About Unified CCX

Overview

Cisco Unified Contact Center Express provides a secure, highly available, and easy to deploy customer interaction management solution for up to 400 agents. This integrated "contact center in a box" is intended for both formal and informal contact centers.

Unified CCX provides options to address multiple contact center functional areas such as:

- Inbound voice

- Outbound campaign

- Agent email

- Web chat

- Social forum activity monitoring and follow-up using SocialMiner are enabled by premium agent license.

Other components included are:

- Historical and Real Time Reporting.

- Browser-based Cisco Finesse Desktops

- Finesse IP Phone Agent (IPPA) for support of phone-based agents

You can deploy these options on Cisco Unified Computing Systems (UCSs) or any other equivalent specification-based third-party virtual servers with the supported reference designs. For more information, see the Unified CCX Virtualization related information located at:
http://www.cisco.com/c/dam/en/us/td/docs/voice_ip_comm/uc_system/virtualization/virtualization-cisco-unified-contact-center-express.html

Unified CCX Components

The following diagram depicts the components of Unified CCX:

Figure 1: Unified CCX Components
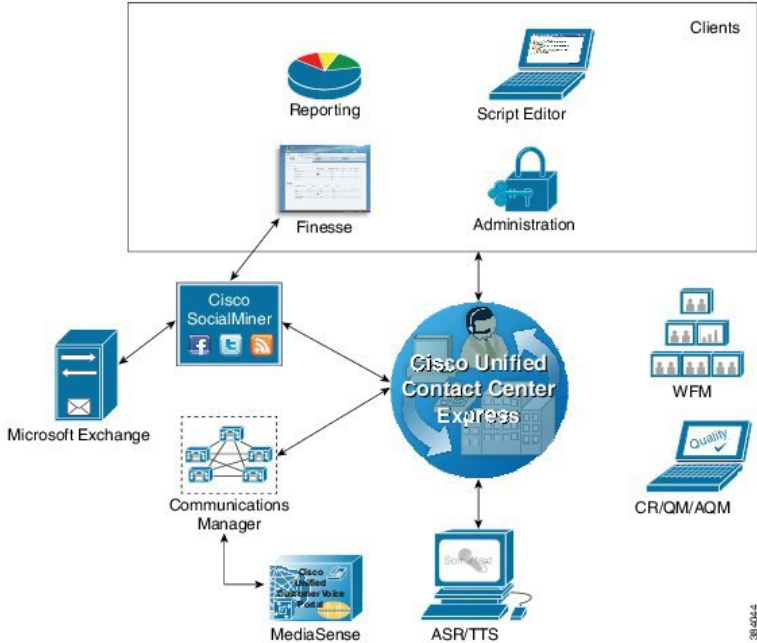
New Features

Removal of Cisco Agent Desktop

Unified CCX 11.0(1) supports only Cisco Finesse as the agent desktop.

Historical Reports

The following Historical Reports have been enhanced with the **Discard Email** feature included:

Available Reports	Description
Email Agent Activity Report	Presents statistics of the email-enabled agents on a per day basis.
Email Contact Detail Report	Presents information about each email contact that is handled by the agent.
Email CSQ Activity Report	Presents email activity statistics of agents in a Contact Service Queue (CSQ) on a per day basis.
Email Traffic Analysis Report	Gives the count of email messages that are received for each CSQ.

Other Reporting Enhancements

These are the following reporting enhancements done in Unified CCX 11.0(1):

- Improved user experience.

- Enhancement of the reporting gadgets on Finesse.

Cisco Finesse related Enhancements

The following Cisco Finesse enhancements are available in the Unified CCX 11.0(1):

- Agent accessibility.

- Finesse IP Phone Agent.

- Increased the number of wrap-up codes.

- Increased number of phone books.

- Increased number of contacts.

- Enhancements in Call Variable Layout.

- Post Call Treatment

System Enhancement

The following is a system enhancement available in the Unified CCX 11.0(1):

- Purge enhancement.

Packaging and Licensing Scheme

Unified CCX is available in three different packages: Standard, Enhanced, and Premium. Different packages provide varying levels of customer interaction management channel options and capability within a contact channel. For more detailed information, refer to product data sheets, feature guides, and end user documentation for each type of Unified CCX customer contact interaction management at the following URL:

http://www.cisco.com/en/US/partner/products/sw/custcosw/ps1846/index.html

Unified CCX deployments must have all product components and optional features of the same package type. Mixing components or options from different license packages is not supported.

Licensing for Cisco Unified Contact Center Express

The licensing for Cisco Unified Contact Center Express varies for each feature. Licenses are either concurrent or named-user licenses. All packaging depends on the number of users with the exception of the Inbound Voice High Availability server software option.

Concurrent licenses apply to logged in users. Different individuals may share a concurrent license as long as only one of them is logged in. For example, Company A has 300 unique users that work in 3 shifts. Each shift has 100 logged in users. Company A needs to purchase only 100 concurrent user licenses.

Named licenses apply to unique individual users regardless of their logged in status. Company B has 300 unique users that work in 3 shifts and each needs access to the licensed option. Each shift has 100 logged in users. Company B must purchase 300 named licenses.

Table 1: Cisco Unified Contact Center Express Licensing and Packaging

Feature	Licensing and Packaging
Inbound Voice Non-High Availability	Concurrent license available with Standard, Enhanced, and Premium
Inbound Voice High Availability	Server software option available with Enhanced, and Premium
Preview Outbound	Concurrent license included with Premium
Progressive and Predictive IVR Outbound, Progressive and Predictive Agent Outbound	Optional license available with Premium
Compliance Recording	Optional named license available with Standard, Enhanced, and Premium
Quality Management	Optional named license available with Premium and Enhanced
Advanced Quality Management	Optional named license available with Premium and Enhanced
Workforce Management	Optional named license available with Premium and Enhanced
Call Recording with MediaSense	Concurrent license optionally available with Premium and Enhanced

Desktops

Cisco Finesse provides the following agent interfaces:

- Cisco Finesse agent desktop and IP Phone Agent (IPPA) for agent use.

