the recorder, the Recorder records the call or cancels the recording.

Avaya Workforce Optimization Select supports consent based recording only for Call Center Elite on Communication Manager deployments.

Architecture

The Avaya Workforce Optimization Select application contains a suite of critical components to manage the contact center life cycle.



The Avaya Workforce Optimization Select architecture is multitiered consisting of a secure layer, web layer, application layer, and storage layer. The architecture supports:

- Recording and monitoring of transactions for centralized and remote agents using SPAN and an API-driven approach.
- Network storage systems such as direct attached storage (DAS), network attached storage (NAS), and storage area networks (SAN).
- Jasper and SQL reporting framework.

Signaling events

Avaya Workforce Optimization Select supports different Avaya environments for recording interactions. However, the primary requirement for any environment is to capture signaling events. You can successfully trace every interaction if you capture the following signaling events:

- Call signaling events for voice and nonvoice transactions
- Media stream events

- Automatic Call Distribution (ACD) signaling and external call variables to tag interaction to agents as per business rules
- PBX and ACD link status that provides status about connectivity of adapters to server.

Call signaling for voice

Call signaling triggers the following events:

- Offhook event gets triggered when the phone goes off hook and a dial tone is heard.
- Connected event gets triggered when the call is answered.
- Hold event gets triggered when the agent puts the call on hold.
- Resume event gets triggered when the agent resumes the on-hold call.
- Onhook event gets triggered when the receiver is put down or when the call ends.
- Transfer Info event gets triggered when the agent does a blind or consultation transfer to a supervisor or another agent. The recorder receives the event from the adapter.
- Conference Info event gets triggered when the agent starts a conference between a customer and a supervisor or another agent. The recorder receives the event from the adapter.
- RTP Started Info event provides information about the IP address and ports of the local and remote phones to the recorder.
- Phone extension information is sent to the recorder by adapter to provide IP phone extension mapping.
- Call information is sent to the recorder by adapter to provide called party, calling party, and call direction.
- Voice stream information is sent to the recorder by adapter to provide media end point information.
- SNMP events for getting IP address in SPAN based recording.

Call signaling for nonvoice transactions

Call signaling triggers the following events:

- Offhook, and Connected events gets triggered when the agent answers a chat, email, or SMS transaction.
- Hold event gets triggered when the agent puts the transaction on hold.
- Resume event gets triggered when the agent resumes the on-hold transaction.
- Onhook event gets triggered when the agent closes the chat, email, or SMS transaction.
- Transfer Info event gets triggered when the agent does a blind or consultation transfer to a supervisor or another agent. The recorder receives the event from the adapter.
- Conference Info event gets triggered when the agent starts a conference between a customer and a supervisor or another agent. The recorder receives the event from the adapter.
- Call information is sent to the recorder by adapter to provide called party, calling party, and call direction.

ACD signaling and external call variables

The Avaya Workforce Optimization Select recorder needs the agent information and external call variables to tag an interaction with the agent who is handling the interaction. The recorder tags each interaction with the business data that the agent enters in the desktop tools for each interaction. Agent login, agent logout, ACD information or extended call info, and wrapup data are the events that the recorder tags.

Link status

Link status provides information about the connectivity status of connectors or adapters with their respective servers. There are signalling events that capture and process the link status to inform if the PBX and ACD link is functional.

Passive recording

Passive recording is a recording method used for IP recording deployments to capture voice transmission or RTP through a network spanning configuration also known as port mirroring. The call events and RTP stream are mirrored directly to the recording server. However, the network switch must support port mirroring capabilities. There are no additional PBX licenses required. IP recording or passive recording cannot be used for analog or digital extension.

Avaya Workforce Optimization Select recorder uses SPAN to get voice and adapter to get call signaling and agent information.

Active recording

Active recording, also known as Conference Mode Recording, conferences the agent call to the recording server. The recording system captures voice transmission by integrating with specific PBX models. You might need to get additional PBX licenses. Active recording does not require port mirroring and supports end points such as analog or digital.

Avaya Workforce Optimization Select uses PBX to get voice streams and passes the voice streams to the recorder for recording an interaction. Avaya Workforce Optimization Select uses adapter to get agent information and call signaling.

Avaya Workforce Optimization Select allows call recording for Digital or Analog stations.

Integration scenarios

Avaya Workforce Optimization Select supports integration with the following Avaya products:

Avaya Aura® Contact Center

Avaya Workforce Optimization Select integrates with Avaya Aura® Contact Center to offer a comprehensive suite of scalable solutions for dynamic contact center environments. AACC integrates with Avaya Workforce Optimization Select to offer voice, email and web chat only.

Avaya Contact Center Select

Avaya Contact Center Select uses the Avaya IP Office telephone system to provide a real-time telephony platform. IP Office is a flexible and scalable phone system designed specifically for small and midsize enterprises. IP Office supports a wide range of phones and devices for use in contact centers.

Avaya Contact Center Select uses SIP and CTI interfaces to communicate with the IP Office platform. The Avaya Workforce Optimization Select integration gives Avaya Contact Center Select access to and control of a wide range of IP Office phones and features. Customers integrating Avaya Contact Center Select with the IP Office platform gain skill-based routing.

IP Office Contact Center

IP Office Contact Center is part of the Avaya Contact Center Solutions for the IP Office portfolio. IP Office Contact Center is a fully integrated contact center specifically built for IP Office and its addressable market. IP Office Contact Center is scalable to meet the market needs of IP Office customers requiring skills-based routing, call recording, and multichannel such as chat and email.

Avaya Workforce Optimization Select integration with IP Office Contact Center is a complete customer interaction suite consisting of call recording for all agents, skills-based routing, and voice, email, and chat multichannel capabilities including historical and real time reporting.

Avaya Aura® Call Center Elite

Call Center Elite is the Avaya flagship voice product for assisted experience management. The product coresides with Avaya Aura® Communication Manager, which is a key component of the Avaya Aura® communications platform. Call Center Elite integrates with the Avaya Workforce Optimization Select to offer voice only.

Avaya Oceana® Solution

Avaya Oceana® Solution is the next generation customer engagement solution. Enterprises can use Avaya Oceana™ Solution to seamlessly handle Voice, Web and Mobile Chat, WebRTC Voice, Email, Simple Messaging, and Social Media channels using a single intelligent attribute-based call routing through a unified Agent Desktop. Avaya Oceana® Solution integrates with the Avaya Workforce Optimization Select to offer voice, email, and chat capabilities.

Avaya Aura® Communication Manager

Communication Manager is the open, highly-reliable and extensible IP Telephony foundation on which Avaya delivers Unified Communications solutions to large and small enterprises. The product delivers rich voice and video capabilities and provides for a resilient, distributed network of gateways and analog, digital and IP-based communication devices. Communication Manager includes advanced mobility features, built-in conference calling and contact center applications, and E911 capabilities.

Avaya Communication Server 1000

Avaya Communication Server 1000 (CS 1000) is a server-based, fully-featured IP PBX. It provides the benefits of a converged network, advanced applications, and over 750 call processing and telephony features. The product provides a rich set of interfaces that enable third party applications to access its call data and communications capabilities.

IP Office

IP Office is Avaya's global midsize solution for enterprises, supporting up to 3,000 users at a single location with IP Office Select editions. For businesses with multiple locations, the product provides a powerful set of tools to help streamline operations, centralize management, and reduce total cost of ownership for converged networks. Apart from basic telephony services and voicemail, IP Office includes a robust set of tools for administration, call tracking, and system monitoring and diagnostics.

Avaya Proactive Contact with CTI

The Avaya Proactive Contact solution is a suite of hardware and software products that facilitates proactive and opportunistic management of customer relationships within a contact center. With the Avaya Proactive Contact solution, you can reach your customers at the lowest possible cost per call, irrespective of whether a calling mission requires an inbound, outbound, or blended solution.