- Cisco Finesse supervisor desktop for supervisor use.

- Cisco Finesse administrator console for administrator use.

Cisco Finesse agent interface services are available with the following Unified CCX packages:

Feature	Premium	Enhanced	Standard
Cisco Finesse agent and supervisor desktops	Included	Included	Not Included
Cisco Finesse IP Phone Agent	Included	Included	Included
Cisco Finesse administrator console	Included	Included	Included

Cisco Finesse Agent Desktop Features

The following table describes the Cisco Finesse Agent Desktop features that are available in each Unified CCX package.

Table 2: Cisco Finesse Agent Desktop Features Available in Each Unified CCX Package

Feature	Premium	Enhanced
Agent State Control. From the agent desktop, agents log in, log out, and make themselves ready and not ready.	Included	Included
Call Control. From the agent desktop, agents can answer, release, hold, retrieve, conference, and consult transfer the calls. Blind transfer is not supported.	Included	Included
Dynamic Regrouping. Change of agent association with a resource group is applied immediately.	Included	Included
Live Data Gadgets. Agents have access to Live Data Gadgets for themselves and the queues to which they are associated. For example, from the Finesse Gadgets, agents can see how many calls they have handled today and how many calls are currently in queue for their CSQ.	Included	Included
Reason Codes. Agents can be configured to select reason codes for Not Ready and Logout.	Included	Included
Basic CTI. The agent desktop supports one variable in the header of the call control gadget and up to a total of 20 variables in two columns below the header (up to 10 in each column). You can use call variables, Extended Call Context (ECC) variables, or the following Outbound Option ECC variables: • BACampaign • BAAccountNumber • BAResponse • BAStatus • BADialedListID • BATimeZone • BABuddyName	Included	Included

Feature	Premium	Enhanced
Telephony Support. Finesse can be deployed with select Cisco Unified IP Phone models, as described in *Cisco Unified CCX Software and Hardware Compatibility Guide*, located at http://docwiki.cisco.com/wiki/Compatibility_Matrix_for_Unified_CCX. However, there are different features available on different phones. An agent ACD (Unified CCX) extension cannot be shared across multiple devices. It is valid only with a single line. You can set the agent ACD extension for Call Forward No Answer (to voicemail or any other endpoint) as long as the value for the Ring No Answer timer on that device (or in Cisco Unified Communications Manager if the default is chosen) is greater than the value for the Select Resource Timeout in the Select Resource step of the script. Unified CCX monitors and reports on activities for the first four extensions on a phone, including non-ACD lines. Agents are associated with a specific Cisco Unified Communications Manager extension (directory number).	Included	Included
Hot Desking. Hot desking allows agents to log in using Finesse and any Cisco Unified IP Phone that is registered with the same Cisco Unified Communications Manager cluster. This capability allows multiple agents to use the same phone, but only one at a time. For example, different agents on different shifts may use the same workstation and phone. Extension Mobility brings a user-specific phone profile (including configured extensions for that user) to the phone being logged in from. After logging in to Cisco Unified Communications Manager with Extension Mobility, agents can log in to Unified CCX using Finesse.	Included	Included
Desktop Workflows. The workflows allow to automate common repetitive agent tasks. A workflow has a unique name and a helpful description. Use the Manage Workflows and Manage Workflow Actions gadgets to view, add, edit, or delete workflows and workflow actions. All workflows are team-level workflows. You cannot create a global workflow. If you need a global workflow, create a team workflow and assign it to all teams.	Included	Included

Feature	Premium	Enhanced
Application Integration - HTTP. Finesse can be configured using desktop workflows to allow call data to be passed to other desktop applications (for example, CRM applications) for an application window. Passing data to other applications is performed through HTTP put/get commands that are then associated with specific call events such as call ringing. No programming is required to develop a screen pop. Application integration can also be done upon call release to pop open a wrap-up application on the agent workstation.	Included	Included
Workflow-Initiated Call Recording. Finesse can be configured to automatically start recording on calls that meet conditions defined in the application script and voice contact workflow.	Included	Included
Automatic Failover. Upon failure of the active Unified CCX server, Finesse will automatically log agents back in on the standby server, and the agent will be placed into a Not Ready state. Upon failure of the active Unified CCX server, active calls on agents phones will survive. However, the call duration and other information that is associated with the call in the historical reporting database may be affected. Historical reports generated for time periods in which a failover occurred will have missing or incorrect data. It will be discernable from the report that a failover occurred.	Optional with HA license.	Optional with HA license.
Wrap-Up Codes. The wrap-up code selection is available to the agent.	Included	Included
Agent Email. Queues and routes email messages to staffed and skilled agents, helps the agent to respond easily, and provides a collection of historical reports that help measure email performance accurately.	Included	Not available
Web Chat . The web chat with premium provides the facility for customers to initiate a chat session with the agent.	Included	Not available
Workforce Optimization. Cisco Unified Workforce Optimization (WFO) for Unified CCX is a full-featured solution for optimizing performance and quality and is an integral component of the Cisco Unified Communications System. The WFO suite provides two solutions: Workforce Management (WFM) and Call Recording and Quality Management (QM).	Optional with Workforce Optimization user license	Optional with Workforce Optimization user license
Outbound Preview Dialer. Finesse includes buttons to control an agent response to an outbound contact offering by the system. If the agent clicks the Accept button, the system places the outbound call to the customer from the agent phone.	Included	Not available

Cisco Finesse IP Phone Agent Features

The following table describes the Finesse IP Phone Agent (FIPPA) features that are available in each Cisco Unified CCX package.