Avaya Proactive Outreach Manager

The Avaya Workforce Optimization Select integration with Avaya Proactive Outreach Manager (POM) provides a solution for unified, outbound capability to communicate through channels of interaction like traditional voice and video. POM is an application for interactive outbound Voice, SMS and E-mail notifications. With POM, you can easily design and deploy campaigns that deliver the right information and service over the right media from the right resource at the right time.

*** Note:**

The Avaya Workforce Optimization Select integration with POM does not support secure channel.

Avaya Session Border Controller

Avaya Session Border Controller is basically a firewall for voice traffic to ensure that the sessions are legitimate, detecting and blocking potential attacks and intrusions. Another important safety feature of Avaya Session Border Controller is that it conceals voice services on the internal network from the outside. To perform all of these functions, the Avaya Session Border Controller sits, like the firewall, on the border between the internal and external network.

Avaya Workforce Optimization Select integration with Avaya products

*** Note:**

None of the deployments support SRTP.

Avaya Workforce Optimization Select on Communication Manager

Deployments	Automatic Call Distributor	Recording type	Voice stream events	Call signaling	Agent login information	Business call variables	Dialer information
Avaya Aura® Contact Center on Communication Manager	AACC	Active	Avaya adapter	AES adapter	AACCNet adapter	AACCNet adapter	
		Passive	SPAN	AES adapter AACCNet adapter for nonvoice transactions.	AACCNet adapter AACCNet adapter for nonvoice transactions.	AACCNet adapter AACCNet adapter for nonvoice transactions.	

Table continues...

Deployments	Automatic Call Distributor	Recording type	Voice stream events	Call signaling	Agent login information	Business call variables	Dialer information
Avaya Aura® Contact Center on Communication Manager and Avaya Proactive Outreach Manager	AACC	Active	Avaya adapter	AES adapter POM adapter for dialer calls. AACCNet adapter for nonvoice transactions.	AACCNet adapter POM adapter for dialer calls. AACCNet adapter for nonvoice transactions.	AACCNet adapter POM adapter for dialer calls. AACCNet adapter for nonvoice transactions.	POM adapter
		Passive	SPAN	AES adapter POM adapter for dialer calls. AACCNet adapter for nonvoice transactions.	AACCNet adapter for inbound calls and nonvoice transactions. POM adapter for dialer calls.	AACCNet adapter for inbound calls and nonvoice transactions. POM adapter for dialer calls.	POM adapter
Call Center Elite on Communication Manager	Call Center Elite	Active	Avaya adapter	AES adapter	AES adapter	AES adapter	
		Passive	SPAN	AES adapter	AES adapter	AES adapter	
Call Center Elite on Communication Manager and Avaya Proactive Contact with CTI	Call Center Elite and Avaya Proactive Contact with CTI	Active	Avaya adapter	AES adapter	AES adapter	AES adapter for Elite calls. PCS adapter for PC calls.	PCS adapter

Table continues...

Deployments	Automatic Call Distributor	Recording type	Voice stream events	Call signaling	Agent login information	Business call variables	Dialer information
		Passive	SPAN	AES adapter	AES adapter	AES adapter for Elite calls. PCS adapter for PC calls.	PCS adapter
Avaya Proactive Contact with CTI on Communication Manager		Active	Avaya adapter	AES adapter	PCS adapter	PCS adapter	PCS adapter
		Passive	SPAN	PCS adapter	PCS adapter	PCS adapter	PCS adapter
Call Center Elite on Communication Manager and Avaya Proactive Outreach Manager	Call Center Elite	Active	Avaya adapter	AES adapter POM adapter for dialer calls.	AES adapter POM adapter for dialer calls.	AES adapter . POM adapter for dialer calls.	POM adapter
		Passive	SPAN	AES adapter POM adapter for dialer calls.	AES adapter POM adapter for dialer calls.	AES adapter POM adapter for dialer.	POM adapter
Avaya Aura® Contact Center on Communication Manager and Avaya Proactive Outreach Manager	AACC	Active	Avaya adapter	AES adapter POM adapter for dialer calls.	AACCNet adapter POM adapter for dialer calls.	AACCNet adapter POM adapter for dialer calls.	POM adapter
		Passive	SPAN	AES adapter POM adapter for dialer calls.	AACCNet adapter POM adapter for dialer calls.	AACCNet adapter POM adapter for dialer calls.	POM adapter

Table continues...

Deployments	Automatic Call Distributor	Recording type	Voice stream events	Call signaling	Agent login information	Business call variables	Dialer information
Call Center Elite on Communication Manager and Avaya Session Border Controller	Call Center Elite	Active	SIP adapter Avaya adapter	AES adapter	AES adapter	AES adapter	

Avaya Workforce Optimization Select on Avaya Communication Server 1000

Deployments	Automatic Call Distributor	Recording type	Voice stream events	Call signaling	Agent login information	Business call variables	Dialer information
Avaya Aura® Contact Center on Avaya Communication Server 1000	AACC	Active	MLS adapter	MLS adapter	MLS adapter	AACCNet adapter	
		Passive	SPAN	MLS adapter	MLS adapter	AACCNet adapter	

Avaya Workforce Optimization Select on IP Office

Deployments	Automatic Call Distributor	Recording type	Voice stream events	Call signaling	Agent login information	Business call variables	Dialer information
IP Office 9.x extension based recording		Passive	SPAN	TAPI adapter			
Avaya Contact Center Select on IP Office 9.x	Avaya Contact Center Select	Passive	SPAN	TAPI adapter	AACCNet adapter	AACCNet adapter	
IP Office Contact Center on IP Office 9.x		Passive	SPAN	TAPI adapter	IPOCC adapter	IPOCC adapter	
IP Office 10.x extension based recording	IP Office Contact Center	Active	SIP adapter	Devlink3 adapter			
		Passive	SPAN	Devlink3 adapter			
Avaya Contact Center Select on IP Office 10.x	Avaya Contact Center Select	Active	SIP adapter	Devlink3 adapter	AACCNet adapter	AACCNet adapter	
		Passive	SPAN	Devlink3 adapter	AACCNet adapter	AACCNet adapter	

Table continues...

Deployments	Automatic Call Distributor	Recording type	Voice stream events	Call signaling	Agent login information	Business call variables	Dialer information
IP Office Contact Center on IP Office 10.x	IP Office Contact Center	Active	SIP adapter	Devlink3 adapter	IPOCC adapter	IPOCC adapter	
		Passive	SPAN	Devlink3 adapter	IPOCC adapter	IPOCC adapter	

Avaya Oceana® Solution on Communication Manager

Deployments	Automatic Call Distributor	Recording type	Voice stream events	Call signaling	Agent login information	Business call variables	Dialer information
Avaya Oceana® Solution on Communication Manager with Call Center Elite	Avaya Oceana® Solution	Active	Avaya adapter	AES adapter	<ul style="list-style-type: none"> • AES adapter for voice calls. • Oceana adapter for nonvoice calls. 	Oceana adapter	
		Passive	SPAN	AES adapter	<ul style="list-style-type: none"> • AES adapter for voice calls. • Oceana adapter for nonvoice calls. 	Oceana adapter	
Avaya Oceana® Solution on Communication Manager with Call Center Elite and Avaya Proactive Outreach Manager	Avaya Oceana® Solution	Active	Avaya adapter	<ul style="list-style-type: none"> • AES adapter • POM adapter for dialer calls. • Oceana adapter for nonvoice transactions. 	<ul style="list-style-type: none"> • AES adapter • POM adapter for dialer calls. • Oceana adapter for nonvoice transactions. 	<ul style="list-style-type: none"> • Oceana adapter for nonvoice transactions. • POM adapter for dialer calls. 	POM adapter

Table continues...

Deployments	Automatic Call Distributor	Recording type	Voice stream events	Call signaling	Agent login information	Business call variables	Dialer information
		Passive	SPAN	<ul style="list-style-type: none"> • AES adapter • POM adapter for dialer calls. • Oceana adapter for nonvoice transactions. 	<ul style="list-style-type: none"> • AES adapter . • POM adapter for dialer calls. • Oceana adapter for nonvoice transactions. 	<ul style="list-style-type: none"> • Oceana adapter for nonvoice transactions. • POM adapter for dialer calls. 	POM adapter

Deployment configurations

Avaya Workforce Optimization Select supports the following deployment models:

- Single site, single server
- Single site, multiple servers
- Multiple sites, multiple servers

Avaya Workforce Optimization Select scales from single site environments to distributed multisite enterprises. Avaya Workforce Optimization Select also supports multiple accounts across multiple site configuration models where recorded interactions are stored at individual sites or a central repository.

Single Site, Single Server

In a single site deployment model, all users are located within the same physical location. A typical single site, single server deployment, with up to 50 users, implements all the necessary components such as storage, database, application, and recording servers using one server. This deployment is cost-effective for organizations with limited hardware budgets.

The single site, single server deployment contains a single server where all necessary components are installed. Components for recording, monitoring, web application, database, storage, and reporting are all plugged into the network's data switch. Voice traffic is captured in the server through port spanning and switch configuration. You can capture interactions between agents and customers. If needed, you can also monitor agent-to-agent conversations by spanning each individual agent phone to Avaya Workforce Optimization Select.

Single Site, Multiple Servers

A single site, multiserver deployment can accommodate as many users as required by distributing the server components across multiple physical servers. Typically, separate physical servers exist for the application, database, and recording components.

In a single site, multiple servers deployment model, the Avaya Workforce Optimization Select server is linked to the data switch of the network through the Voice NIC configured on the server. The switch is configured to copy all voice traffic to the Avaya Workforce Optimization Select server through the use of port spanning.

Multiple Sites, Multiple Servers

In a multiple sites, multiple servers deployment model:

- Agents are spread across multiple geographical locations.
- Multiple instances of recording, monitoring, and storage services are installed to scale to handle larger number of agents.
- Web application and Database are installed in a central location.
- All the services are split and deployed across multiple physical server spread across multiple geographical locations.

The number of agents that a multisite environment can handle depends on the underlying network infrastructure such as routers used and available bandwidth.

Avaya Workforce Optimization Select editions

Avaya Workforce Optimization Select is available in multiple configurations to meet your specific business needs and is designed to evolve with you as your business needs change. You can seamlessly upgrade from one edition to another with transferable licensing as your organization grows.

The following is a comparison of the key features across editions:

Features	Recorder	Recorder with Monitor	Recorder with Screen Capture	Standard	Quality Management
Interactions	Yes	Yes	Yes	Yes	Yes
Live Monitoring	No	Yes	No	Yes	Yes
Screen Capture	No	No	Yes	Yes	Yes
Reports	Yes	Yes	Yes	Yes	Yes
Evaluate	No	No	No	No	Yes
Analyze	No	No	No	No	Yes

Table continues...

Features	Recorder	Recorder with Monitor	Recorder with Screen Capture	Standard	Quality Management
Speech (Optional module)	Yes	Yes	Yes	Yes	Yes
Learn	No	No	No	No	Yes
Coach	No	No	No	No	Yes
Administration	Yes	Yes	Yes	Yes	Yes
Desktop Monitor (Optional module)	No	No	Yes	Yes	Yes

Upgrade overview

Avaya Workforce Optimization Select supports the following upgrades:

- 5.0.0.1 to 5.0.1: For this upgrade, you must have Avaya Workforce Optimization Select 5.0.0.1 installed on your system.
- 5.0.1 to 5.0.2: For this upgrade, you must have Avaya Workforce Optimization Select 5.0.1 installed on your system.
- 5.0.1 to 5.0.2.1: For this upgrade, you must have Avaya Workforce Optimization Select 5.0.1 installed on your system.
- 5.0.2 to 5.0.2.1: For this upgrade, you must have Avaya Workforce Optimization Select 5.0.2 installed on your system.
- 5.0.2.1 to 5.1: For this upgrade, you must have Avaya Workforce Optimization Select 5.0.2.1 installed on your system.
- 5.1 to 5.1.0.2: For this upgrade, you must have Avaya Workforce Optimization Select 5.1 installed on your system.
- 5.1.0.2 to 5.2: For this upgrade, you must have Avaya Workforce Optimization Select 5.1.0.2 installed on your system.
- 5.2 to 5.2.1: For this upgrade, you must have Avaya Workforce Optimization Select 5.2 installed on your system.
- 5.2.1 to 5.2.1.1: For this upgrade, you must have Avaya Workforce Optimization Select 5.2.1 installed on your system.
- 5.2.1.1 to 5.2.1.2: For this upgrade, you must have Avaya Workforce Optimization Select 5.2.1.1 installed on your system.
- 5.2.1.2 to 5.2.2: For this upgrade, you must have Avaya Workforce Optimization Select 5.2.1.2 installed on your system.

Before you start the upgrading procedure, ensure that you get access to the following files:

- Awfos_5_FP1.exe file.
- Awfos_5_FP2.exe file.
- Awfos_5_FP2_SP1.exe file.
- Awfos_5_1.exe file.
- Awfos_5_1_SP2.exe file.
- Awfos_5_2.exe file.
- Awfos_5_2_1.exe file.
- Awfos_5_2_1_1.exe file.
- Awfos_5_2_1_2.exe file.
- Awfos_5_2_2.exe file.

Migration Overview

Avaya Workforce Optimization Select supports the following migrations:

From	To	Considerations
Standard Edition Harmony Workforce Optimization 4.5.1	Standard Edition Avaya Workforce Optimization Select 5.0.1.	Ensure you install and configure Avaya Workforce Optimization Select 5.0.1 before proceeding with database migration from Harmony Workforce Optimization 4.5.1 to Avaya Workforce Optimization Select 5.0.1. After the installation, ensure that you configure the component parameters to map with the Harmony Workforce Optimization 4.5.1 configuration. You can migrate Harmony Workforce Optimization 4.5.1 to Avaya Workforce Optimization Select 5.0.1 in two ways: <ul style="list-style-type: none"> • Where both are installed on the same server • Where both are installed on different servers

Table continues...

From	To	Considerations
QM Edition Harmony Workforce Optimization 4.5.1	QM Edition Avaya Workforce Optimization Select 5.1.	<p>Ensure you install and configure Avaya Workforce Optimization Select 5.1 before proceeding with database migration from Harmony Workforce Optimization 4.5.1 to Avaya Workforce Optimization Select 5.1. After the installation, ensure that you configure the component parameters to map with the Harmony Workforce Optimization 4.5.1 configuration. You can migrate Harmony Workforce Optimization 4.5.1 to Avaya Workforce Optimization Select 5.1 in two ways:</p> <ul style="list-style-type: none"> • Where both are installed on the same server • Where both are installed on different servers
QM Edition Harmony Workforce Optimization 4.5.1	QM Edition Avaya Workforce Optimization Select 5.2.1.0	<p>Ensure you install and configure Avaya Workforce Optimization Select 5.2.1.0 before proceeding with database migration from Harmony Workforce Optimization 4.5.1 to Avaya Workforce Optimization Select 5.2.1.0. After the installation, ensure that you configure the component parameters to map with the Harmony Workforce Optimization 4.5.1 configuration. You can migrate Harmony Workforce Optimization 4.5.1 to Avaya Workforce Optimization Select 5.2.1.0 in two ways:</p> <ul style="list-style-type: none"> • Where both are installed on the same server • Where both are installed on different servers

Chapter 3: Interoperability

Product compatibility

For the latest and most accurate compatibility information, go to <https://support.avaya.com/CompatibilityMatrix/Index.aspx>

Third-party product requirements

Software requirements

Software	Supported versions
Wireshark	2.2.3 Windows 64-bit
WinPCap	4.1.3
Notepad ++	Latest version
7 Zip	Latest version
TAPI2 driver	1.0.0.42
TSAPI client	7.0.0.131 Windows – 32-bit
Microsoft SQL server	2012/2016 (64-bit) Standard Edition, 2017 (64-bit) Enterprise Edition
Microsoft Visual C++ 2015 Update 3 Redistributable	Microsoft Visual C++ 2015 Update 3 Redistributable
Microsoft ODBC Driver 13 for SQL Server	Microsoft ODBC Driver 13 for SQL Server
Microsoft Command Line Utilities 13 for SQL Server	Microsoft Command Line Utilities 13 for SQL Server
Microsoft Dot Net Framework	4.7 version 32-bit
Citrix or terminal services	Citrix 7.5, 7.11, and 7.17. Terminal services on Windows server 2012.