Table 3: FIPPA Features Available in Each Cisco Unified CCX Package

Feature	Premium	Enhanced	Standard
Agent State Control. From the FIPPA XML application, agents log in, log out, and make themselves ready or not ready.	Included	Included	Included
Call Control. The Cisco Unified IP Phone provides call control.	Included	Included	Included
Dynamic Regrouping. Change of agent association with a resource group is applied immediately.	Included	Included	Included
Reason Codes. Agents can be configured to select reason codes for Not Ready and Logout.	Included	Included	Included
Basic CTI. FIPPA allows for call data to be popped onto the IP Phone display upon call ringing.	Included	Included	Included
Telephony Support. FIPPA can be run from any phone that supports an XML client.	Included	Included	Included
Hot Desking. Hot desking allows agents to log in using any Cisco Unified IP Phone that is registered with the same Cisco Unified Communications Manager cluster. Agents using Cisco IP Communicator can also use Extension Mobility. This capability allows multiple agents to use the same phone, but only one at a time. For example, different agents on different shifts may use the same workstation and phone. Extension Mobility brings a user-specific phone profile (including configured extensions for that user) to the phone being logged in from. After logging in to Cisco Unified Communications Manager with Extension Mobility, agents can log in to Cisco Unified CCX using Finesse.	Included	Included	Included

Cisco Finesse Supervisor Desktop Features

The following table lists the Cisco Finesse Supervisor Desktop features that are available in each Cisco Unified CCX package.

Table 4: Cisco Finesse Supervisor Desktop Features Available in Each Cisco Unified CCX Package

Feature	Premium	Enhanced	Standard
View / Change Agent State. Supervisors can view the current state of all agents that are part of their team. The supervisor desktop allows the supervisors to change an agent state to Ready, Not Ready, or Logout.	Included	Included	Not available
Live Data Gadgets. Supervisors can view statistics of all agents and queues that are associated with their team.	Included	Included	Not available
Silent Monitoring. Supervisors can silently monitor agent calls. Supervisor can only monitor one agent at a time. To monitor another agent, supervisor must end the silent monitoring call, and then select a new agent who is in Talking state.	Included	Included	Not available
Barge-in. Supervisors can barge in on an agent call that they are silently monitoring. The Barge-in feature brings the supervisor, the agent, and the caller into a three-way conference. The agent is aware when the supervisor barges in. Barge-in is supported with Finesse using supported phones, or FIPPA.	Included	Included	Not available
Intercept. Supervisors can intercept an agent call. The intercept feature transfers the call to the supervisor and the agent is available to take another call. Intercept is supported with Finesse using supported phones, or FIPPA.	Included	Included	Not available
Search and Play Gadget. Cisco MediaSense provides Search and Play gadget, a web interface, which allows to search and filter active and completed call recordings.	Included	Included	Not available
Automatic Failover and Re-login. Upon Cisco Unified CCX Engine failover, Finesse automatically fails over to the standby Unified CCX Engine. The supervisor is logged in again and set to "Not Ready" state, but the call will continue to progress.	Included	Included	Not available

Inbound Voice

Cisco Unified CCX Standard, Enhanced, and Premium each provide varying levels of inbound voice ACD, IVR, CTI, agent and supervisor desktops, desktop administration, real-time and historical reporting, and web-based administration features.

Each user license is for a concurrent user. For example, a contact center with three shifts of 100 agents and supervisors requires 100 concurrent user licenses. Each shift of 100 users would reuse these licenses during their shifts.

The following table lists the inbound voice licensed components:

Table 5: Inbound Voice Licensed Components

License	Premium	Enhanced	Standard
Concurrent inbound voice seat with FIPPA Each concurrent inbound voice user (agent or supervisor) requires a concurrent seat license. Each quantity of one seat license provides one quantity of Cisco Finesse IP Phone Agent (FIPPA).	Yes	Yes	Yes
Concurrent inbound voice seat with Finesse Desktop Each concurrent inbound voice user (agent or supervisor) requires a concurrent seat license.	Yes	Yes	Not available
Basic Prompt and Collect IVR port	Yes	Yes	Yes
Advanced IVR port	Yes	Not available	Not available
High Availability (HA) option HA provides licensing for mirrored, warm standby server software.	Yes	Yes	Not available

The following table lists the inbound voice features:

Table 6: Inbound Voice Features

Feature	Premium	Enhanced	Standard
General System Features with Server Software			
Inbound voice redundancy support	High-availability cluster over the WAN with automatic failover	High-availability cluster over the WAN with automatic failover	Not available
Maximum number of ACD lines per agent	1	1	1
Maximum number of secondary lines with Finesse	3	3	3
Call conferencing	Included	Included	Included
Agent inter-dialing support	Included	Included	Included
Direct-outward-dialing (DOD) support	Included	Included	Included
Inbound Voice Seats			
Maximum number of configurable inbound agents supported	2000	2000	2000
Maximum number of active inbound agents supported (including supervisor seats)	400	400	400

Feature	Premium	Enhanced	Standard
Maximum number of inbound supervisor positions supported	42	42	42
Inbound seat license type	Concurrent user	Concurrent user	Concurrent user
Integrated ACD Features with Server Software			
Custom scripting with Cisco Unified Contact Center Express Drag and Drop Editor	Included	Included	Included
Maximum number of agent groups supported	150	150	150
Maximum number of agents per team	50	50	50
Automatic Number Identification (ANI) support	Included	Included	Included
Dialed Number Identification Service (DNIS) support	Included	Included	Included
Route on Skill	Included	Included	Included
Route on Skill competency	Included	Included	Included
Conditional routing (time of day, day of week, and custom variables)	Included	Included	Included
Custom routing based on data from database access (for example, data-directed priority routing)	Included	Not available	Not available
Dynamic priority queuing	Included	Included	Not available
Maximum number of definable skill groups	150	150	150
Maximum number of skills per agent	50	50	50
Recording			
Workflow-based recording with Cisco Finesse	Available with MediaSense or WFO license	Available with MediaSense or WFO license	Not available

IVR Ports

IVR ports are packaged as either Basic or Advanced IVR ports.