VMware requirements

To deploy Avaya Workforce Optimization Select in a VMware environment, you need:

- VMware-certified servers
- ESXi Host installed on VMware-certified servers
- An appropriate VMware license

Avaya Workforce Optimization Select can be deployed both as a single-server deployment and as multiserver deployments. In single-server deployment, a web application, database, recorder, and the ICM components are all installed on one server. In multiserver deployments, there are different servers for web application, database, and recorder components for optimum scalability.

Single-server deployment:

Software	Specifications
vCPU	8 with 2.5 GHz/CPU Reservation
vRAM	16 GB
vDisk	<ul style="list-style-type: none"> • C: 100 GB • D: 150 GB • E: 300 GB
vNIC	2

Multiserver deployments:

Software	Specifications
For Recorder VMware	
vCPU	8 with 2.5 GHz/CPU Reservation
vRAM	8 GB
vDisk	<ul style="list-style-type: none"> • C: 100 GB • D: 150 GB • E: 300 GB
vNIC	2
One VM Recorder	For every 500 concurrent G.711, G722, and G.729 calls
For web application and database VMware	
vCPU	8 with 2.4 GHz/CPU Reservation
vRAM	16
vDisk	<ul style="list-style-type: none"> • C: 100 GB • D: 300 GB • E: Disk space must be calculated based on database sizing.
vNIC	2

Storage

Avaya Workforce Optimization Select supports data storage using direct attached storage (DAS), network attached storage (NAS), and storage area networks (SAN). Depending on the recording rule and storage rule definition, Avaya Workforce Optimization Select stores or purges an interaction.

Active Directory integration

Avaya Workforce Optimization Select supports Active Directory provisioning. You can use Lightweight Directory Access Protocol (LDAP) such as the database of Microsoft's Active

Directory Services (ADS) to track user names, passwords, and other employee information. You can configure ADS settings to synchronize employee data every time an employee signs in. You can map users in the LDAP database to import into the application.

Internet browsers

Type	Internet browsers and supported version
Avaya Workforce Optimization Select access	<ul style="list-style-type: none"> • Microsoft Internet Explorer 11 • Mozilla FireFox 53.0.3 and 57.0.2 • Google Chrome 56.0.2924.76 (64-bit) and 60 • Microsoft Edge 38.14393.1066.0 and 40 • Safari 10.1.0 and above
SysAdmin Interface	<ul style="list-style-type: none"> • Microsoft Internet Explorer 11 • Mozilla FireFox 53.0.3 and 57.0.2 • Google Chrome 56.0.2924.76 (64-bit) and 60 • Microsoft Edge 38.14393.1066.0 and 40 • Safari 10.1.0 and above

Email client

Avaya Workforce Optimization Select email servers that support SMTP and SMTPS protocols for emailing notifications and interaction links.

Audio codec

Avaya Workforce Optimization Select supports G711, G722, and G729 audio codecs.

Operating system compatibility

Avaya Workforce Optimization Select supports the following operating systems:

Type	Operating system
User preferences	<ul style="list-style-type: none"> • Windows 7 (32-bit or 64-bit) • Windows 8.1 (32-bit or 64-bit) • Windows 10 (64-bit)
Avaya Workforce Optimization Select access	<ul style="list-style-type: none"> • Windows Server 2012 (64-bit) with latest service pack • Windows Server 2016 (64-bit) • Windows Server 2017 (64-bit)

Table continues...

Type	Operating system
SysAdmin interface	<ul style="list-style-type: none">• Windows Server 2012 (64-bit) with latest service pack• Windows Server 2016 (64-bit)• Windows Server 2017 (64-bit)
Desktop Monitor on client machine	<ul style="list-style-type: none">• Windows 7 (32-bit or 64-bit) with latest service packs and security updates• Windows 10 (64-bit)

Chapter 4: Licensing requirements

WebLM

Avaya provides a web-based license manager (WebLM) to manage licenses of one or more Avaya software products.

To track and manage licenses in an organization, WebLM requires a license file from the Avaya Product Licensing and Delivery System (PLDS) website at <https://plds.avaya.com>.

The license file is in XML format and contains information about the product such as the licensed capacities of each feature that you purchase. You activate the license file in PLDS and install the license file on the WebLM server.

You must run WebLM as a separate VMware virtual machine or use the WebLM running on System Manager. For more information about WebLM administration, see *Administering Avaya Aura® System Manager*.

Licensing model overview

Avaya Workforce Optimization Select supports the following two licensing models.

Concurrent Agent (CU) Model

Avaya Workforce Optimization Select licenses are concurrent user type where licenses are consumed based on the number of concurrent logged in agents or extensions. You can configure multiple agents or extensions on a single phone without any additional license consumption. For example, if there are 30 phones and 2 extensions per phone, you can purchase only 30 seat licenses but configure a total of 60 extensions.

WFM licenses are named user type where licenses are consumed based on the total number agents that need to be scheduled. No additional licenses are required for supervisors, schedulers, or quality managers. This model supports Recorder edition, Standard edition, and the Quality Performance Management (QPM) edition.

Concurrent Channel Model

Avaya Workforce Optimization Select licenses are consumed based on the maximum number of simultaneous recording sessions. Each recording session uses one concurrent license. As soon as a call terminates, that license is available for reuse for another recording session (either on the same or on a different phone).

WFM licenses are named user type where licenses are consumed based on the total number of agents that need to be scheduled. No additional licenses are required for supervisors or schedulers. This model supports Recorder edition and Standard edition.

The table below lists the editions and the supported licensing model.

Editions / Modules	Concurrent Agent (CU) Model	Concurrent Channel Model
Recorder edition	Supported	Supported
Recorder edition redundancy	Supported	Supported
Standard edition	Supported	Supported
Standard edition redundancy	Supported	Supported
Quality and Performance Management (QPM) edition	Supported	Not Supported
QPM edition redundancy	Supported	Not Supported
Desktop Trigger	Supported	Not Supported
Desktop Screen Capture module	Supported	Not Supported
Silent Monitoring module	Supported	Not Supported
Speech	Supported	Not Supported

Deployment-specific license requirements

A number of licenses are required for a complete call recording solution for different deployment configurations. Recording solutions are of three types: Single Step Conference, Service Observing, and Multiple Registration. Each recording solution has its own licensing requirements.

For every Avaya Workforce Optimization Select license you purchase, you also require deployment specific licenses for the recording solution you choose.

Telephony Platform	Automatic Call Distribution	Recording Type	Licenses Required
AES 7.0.1 and previous			

Table continues...