- Basic IVR ports licensing—Basic IVR ports are not licensed. You must use the Cisco Collaboration Sizing Tool to determine the maximum number of Basic IVR ports that are supported on a per-configuration basis.

- Advanced IVR ports licensing—Advanced IVR ports are licensed on a per-inbound voice seat basis and are available only with the Premium package. Each inbound voice seat provides two Advanced IVR port licenses. For example, a 100-seat inbound voice deployment provides 200 Advanced IVR port licenses. Advanced IVR port licenses counts are checked at run-time. In the example given here, the 201st

simultaneously active request for an Advanced IVR port to handle an incoming call would be denied. Deployments that require additional advanced IVR ports need to purchase add-on Unified CCX Premium seats. Each Premium seat provides two advanced IVR ports.

Inbound Voice Packaged Components

The following sections describe the primary components that are provided with inbound voice. These sections provide high-level descriptions of the features and functions provided for these components. For more specific information, see the Cisco Unified CCX user documentation.

Automatic Call Distribution

The following table describes the Automatic Call Distribution (ACD) features that are available in each Unified CCX package.

Table 7: ACD Features Available in Each Unified CCX Package

Feature	Premium	Enhanced	Standard
Conditional Routing. Unified CCX supports routing based on caller input to menus, real-time queue statistics, time of day, day of week, ANI, dialed number, and processing of data from XML text files.	Included	Included	Included
Agent Selection. Unified CCX supports the longest available, linear, most handled contacts, the shortest average handle time, and circular agent selection algorithms. With Basic ACD functionality, agents are associated with one resource group only.	Included	Included	Included
Customizable Queuing Announcements. Unified CCX supports the playing of customizable queuing announcements based on the skill group that the call is being queued to, including announcements related to position in queue and expected delay.	Included	Included	Included
Re-route on Ring No Answer. If the selected agent does not answer within the allowed time limit, the caller retains the position in queue. Any screen pop data is also preserved.	Included	Included	Included
Data driven routing for HTML and XML data sources. The ability to use data obtained from HTML or XML documents to make routing decisions. XML document processing can also be used as a data store to access system-wide static data, such as a list of holidays, hours of operation, or a short list of hot customer accounts.	Included	Included	Included

Feature	Premium	Enhanced	Standard
Agent Skill and Competency-Based Routing. Agents can be configured with specific number of skills, each with up to 10 different competency levels. Contact Service Queues (also known as skill groups) can be configured as requiring up to specific number of skills, each with up to 10 minimum skill competency levels. The Unified CCX routing logic then matches the caller and contact requirements with agent skills to find the optimum match using one of the following agent selection criteria: • Longest available, most handled contacts, or shortest average handle time • Most skilled, most skilled by weight, or most skilled by order • Least skilled, least skilled by weight, or least skilled by order	Included	Included	Included
High Availability Failover. With HA failure of the active server can be detected and the ACD subsystem can automatically fail over from the active to the standby server.	Optional with HA license	Optional with HA license	Not available
Dynamic Re-skilling by Administrator or Supervisor. Changes to CSQ skills and competencies and agent skills and competencies are applied immediately.	Included	Included	Included
Prioritized Queuing. Up to 10 levels of customer contacts can be prioritized based on call or customer data, and calls may be moved within or among queues under workflow control using priority information.	Included	Included	Not available
Agent Routing. Unified CCX routing applications can select a specific agent if that agent is in Ready state. (Queuing on a per agent basis is not supported.)	Included	Included	Not available
Data-driven routing based on JDBC database sources via SQL. The ability to use data obtained from a JDBC compatible database via a SQL query to make routing decisions.	Included	Not available	Not available
Wrap-Up and Work Modes. After call completion, an agent can be configured to be automatically placed into Work state, on a per CSQ basis. The agent can also choose to enter work state if that option is provided by the agent desktop administrator. A wrap-up timer is also configurable on a per CSQ basis.	Included	Included	Not available
Wrap-Up Codes. Agents may select administratively defined wrap up codes.	Included	Included	Not available

Interactive Voice Response

The following table describes the Interactive Voice Response (IVR) features that are available in each Unified CCX package.

Table 8: IVR Features Available in Each Unified CCX Package

Feature	Premium	Enhanced	Standard	IVR License
Basic Prompt and Collect IVR. Basic IVR ports provide a queue point, custom messaging and prompting, caller input collection, and processing via DTMF decoding. Decoded DTMF input may be used for both routing and screen pop purposes. Basic call controls such as terminate, transfer, and place call are also supported as part of the basic IVR functionality. **Note** Basic IVR port and Advanced IVR port cannot be mixed in the same configuration. Advanced IVR port includes all features available in Basic IVR port.	Included as a part of advanced IVR port	Included	Included	Included
High Availability Failover. With HA, failure of the active server can be detected and the IVR subsystem can automatically fail over from the active to the standby server. All IVR functions will be restored on the standby server. **Note** All calls in queue and calls receiving IVR call treatment will be lost. Calls already transferred to the agent will be preserved.	Optional with HA license	Optional with HA license	Not available	Optional with HA license

Feature	Premium	Enhanced	Standard	IVR License
Advanced IVR Port Database Integration. The Unified CCX server can interoperate with any JDBC-compliant database. Databases tested and supported by Cisco are listed in *Cisco Unified CCX Software and Hardware Compatibility Guide*, which is available at: http://docwiki.cisco.com/wiki/Compatibility_Matrix_for_Unified_CCX. Data retrieved from databases can be used with the conditional routing capabilities to provide customer profile-based routing and queuing. Database integration also provides the ability to offer complete self-service applications to callers. Database views are not supported using the Unified CCX Editor database steps, but database views can be accessed using Voice XML or Java logic modules.	Included	Not available	Not available	Included
Advanced IVR Ports HTTP Triggers (the web analog to Unified CM Telephony) to invoke and run a workflow. HTTP triggers enable a Unified CCX to receive a customer contact request through an HTTP request. This approach allows web users to be offered service through a "click to talk to an agent" button. Information collected using the web (a customer call back number, account number, shopping cart content, and so on) can be passed to the Unified CCX script to allow customer profile-based routing and a data-rich window. These contacts can be prioritized and routed using the same methods available to normal inbound voice callers.	Included	Not available	Not available	Included

Feature	Premium	Enhanced	Standard	IVR License
Advanced IVR Port SMTP outbound mail subsystem that may be used at run time under workflow control to send an email message. Third-party paging or fax products that accept an incoming email message to invoke a page or fax service may use this subsystem to provide real-time paging and fax responses in addition to email responses.	Included	Not available	Not available	Included
Advanced IVR Port Voice XML 2.0 Support. Unified CCX supports executing application logic developed with the Voice XML (VXML) standard. VXML is required for certain complex grammar ASR and TTS interactions and is optional for a DTMF or simple ASR or TTS voice interaction service. VXML allows organizations to reuse application logic from other applications, such as a transaction server to a mainframe database. **Note** 1. Unified CCX uses MRCP v1 for communicating with third-party ASR-TTS servers. For information on compatible versions of the ASR-TTS see, *Compatibility Matrix for Unified CCX* at: http://docwiki-dev.cisco.com/wiki/Compatibility_Matrix_for_Unified_CCX	Included	Not available	Not available	Included
Advanced IVR Port Java Support. The Unified CCX server can support the defined logic using Java. Java support allows the reuse of logic from the existing web and Java applications.	Included	Not available	Not available	Included
Advanced IVR Port Automatic Speech Recognition via MRCP. ASR provides the ability to use natural human speech to replace DTMF keypad presses as a way to interact with IVR applications.	Optional with purchase of compatible ASR product	Not available	Not available	Optional with purchase of compatible ASR product

Feature	Premium	Enhanced	Standard	IVR License
Advanced IVR Port Text to Speech via MRCP. TTS provides the ability to use flat text files as input to a computer-generated speech engine. TTS can replace prerecorded human speech in IVR applications.	Optional with purchase of compatible TTS product	Not available	Not available	Optional with purchase of compatible TTS product
General IVR Features				
Play messages to callers: Music on hold	Included through Cisco Unified Communications Manager Music on Hold server or .wav file	Included through Cisco Unified Communications Manager Music on Hold server or .wav file	Included through Cisco Unified Communications Manager Music on Hold server or .wav file	Included through Cisco Unified Communications Manager Music on Hold server or .wav file
Play messages to callers: Prompts	Included through .wav file	Included through .wav file	Included through .wav file	Included through .wav file
Play messages to callers: Combine prompts, music, and messages	Included and fully customizable	Included and fully customizable	Included and fully customizable	Included and fully customizable
Capture and process caller DTMF input	Included	Included	Included	Included
Automated-Attendant support	Included and fully customizable	Included and fully customizable	Included and fully customizable	Included
Database integration	Included	Not available	Not available	Included
Automatic Speech Recognition (ASR)	Optional through Media Resource Control Protocol (MRCP)	Not available	Not available	Through Media Resource Control Protocol (MRCP)
Text to Speech (TTS)	Optional through MRCP	Not available	Not available	Optional through MRCP
Real-time notification services (email; support for paging and fax)	Included (paging and fax require integration with third-party services)	Not available	Not available	Included (paging and fax require integration with third-party services)
VoiceXML for ASR, TTS, and DTMF	Included	Not available	Not available	Included

Feature	Premium	Enhanced	Standard	IVR License
Read data from HTTP/S and XML pages	Included	Included	Included	Included
Run workflows through HTTP/S request	Included	Not available	Not available	Included
Integrated self-service application support	Included	Not available	Not available	Included
Retrieve XML data using HTTP/S mechanism	Included	Not available	Not available	Included
Retrieve XML/JSON based data using generic REST API call	Included	Not available	Not available	Included

The following table describes the Outbound IVR features that are available with a premium package and separate Outbound IVR license which provides both predective and progressive.

Table 9: Outbound Features (IVR and Agent) Available with a Premium Package

Feature	Premium
System Features	
Hardware configuration	Outbound (IVR and Agent deployed in the same VM) Dialer is deployed co-loaded on the same virtual machine (VM) as the inbound voice server.
Outbound IVR Ports and Agent Seats	
Maximum number of Outbound IVR ports and Agent seats supported	150
Outbound IVR Port license type	Concurrent
Outbound Agent Seat license type	Concurrent
Outbound IVR and Agent Features (Progressive and Predictive)	
Maximum number of active outbound campaigns	15
Maximum number of active contacts per outbound campaign **Note** Import contacts in chunks of 10,000 at a time.	1 million
Ability to automatically detect voice answer, answering machine, fax/modem, special information tones (all of these available with all the supported gateways)	Included
Administration	
Ability for administrator to create and configure campaigns	Included

Feature	Premium
Ability for administrator to create non-North American area code to time-zone mappings	Included

The summary overview of system maximums for inbound and outbound voice in the tables are for reference only.