Telephony Platform	Automatic Call Distribution	Recording Type	Licenses Required
Avaya Aura® Communication Manager (Communication Manager)	Avaya Aura® Contact Center (AACC) Avaya Aura® Call Center Elite (Call Center Elite)	Active	<p>For Single Step Conferencing (SSC) Recording Method:</p> <ul style="list-style-type: none"> • Station license on Communication Manager for each phone with the license type as VALUE_STA • IP Station license on Communication Manager for each phone with the license type as VALUE_IP_STA • DMCC license on Application Enablement Services (AES) or Communication Manager for each DMCC soft phone with license type as VALUE_DMCC_DMC or IP_API_A • Basic TSAPI license on AES for each DMCC soft phone with license type as VALUE_TSAPI_USERS • Basic TSAPI license on AES for each phone with license type as VALUE_TSAPI_USERS • Basic TSAPI license on AES for each hunt group with license type as VALUE_TSAPI_USERS <p>For Multiple Registrations (MR) Recording Method:</p> <ul style="list-style-type: none"> • IP Station License on Communication Manager for each phone with license type as VALUE_IP_STA • DMCC License on AES or Communication Manager for each phone with license type as VALUE_DMCC_DMC or IP_API_A • Basic TSAPI License on AES for each phone with license type as VALUE_TSAPI_USERS • Basic TSAPI License on AES for each huntgroup with license type as VALUE_TSAPI_USERS <p>CCT Contact Centre voice terminal license on AACC for each configured agent with license type as VALUE_CC</p>

Table continues...

Telephony Platform	Automatic Call Distribution	Recording Type	Licenses Required
		Passive	<ul style="list-style-type: none"> • Basic TSAPI license on AES for each phone with license type as VALUE_TSAPI_USERS. • Basic TSAPI License on AES for each huntgroup with license type as VALUE_TSAPI_USERS. • CCT Contact Centre voice terminal license on AACC for each configured agent with license type as VALUE_CCTR_CTIDT_CC_1.
AES 7.1 onwards with AES trusted licensing			
Avaya Aura [®] Communication Manager (Communication Manager)	Avaya Aura [®] Contact Center (AACC) Avaya Aura [®] Call Center Elite (Call Center Elite)	Active	<p>For Single Step Conferencing (SSC) Recording Method:</p> <ul style="list-style-type: none"> • Station license on Communication Manager for each phone with the license type as VALUE_STA • IP Station license on Communication Manager for each phone with the license type as VALUE_IP_STA <p>For Multiple Registrations (MR) Recording Method:</p> <ul style="list-style-type: none"> • IP Station License on Communication Manager for each phone with license type as VALUE_IP_STA <p>CCT Contact Centre voice terminal license on AACC for each configured agent with license type as VALUE_CC</p>
		Passive	<ul style="list-style-type: none"> • CCT Contact Centre voice terminal license on AACC for each configured agent with license type as VALUE_CCTR_CTIDT_CC_1.

Table continues...

Telephony Platform	Automatic Call Distribution	Recording Type	Licenses Required
Avaya Communication Server 1000 (CS 1000)	AACC	Active	<ul style="list-style-type: none"> One AST license per phone on CS 1000 or <ul style="list-style-type: none"> Multi-DN call recording license for non-AST on AACC with license type as LM_MLSM_DN_REG. On-demand recording license on AACC with license type as LM_MLSM_ROD_REGC. CCT Contact Centre voice terminal license on AACC for each configured agent with license type as VALUE_CCTR_CTIDT_CC_1.
		Passive	<ul style="list-style-type: none"> One AST license per phone on CS 1000 or <ul style="list-style-type: none"> Multi-DN call recording license for non-AST on AACC with license type as LM_MLSM_DN_REG On-demand recording license on AACC with license type as LM_MLSM_ROD_REGC CCT Contact Centre voice terminal license on AACC for each configured agent with license type as VALUE_CCTR_CTIDT_CC_1

License types

License type	Description
VALUE_STA	A station license that a recording solution consumes for single step conference or service observing methods per recorder. The multiple registration method does not require a station license.
VALUE_IP_STA	An IP station license that a recording solution consumes for single step conference, service observing, and multiple registration methods.

Table continues...

License type	Description
VALUE_DMCC_DMC	<p>A DMCC basic license from the AES WebLM server used by those who have a large pool of existing unused VALUE_IP_STA and VALUE_STA licenses from which they can draw.</p> <p>In all the forms of call recording, a DMCC device is used as a recording device. DMCC devices used to record media must be registered. The act of registering a DMCC device consumes a DMCC license.</p>
VALUE_DMCC_DMC + VALUE_IP_STA + VALUE_STA	A DMCC full license.
VALUE_TSAPI_USERS	<p>A TSAPI basic user license.</p> <p>Typically, the application monitors a target device for calls using DMCC, TSAPI or JTAPI. In all of these cases, a TSAPI device monitor consumes a TSAPI basic user license. Monitoring the target application provides information such as ANI and DNIS.</p> <p>For single step conference, an extra TSAPI license is consumed unlike for service observing and multiple registration methods.</p>
VALUE_AEC_CONNECTIONS	<p>The Application Enablement Services server requires an Application Enablement Protocol (AEP) license for each IP connection to Communication Manager. Avaya recommends a minimum of two AEP connections between each AE Services server and a specific Communication Manager.</p> <p>The purchase of one AE Services license gives you two AEP licenses. Based on how much recording you want to do at a specific customer site, you need to calculate how many additional Station, IP Station, DMCC and TSAPI Basic User licenses will be needed to support that location.</p>
VALUE_CCTR_CTIDT_CC_1	<p>A CCT Contact Centre voice terminal license for Avaya Aura® Contact Center and Avaya Contact Center Select.</p> <p>The default license count for Avaya Aura® Contact Center and Avaya Contact Center Select is 1200.</p> <p>The default license count for Communication Manager and CS 1000 is equal to the maximum number of agents configured.</p>
LM_MLSM_DN_REG	A multi-DN call recording license for non-AST for Avaya Aura® Contact Center on CS 1000.

Avaya Contact Center Select on IP Office deployments

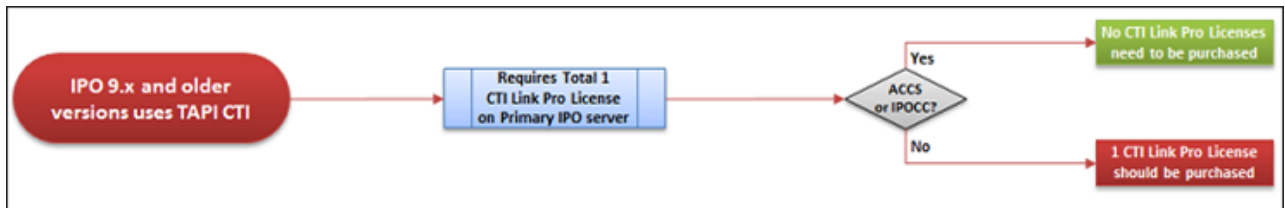
License requirements

IP Office 9.x

Avaya Workforce Optimization Select on IP Office 9.x and older versions use TAPI driver on Windows to connect to IP Office (3PCC) for CTI call events. Since IP Office TAPI driver supports connectivity to primary IPO only, Avaya Workforce Optimization Select does not support IP Office resiliency or high availability.

If Avaya Contact Center Select is deployed on the IP Office platform, there is no need to provision additional CTI Link Pro license for Avaya Workforce Optimization Select. Avaya Contact Center Select order includes a CC bundle material code entitlement for one CTI Link Pro license. Avaya Contact Center Select requires only one CTI Link Pro license on each IP Office server as it uses TAPI-D CTI API. TAPI-D CTI does not require licenses based on SCN nodes.

Telephony Platform	Automatic Call Distribution	Recording Type	Licenses Required
IP Office	Avaya Contact Center Select	Passive	<ul style="list-style-type: none"> • CTI Link Pro feature license on IP Office. • CCT Contact Centre voice terminal license on Avaya Contact Center Select for each configured agent with license type as VALUE_CCTR_CTIDT_CC_1

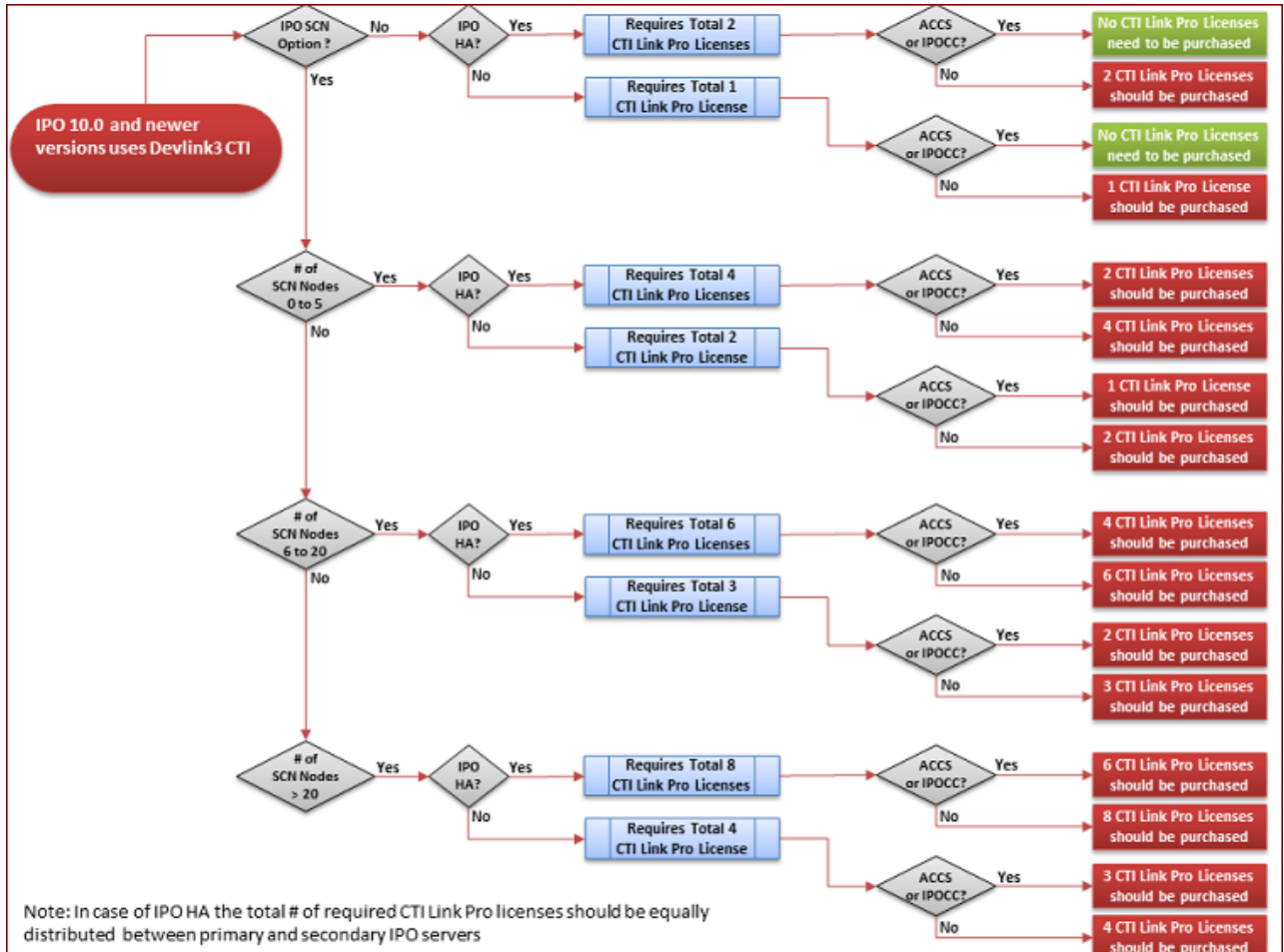


IP Office 10.x

Avaya Workforce Optimization Select on IP Office 10.x and newer versions use Devlink3 API to connect to IP Office for CTI call events and media forking. Devlink3 API requires the following CTI Link Pro licenses:

- 1 x CTILINK_PRO license = No Small Community Network (SCN) option.
- 2 x CTILINK_PRO license = SCN option allowed on networks <= 5 nodes.
- 3 x CTILINK_PRO license = SCN option allowed on networks <= 20 nodes.
- 4 x CTILINK_PRO license = SCN option allowed on large networks (greater than 20 nodes).

If IP Office resiliency or high availability is deployed, then, the above license count must be installed on both primary and secondary IP Office servers equally. This is irrespective of the IP Office using centralized (WebLM) or nodal licensing. CTI Link Pro licenses are not shared between primary and secondary IP Office. If IP Office Contact Center is deployed on the IP Office platform, then, one CTI Link Pro license is automatically installed. Avaya Contact Center Select order includes a CC bundle material code entitlement for one CTI Link Pro license on each IP Office node (primary and secondary).



IP Office Contact Center on IP Office deployments

License requirements

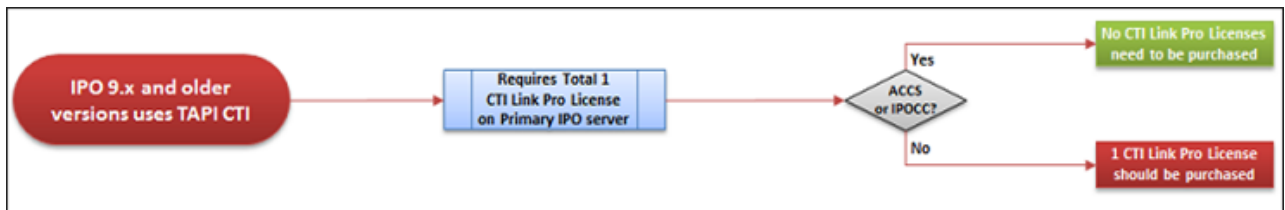
IP Office 9.x

Avaya Workforce Optimization Select on IP Office 9.x and older versions use TAPI driver on Windows to connect to IP Office (3PCC) for CTI call events. Since IP Office TAPI driver supports

connectivity to primary IP Office only, Avaya Workforce Optimization Select does not support IP Office resiliency or high availability.

If IP Office Contact Center is deployed on the IP Office platform, there is no need to provision additional CTI Link Pro license for Avaya Workforce Optimization Select. IP Office Contact Center order includes a CC bundle material code entitlement for one CTI Link Pro license. IP Office Contact Center requires only one CTI Link Pro license on each IP Office server as it uses TAPI-D CTI API. TAPI-D CTI does not require licenses based on Small Community Network (SCN) nodes.

Telephony Platform	Automatic Call Distribution	Recording Type	Licenses Required
IP Office	IP Office Contact Center	Passive	• CTI Link Pro feature license on IP Office.