Computer Telephony Integration

Computer Telephony Integration (CTI) refers to the ability to use data entered by the caller, ACD, IVR, or other data sources to pop to the agent, to make routing decisions, or to use as a key to perform a data lookup (for example, using a database access prior to popping to the agent, or to use in making routing decisions). CTI may also include the ability to invoke a third-party application and to pass data to that application as part of the agent screen pop.

The following table lists the CTI features that are available in each Cisco Unified CCX package.

Table 10: CTI Features Available in each Cisco Unified CCX Package

Feature	Premium	Enhanced	Standard
Basic CTI. Provides a customizable enterprise data window that is popped on the agent desktop upon call ringing. Data in the enterprise data window includes ANI, dialed number, and any caller input (account number, order number, case number, reason for calling, and so on), and details about how long the caller interacted with the IVR, how long the caller waited in queue, and how long the caller spent with all other agents if this was a transferred call.	Included	Included	Included

Feature	Premium	Enhanced	Standard
Advanced CTI. Advanced CTI functionality allows call data to be passed to other Windows-based desktop applications (for example, CRM applications) for an application screen pop on ringing. Passing data to other applications is performed through keystroke macros that are then associated with specific call events such as call ringing or call release. With keystroke macros and HTTP put/get commands, no programming is required to develop a screen pop application.	Included. Premium package adds support for using data from supported databases using workflow-based SQL queries	Included. Enhanced package adds support for using data from XML data sources. Database integration is not supported	Not available
Automatically start any Microsoft Windows-compatible application: Pass initialization parameters	Included	Included	Not available
Populate data to any Microsoft Windows-compatible application	Included	Included	Not available
Populate data to any browser-based application	Included	Not available	Not available
Customer database integration (JDBC)	Included	Not available	Not available

Direct Preview Outbound

The Direct Preview Outbound Dialer provides campaign-based outbound preview dialer support. Each inbound Premium seat provides one outbound seat. If you have 100 agent licenses, you can have up to 100 agents logged in and up to 100 agents handling inbound and outbound calls at the same time.

The following table lists the Outbound Preview Dialer availability in Unified CCX premium package:

Table 11: Direct Preview Outbound Availability for Unified CCX Premium Package

Feature	Premium
Direct Preview Outbound	Available

The following table describes the Outbound Preview Dialer features that are available in premium Unified CCX package:

Note For the Outbound feature, the maximum number of campaigns supported is 15 and the maximum number of supervisor positions supported is 42.

Table 12: Direct Outbound Preview Features Available for Unified CCX Premium Package

Feature	Premium
System Features **Note** These features are the same as for inbound voice with the exception of redundancy.	
Hardware configuration	Deploys and executes co-loaded on the same virtual machine as the inbound voice server.
Outbound Voice Seats	
Maximum number of active outbound agents supported	150
Outbound license type	Concurrent user
Outbound Preview Dialer Features	
Maximum number of active outbound campaigns	15
Maximum number of active contacts per outbound campaign **Note** Import contacts in chunks of 10,000 at a time.	1 million
Integrated CTI and Screen Pop Features with Cisco Unified Contact Center Express Seat License	
Populates customer's name, account number, and phone number dialed	Included
Cisco Finesse Features for Agent with Cisco Unified Contact Center Express Seat License	
Workflow-based recording	Included
Ability for supervisor to use Silent Monitor, Barge-In, and Intercept	Included
Ability for agent to accept or reject outbound contact. Agent can reclassify call to anyone of many call results, such as busy, fax, and answering machine.	Included
Cisco Finesse Features for Supervisor with Cisco Unified Contact Center Express Seat License	

Feature	Premium
Live Data Gadgets	Included
Silent Monitor: Listen in on an agent's call	Included
Barge-In: Join in on an agent's conversation	Included
Intercept: Take a call from an agent	Included
Record	Optional with MediaSense, Cisco WFO, or WFO Solutions Plus
Integrated Historical Reporting with Cisco Unified Contact Center Express Seat License	
Preview Outbound Campaign Summary report	Included
Preview Outbound Agent Detail Performance report	Included
Administration	
Campaign Management: Administrators can create and configure campaigns. They can specify a daily time range during which outbound calls are made and a set of CSQ to specify whose agents make the outbound calls, They can also specify and import a list of customer contacts to be called.	Included
Area Code Management: Administrators can add mappings from area-code to time zone for non-North American locations. This information is used to determine the customer contact current time before placing an outbound call.	Included

Outbound Progressive and Predictive Dialer

The Unified CCX Outbound Progressive and Predictive Dialer provides campaign-based agent outbound progressive and predictive dialer support. The number of agent seats depends on the number of outbound licenses available. If you have 10 outbound licenses, you can have up to 10 concurrent agent seats to handle outbound calls and 10 concurrent outbound IVR calls.

The following table lists the Outbound Progressive and Predictive Dialer feature that is available with the premium package.

Table 13: Outbound Progressive and Predictive Dialer Available with Premium Package

Feature	Premium
Progressive and Predictive Agent Outbound	Optional with Outbound License

The following table describes the Outbound Progressive and Predictive features that are available for the Outbound License with the premium package.

Note For the Outbound feature, the maximum number of campaigns supported is 15 and the maximum number of supervisor positions supported is 42.

Table 14: Outbound Progressive and Predictive Dialer Availability with Premium Package and an Additional Outbound License

Feature	Premium
System Features **Note** These features are the same as for inbound voice with the exception of redundancy.	
Hardware configuration	Deploys and executes co-loaded on the same virtual machine as the inbound voice server.
Outbound Voice Seats	
Maximum number of active concurrent agents supported	150
Outbound license type	Concurrent user
Outbound Progressive and Predictive Dialer Features	
Maximum number of CSQs per outbound campaign	10
Maximum number of active contacts per outbound campaign **Note** Import contacts in chunks of 10,000 at a time.	1 million
Cisco Finesse Features with Cisco Unified Contact Center Express Seat License	
Workflow-based recording	
View agent activity in real time	
Cisco Finesse Features for Supervisor with Cisco Unified Contact Center Express Seat License	
Silent Monitor: Listen in on an agent's call	
Barge-In: Join in on an agent's call	
Intercept: Take a call from an agent	
Integrated Historical Reporting with Cisco Unified Contact Center Express Seat License	
Agent Outbound Campaign Summary Report	
Agent Outbound CCDR Report	
Agent Outbound Half Hourly Report	
Outbound Agent Detail Performance Report	

Feature	Premium
Integrated Live Data Reporting with Cisco Unified Contact Center Express Seat License	
Agent Outbound Team Summary Report	
Administration	
Campaign Management: Administrators can create and configure campaigns using Unified CCX Administration web interface and REST APIs	

Web Chat

Unified CCX premium package provides the facility for customers to initiate a chat session with the agent. State control is common for web chat and email.

Contact Channel	Premium
Inbound Web Chat	Included

Web Chat Components

Finesse Gadgets

The following gadgets are available when the administrator adds the gadgets to the desktop:

- Chat and Email Control gadget—Allows the agent to control the chat state and to accept incoming customer chat requests.

- Manage Chat and Email gadget—Allows the agent to handle multiple chat sessions.

Chat Live Data and Historical Reports

Unified CCX provides chat-specific live data reports and historical reports.

Web Chat Features

The following table describes the web chat features that are available in premium package.

Table 15: Web Chat Features Available in Premium Package

Feature	Premium
Agent alias. Administrator can set an alias for chat agent. When the agent is on chat, the alias of the agent is displayed to the customer.	Included
Auto chat reject. If no agent is available, Web Chat rejects the chat request.	Included
Chat timeouts. Session timeouts for chat inactivity and maximum wait period.	Included
Audible alert. An alert is played when the agent receives a new chat request or when there is a new message on an inactive chat session tab.	Included

Feature	Premium
Multisession chat for agents. Agents can handle multiple chat sessions. The administrator can set one to five sessions and the agent will be presented with set number of sessions.	Included
Predefined Responses. Administrator can configure up to 500 Predefined Responses across chat and email. These Predefined Responses can be tagged Global or with up to 10 CSQ tags. Chat supports plain text only.	Included
Chat transcript. Storage and retrieval of chat transcripts through Cisco SocialMiner, and download of chat transcripts by end user as PDF.	Included
Live Data and historical reports.	
Supervisor reports. Team report for CSQ and agents. Agent statistics and CSQ statistics for chat.	Included
Integrated Web Chat General System Features with Cisco Finesse Agent Desktop	
Multiple skills per chat agent.	Included
Blended voice, chat, and email agents.	Included and configurable
Offer voice calls when on chat.	Included and configurable
Offer chat when on voice calls.	Included and configurable
Dedicated chat agents.	Included and configurable
Separate voice and non-voice state model .	Included
Maximum number of concurrent web chat sessions. Depends on the OVA profile.	Included 60 / 120 chat sessions
Customer form generation and customization.	Included
Agent skill and competency-based routing. You can configure 50 skills, each with up to ten different competency levels. You can configure Contact Service Queues (also known as skill groups) as requiring up to 50 skills, each with up to ten minimum skill competency levels. The web chat routing logic then matches the contact problem statement with agent skills to find the optimum match using one of the following agent selection criteria: • Longest available • Most skilled	Included

Feature	Premium
Dynamic reskilling by administrator. Changes to CSQ skills and competencies and agent skills and competencies are applied immediately.	Included
Conditional routing. Routing is based on a problem statement that is chosen by the customer.	Included
Agent selection. The longest available and most skilled agent selection algorithm.	Included
Rerouting on chat no answer. If the allocated agent does not accept chat within the allowed time limit, the contact is requeued and rerouted.	Included
Customizable queuing messages. Customizable contact waiting message.	Included
High Availability (HA) failover. With HA, failure of the active server can be detected and the nonvoice subsystem can automatically fail over from the active to the standby server.	Optional with HA License

Agent Email

Unified CCX supports agent email with Finesse. Agent Email is available with Unified CCX premium package.

Feature	Premium
Finesse Agent Email	Included

Agent Email Components

Finesse provides gadgets for handling email contacts. The following gadgets are available:

- Chat and Email Control Gadget—Allows the agent to control the chat and email state (non-voice state). Emails are automatically accepted.

- Manage Chat and Email Gadget—Enables the agent to handle multiple email contacts.

Email Reports

Cisco Unified Intelligence Center provides Historical and Live Data reports for Email. Live Data reports are also available in the Finesse supervisor desktop as gadgets if the administrator enables them.

Agent Email Features

The following table describes the email features that are available with the premium package.