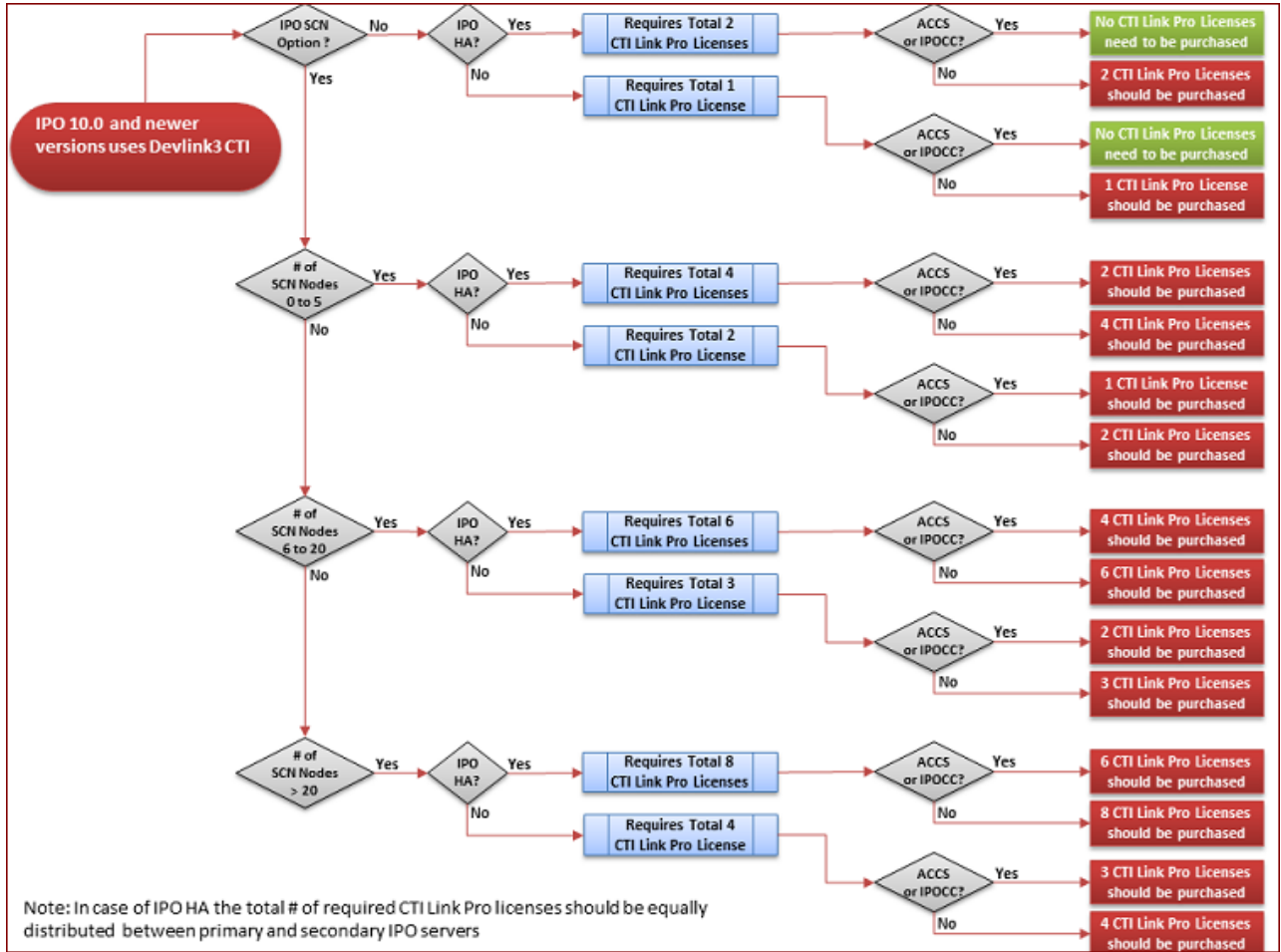


IP Office 10.x

Avaya Workforce Optimization Select on IP Office 10.x and newer versions use Devlink3 API to connect to IP Office for CTI call events and media forking. Devlink3 API requires the following CTI Link Pro licenses:

- 1 x CTILINK_PRO license = No Small Community Network (SCN) option.
- 2 x CTILINK_PRO license = SCN option allowed on networks <= 5 nodes.
- 3 x CTILINK_PRO license = SCN option allowed on networks <= 20 nodes
- 4 x CTILINK_PRO license = SCN option allowed on large networks (greater than 20 nodes).

If IP Office resiliency or high availability is deployed, then, the above license count must be installed on both primary and secondary IP Office servers equally. This is irrespective of the IP Office using centralized (WebLM) or nodal licensing. CTI Link Pro licenses are not shared between primary and secondary IP Office. If IP Office Contact Center is deployed on the IP Office platform, then, one CTI Link Pro license is automatically installed. IP Office Contact Center order includes a CC bundle material code entitlement for one CTI Link Pro license on each IP Office node (primary and secondary).



Chapter 5: Performance specifications

Recorder performance and sizing requirements

Number of concurrent calls	Servers
Up to 150	<ul style="list-style-type: none">• One server for the Avaya Workforce Optimization Select web application, database, and recorder.• Additional server for Desktop Monitor (Optional Module).
150 to 500	<ul style="list-style-type: none">• One server for the Avaya Workforce Optimization Select recorder.• One server for the Avaya Workforce Optimization Select web application, database, and recorder.• Additional server for Desktop Monitor (Optional Module).
More than 500	<ul style="list-style-type: none">• One Avaya Workforce Optimization Select recorder for each 500 concurrent calls.• One server for the Avaya Workforce Optimization Select web application.• One Avaya Workforce Optimization Select database server.• Additional server for Desktop Monitor (Optional Module).

Overview

High availability of Avaya Workforce Optimization Select is achieved in a cost-effective manner by using various failover strategies .

Database redundancy

Database redundancy is achieved using the Always On Availability Groups option in the SQL server for database high availability. This option meets both local high availability and geo-redundancy needs provided you are using MS SQL server 2012/2016 Enterprise Edition .

The SQL database in Avaya Workforce Optimization Select can be shared with other applications as long as appropriate resources are allocated. To minimize MS SQL servers, sharing is possible with other applications that support SQL 2012/ 2016. Depending on no local high availability and other deployment aspects, such as dedicated tenant or less number of tenants, the Basic Availability Group option in SQL server 2016 Standard Edition can be used. This option supports

two nodes where one node is primary in data center and the other is secondary in disaster recovery. This supports geo-redundancy but not high availability.

Web application server redundancy

Web application servers are deployed as active-active servers to meet local high availability and geo-redundancy requirements. However, Network Load Balancers (NLBs) are required to ensure that users are split evenly between multiple web application servers. If one of the web application server becomes nonfunctional, the NLB routes users to the available server. Web application servers can be split across data centers for geo-redundancy purposes.

*** Note:**

Note that Avaya recommends an external NLB, not the NLB function provided by Microsoft .

The DNS entry pointing to a virtual IP address on the load balancer distributes the user sessions across all the web application instances. The web application instances are independent, and no session replication is done between them. If any web application instance fails, user sessions on that instance are forced to log out and log in to another instance through the NLB.

During storage server failure, the Avaya Workforce Optimization Select recorder component has the capability to write files locally to avoid loss of data. If the recorder loses connectivity to the storage server, voice and screen capture files are written locally within the storage space of the recorder. These files are moved to central storage when connectivity is restored. This is the reason for separating the recorder server component from the primary application server in a single-server deployment. The recorder cannot write files locally in a single-server deployment if the server fails.

Multiple SPAN ports

Avaya recommends multiple SPAN ports to avoid loss of recording due to port failure. Because Avaya Workforce Optimization Select relies on SPAN, failure occurring at the data switch level must be mitigated in the best way possible.

Multi-interface support

In the absence of a multiple server model, installing multiple NIC cards in a single server can provide redundancy at the NIC level. Normally, if a NIC fails, all traffic stops. However, by grouping together several NICs into one logical NIC, availability is maximized. With teaming, if one NIC fails, the network connection continues to operate on the other NICs.

A multi-interface NIC configuration can also be used to connect multiple SPANs to the recording server. The traffic in each SPAN can be forwarded to a separate interface. A multi-interface NIC configuration also supports failover at the switch level. Two switches in failover mode connected to two SPANs can direct traffic to the two NICs. If the primary switch fails and the backup switch becomes primary, Avaya Workforce Optimization Select still continues to record interactions.

Avaya Workforce Optimization Select supports maximum five NICs in a multi-interface NIC configuration.

Recording server redundancy

On the recorder side, high availability is implemented by deploying the recorders in pairs: one is active while the other one is in hot standby mode. Based on this deployment mode, the following failover strategy is provided:

- A heartbeat mechanism is used between the active and standby server. The recording media can be sent to both recorders simultaneously for a more robust solution, for example, Active-

Active recording. If the primary recorder is healthy at the end of the recording, the recording is discarded by the standby server to avoid storing duplicate files. However, if the primary recorder or server fails in the middle of a call, the full recording is captured by the standby server. If the heartbeat fails, the standby server takes over without losing any recording data. Note that when a failure occurs, the standby server stays as the primary server until a restart occurs or until it fails or gets restarted.

*** Note:**

Avaya IP Office does not support Active-Active redundancy.