Table 16: Agent Email Features Available with Premium Package

Feature	Premium
Auto accept email. Incoming emails are automatically presented to the agent without any explicit accept (button click).	Included
Visible alert. Email alert along with pending email count.	Included

Feature	Premium
Email contact handling Agents can be configured to handle up to five email contacts.	Included
Requeue email. Agent can re-queue email.	Included
Reply To Header. If the Reply To header is present, the agent's response is sent to that address. Otherwise, it uses the From address of that email to respond.	Included
Save drafts. Agent can save email draft response and resume at a later time	Included
Discard email. Discards email from the agent desktop, but mails are not deleted from the serve.	Included
Predefined Responses. Administrator can configure up to 500 Predefined Responses across chat and email. These Predefined Responses can be tagged Global or with up to 10 CSQ tags. Email supports rich text.	Included
Attachments. Supported. **Attachment size limit** The size limit of a single file attachment is 2MB for both incoming or outgoing. The total size limit of attachments in the outgoing email from the agent is 5MB. The agents can load up to 10 attachments with total size of maximum 5 MB. The total size limit of attachments in the incoming email from the customer is 10MB.	Included
Historical Reports	Included
Email Live Data Reports	Included
Integrated Agent Email General System Features with Cisco Finesse Agent Desktop	
Microsoft Exchange.	Not included; must be purchased separately by customer.
Multiple email addresses. Assign one or more email addresses to a single Contact Service Queue (CSQ)	Included
Dedicated email agents.	Included and configurable
Fully integrated with Cisco Finesse agent desktop.	Included
Separate voice and non-voice state model.	Included
Blended voice, chat ,and email agents.	Included

Feature	Premium
Email routing. • Last Agent Email Routing where attempt is made to route an email to the last agent who handled the previous leg. • Skill and competency based routing which applies to new emails or when Last Agent Email Routing expires.	Included
Dynamic reskilling by administrator. Changes to CSQ skills and competencies and agent skills and competencies are applied immediately. Emails currently being worked by the agents are not affected.	Included
Agent selection. The longest available or most skilled agent selection algorithm.	Included
High Availability (HA) failover. HA is supported in Unified CCX. Upon Unified CCX failover, all emails in the system are automatically requeued and rerouted.	Optional with HA License
Toaster Notification. Toaster Notification. Agent receives a notification when a new email is received.	Included

Reporting

Cisco Unified Intelligence Center is the web-based reporting platform for Cisco Unified CCX. Cisco Unified Intelligence Center Standard license is available with the following Unified CCX packages:

Feature	Premium	Enhanced	Standard
Co-resident Unified Intelligence Center with Standard license.	Included	Included	Included
Standalone Unified Intelligence Center	Included	Not Included	Not Included

Cisco Finesse Recording

The following recording options are available:

• While using the Finesse workflow recording option with MediaSense, you must purchase the Unified CCX recording license.

• Cisco Finesse workflow-based recording using WFO (Workforce Optimization).

Note While using the MediaSense recording option, you must purchase the Unified CCX recording license.

While using the WFO recording option, you must have the Compliance Recording/Quality Management/Advanced Quality Management licenses.

The following table details the various recording features that are supported based on the type of recording options available:

Feature	Recording using WFO	Recording using MediaSense	Recording using MediaSense and WFO Solutions Plus applications
Audio Recording	Supported	Supported	Supported
Video Recording	Not Supported	Supported	Supported
On Demand Recording	Supported	Not Supported	Supported
Quality Management	Supported	Not Applicable	Supported
Advanced Quality Management (with Screen Recording)	Supported	Not Applicable	Supported

Note The licenses required for the recording options mentioned in the above table are:

- For recording using WFO, WFO licenses on Unified CCX are required.

- For recording using MediaSense, licenses on Unified CCX for Workflow based recording and Native MediaSense licenses for IPT recording are required.

- For recording using MediaSense and WFO Solutions Plus applications, licenses on Unified CCX for Workflow based recording, Native MediaSense licenses for IPT recording and Solutions Plus WFO licenses are required.

Quality Management and Compliance Recording

Each user license is for a named (not concurrent) user. For example, a contact center with three shifts of 100 agents and supervisors needs 300 named user licenses. Each person in a shift of 100 users uses the license associated with them during their shift.

Quality Management is licensed on a per named user basis and provides all the server software required with the exception of the Windows operating system and database software for the QM server, which must be purchased off the shelf.

The following table lists the license types and features available:

Table 17: License and Features

Feature	Compliance Recording	Quality Management	Advanced QM
Compliance Recording	Included	Included	Included
Endpoint Recording	Included	Included	Included

Feature	Compliance Recording	Quality Management	Advanced QM
Server Based Recording (via SPAN port)	Included	Included	Included
Network Based Recording	Included	Included	Included
Cisco CUBE Recording (via SIP)	Included	Included	Included
Network Recording (Built In Bridge)	Included	Included	Included
Gateway Recording	Included	Included	Included
Role-based Scoping	Included	Included	Included
Users Synchronized with UCCX	Included	Included	Included
Finesse Recording Controls - (Pause, Resume, Delete)	Included	Included	Included
Attach Custom Metadata	Included	Included	Included
Role Based Dashboards	Included	Included	Included
Exporting of Recordings	Included	Included	Included
Monitoring and Notification Service	Included	Included	Included
Recording Monitoring Dashboard	Included	Included	Included
Reporting	Included	Included	Included
Live Audio Monitoring	Included	Included	Included
Quality Evaluation	Not available	Included	Included
Evaluator Comments	Not available	Included	Included
Screen Recording	Not available	Not available	Included
Live Screen Monitoring	Not available	Not available	Included

Workforce Management

Cisco Workforce Management allows supervisors and contact center managers to develop schedules for their agents and manage key performance indicators and real-time adherence. Managers can create and manage schedules for an unlimited number of sites, manage scheduling for offices spread out in different time zones, and schedule alternative media sources seamlessly, including email. Cisco Workforce Management also allows

agents to view their schedules and performance metrics and request exceptions to those schedules, such as schedule offers and trades and requesting time off. Cisco Workforce Management is available with Unified CCX Enhanced and Premium licenses.

Each user license is for a configured (not concurrent) user. For example, a contact center with three shifts of 100 agents and supervisors needs 300 configured user licenses. Each person in a shift of 100 users uses the license associated with them during their shift.

The following Workforce Management features are available in each Cisco Unified CCX package:

- Forecasting

- Multimedia Scheduling

- Intraday Management

- KPIs and Reporting

- Alerts

- Reporting

- Web Interface

- Desktop Integration