- If the recorder loses connectivity to the storage server, voice and screen capture files are written locally within the storage space of the recorder. These files are moved to central storage when connectivity is restored.
- If the recorder loses connectivity to the database, all database updates are queued to the local file system and applied after connectivity is restored.
- Multiple NIC cards can be installed and configured on the recorder to account for NIC failures. The recorder can read data from multiple NIC cards.

Chapter 6: Security

Security specifications

Before implementing the Avaya Workforce Optimization Select application, ensure that the customer security staff reviews and approves the deployment plan. Customers must engage the expertise of their security staff early in the implementation process. The security staff must decide how to incorporate the Avaya Workforce Optimization Select system into the routine maintenance for virus protection, patches, and service packs.

Payment Card Industry compliance

Avaya Workforce Optimization Select adheres to the following security standards to meet Payment Card Industry (PCI) compliance:

- Advanced Encryption Standard (AES) 256-bit encryption to protect data when recorded, in transit, and archived on storage. Files related to voice and screen captures are stored in an encrypted form so that only users with proper access to the application can playback calls and view screens.
- The ability to mute a portion of the call recording using a CRM integration API (HTTP). For example, muting segments with credit card information.
- The ability to capture Audit trail information in logs and database. For example who did it, what, and when. The information captured in database provides the ability to generate Audit trail reports on user activity such as who played recorded calls, how many times, data deletes, and data updates.
- The ability to modify storage folder structure to include client alias, which helps in setting different archival cycles and also provides folder level security across multiple clients.
- Tight integration and synchronization with Active Directory for user settings and single sign-on authentication.

Password policy

Each Avaya Workforce Optimization Select customer must create a password policy for their users. Administrators define a set of rules to maintain system security. Policies include rules for:

- Password syntax: The length and syntax.
- Password history: The number of unique passwords required before reuse of an old password.
- Password expiration and lockout: The validity, warning and grace period for expiration, and lockout rules.

Role-Based Access Control

You can use roles in Avaya Workforce Optimization Select to improve security and administration. Define administrative roles for your business using a role-based access control application.

Administrators can implement access control by grouping a set of privileges to a role. Roles are assigned to users. Some of the commonly used roles are: Agent, Supervisor, Manager, Quality Manager, and Administrator.

User authentication

You must use the user authentication feature to get access to the **Administration** module or access any feature under the **Administration** module when you log in to the application every time. The system displays the authenticate user page for additional security. You can choose to close the authentication window, but closing and it logs you out of the application. This step prevents any unauthorized users from making changes in the administration settings, which is crucial for the overall functioning of the application.

Port assignments

If the Avaya Workforce Optimization Select deployment is limited to the local intranet, then you do not need to open any ports on the firewall. If you want to provide external access to Avaya Workforce Optimization Select , with firewalls on both ends of a private WAN, open relevant ports. For complete port matrix information, see *Avaya Port Matrix: Avaya Workforce Optimization Select 5.2.3* available on the support website at <http://support.avaya.com>.

Chapter 7: Resources

Documentation

See the following related documents at <http://support.avaya.com>:

Document number	Title	Use this document to:	Audience
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Table continues...

Implementing			
	<i>Deploying Avaya Workforce Optimization Select with Avaya Aura® Communication Manager and Avaya Aura® Call Center Elite</i>	Provides checklist and procedures for the installation, configuration, initial administration, and basic maintenance of Avaya Workforce Optimization Select with Avaya Aura® Communication Manager and Avaya Aura® Call Center Elite.	Deployment engineers and support personnel
	<i>Deploying Avaya Workforce Optimization Select with IP Office and IP Office Contact Center</i>	Provides checklist and procedures for the installation, configuration, initial administration, and basic maintenance of Avaya Workforce Optimization Select with IP Office and IP Office Contact Center.	Deployment engineers and support personnel
	<i>Deploying Avaya Workforce Optimization Select with IP Office and Avaya Contact Center Select</i>	Provides checklist and procedures for the installation, configuration, initial administration, and basic maintenance of Avaya Workforce Optimization Select with IP Office and Avaya Contact Center Select.	Deployment engineers and support personnel
	<i>Deploying Avaya Workforce Optimization Select with Avaya Aura® Communication Manager and Avaya Oceana® Solution</i>	Provides checklist and procedures for the installation, configuration, initial administration, and basic maintenance of Avaya Workforce Optimization Select with Avaya Aura® Communication Manager and Avaya Oceana® Solution.	Deployment engineers and support personnel

Document number	Title	Use this document to:	Audience
	<i>Deploying Avaya Workforce Optimization Select with Avaya Communication Server 1000 and Avaya Aura® Contact Center</i>	Provides checklist and procedures for the installation, configuration, initial administration, and basic maintenance of Avaya Workforce Optimization Select with Avaya Communication Server 1000 and Avaya Aura® Contact Center.	Deployment engineers and support personnel
	<i>Deploying Avaya Workforce Optimization Select with Avaya Aura® Communication Manager and Avaya Aura® Contact Center</i>	Provides checklist and procedures for the installation, configuration, initial administration, and basic maintenance of Avaya Workforce Optimization Select with Avaya Aura® Communication Manager and Avaya Aura® Contact Center.	Deployment engineers and support personnel
Administering			
	<i>Administering Avaya Workforce Optimization Select</i>	Explain how to use Avaya Workforce Optimization Select to configure your system, employee data, settings, and recording rules and perform routine maintenance tasks. The content is available in two formats: HTML and PDF.	Administrators
	<i>Administering SysAdmin</i>	Provides information on how to perform administration tasks in the SysAdmin application including how to manage tenants, assets, component configuration, and diagnostics.	System administrators
	<i>Avaya Workforce Optimization Select Quick Reference Guide for Administrators</i>	Understand the most common user tasks that an Administrator performs.	Administrators
Using			
	<i>Using Avaya Workforce Optimization Select</i>	Explain how to use Avaya Workforce Optimization Select to configure settings such as user preferences, monitor and record interactions, and access and generate reports. The content is available in two formats: HTML and PDF.	Users
	<i>Avaya Workforce Optimization Select Quick Reference Guide for Supervisors</i>	Understand the most common user tasks that a Supervisor performs.	Users

Table continues...

Document number	Title	Use this document to:	Audience
	<i>Avaya Workforce Optimization Select Quick Reference Guide for Call Center Agents</i>	Understand the most common user tasks that an Agent performs.	Users
	<i>Avaya Workforce Optimization Select Quick Reference Guide for QA Analyst</i>	Understand the most common user tasks that a QA Analyst performs.	Users
	<i>Using Desktop Monitor</i>	Explain how to use Desktop Monitor. Supervisors can use this document to create and assign projects to employees in a contact center environment. Employees can use the document to monitor the projects assigned to each employee.	Users

Viewing Avaya Mentor videos

Avaya Mentor videos provide technical content on how to install, configure, and troubleshoot Avaya products.

About this task

Videos are available on the Avaya Support website, listed under the video document type, and on the Avaya-run channel on YouTube.

Procedure

- To find videos on the Avaya Support website, go to <https://support.avaya.com/> and do one of the following:
 - In **Search**, type `Avaya Mentor Videos`, click **Clear All** and select **Video** in the **Content Type**.
 - In **Search**, type the product name. On the Search Results page, click **Clear All** and select **Video** in the **Content Type**.

The **Video** content type is displayed only when videos are available for that product.

In the right pane, the page displays a list of available videos.

- To find the Avaya Mentor videos on YouTube, go to www.youtube.com/AvayaMentor and do one of the following:
 - Enter a key word or key words in the **Search Channel** to search for a specific product or topic.
 - Scroll down Playlists, and click a topic name to see the list of videos available for the topic. For example, Contact Centers.

 **Note:**

Videos are not available for all products.

Support

Go to the Avaya Support website at <https://support.avaya.com> for the most up-to-date documentation, product notices, and knowledge articles. You can also search for release notes, downloads, and resolutions to issues. Use the online service request system to create a service request. Chat with live agents to get answers to questions, or request an agent to connect you to a support team if an issue requires additional expertise.

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