

Contact Center Enterprise Solution Compatibility Matrix, Release 12.5(x)

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Overview

The Contact Center Enterprise (CCE) Solution Compatibility Matrix includes all the Cisco CCE solutions and component compatibility information. This compatibility matrix specifies all supported configurations and versions for Release 12.5(x). The information in this compatibility matrix supersedes compatibility information in any other CCE documentation. If the Compatibility Matrix does not state a configuration or version, then it does not support it.

The process of migrating from Unified CCE, Packaged CCE, or Hosted Collaboration Solution for CC to Webex CCE is like performing a premise-based tech refresh, but with a few key differences pointed out within this document. This document provides guidance on the access and tools available and recommendations on how to accomplish a Webex CCE migration. This document focuses on the core Cisco components. It does not provide information about third-party solution components.

Notes

- Make sure that your Router, Logger, and AW are in the same version as your PG or in a version that is higher than your PG.
- The Compatibility Matrix specifies all supported third-party software (such as Nuance and Informix) and its versions. Support for these software versions and their interoperability depends on the release cycles (patches and upgrades) of the third-party software. For example, support for ESXi depends on VMware release cycles.
- Cisco Hosted Collaboration Solution for Contact Center (HCS for CC) shares the same media kit as Cisco Unified CCE, which includes some components not supported in a Cisco HCS for CC deployment.
- Packaged CCE: In Release 12.5(x), the multistage upgrade support is backward compatible with Release 12.0 only. For all releases prior to 12.0, all components must be on the same release.

Exception: Cisco Unified CM (CUCM) can continue to be on an earlier compatible release for an off-box solution deployment.

- Support for a CUCM release is inclusive of all updates.
- For details on the browsers and the languages that are supported by Cisco Webex Experience Management, see [Experience Management](#).
- Upgrade all the solution components to experience the new features delivered as part of a particular solution release version. Upgrading only the component that delivers the new feature may not be sufficient in all cases. For more information on upgrade paths, see the CCE Upgrade

Flowcharts in the respective [Contact Center Enterprise Installation and Upgrade Guides](#).

- IP IVR 12.5(1), IP IVR 12.5(1) SU1 and IP IVR 12.5(1) SU2 are compatible with CCE 12.5(x).

Central Controller and Component Compatibility

PCCE/UCCE Components, Release 12.5(x)	PCCE/UCCE/HCS for CC components, Release 12.0														
	IdS (Standalone)	Finesse	ECE	CVP	VVB	CUIC (Standalone)	CUIC-LiveData-IdS (Coresident)	Router	Logger	AW	Live Data (Standalone)	PG	SocialMiner	CCMP/CCDM	Notes
Router				N			N				N	Y	Y	N	
Logger				N								Y	Y	N	
AW	N	N	N	N		N	N				N	Y	Y	N	
Live Data (Standalone)		N				N		N		N		Y			
PG		N	N	N			N	N	N	N	N				

PCCE/UCCE/HCS for CC Components, Release 12.5(1)	12.0 PCCE/UCCE/HCS for CC Components, Release														
	IdS (Standalone)	Finesse	ECE	CVP	VVB	CUIC (Standalone)	CUIC-LiveData-IdS (Coresident)	Router	Logger	AW	Live Data (Standalone)	PG	SocialMiner	CCMP / CCDM	Notes

PCCE/UCCE/HCS for CC Components, Release 12.5(1)	12.0 PCCE/UCCE/HCS for CC Components, Release														
	IdS (Standalone)	Finesse	ECE	CVP	VVB	CUIC (Standalone)	CUIC-LiveData-IdS (Coresident)	Router	Logger	AW	Live Data (Standalone)	PG	SocialMiner	CCMP / CCDM	Notes
Identity Server (Standalone)		Y	Y			Y				Y					
Finesse	N		N			Y	N			Y	Y	Y	Y		For Live data gadgets to load in Cisco Finesse, install CUIC 12.0(1) ES 06 or later on Live Data (Standalone) server. See Notes for more information.
ECE	N	Y								Y		Y			
CVP					Y			Y	Y	Y		Y			On PCCE

PCCE/UCCE/HCS for CC Components, Release 12.5(1)	12.0 PCCE/UCCE/HCS for CC Components, Release														
	IdS (Standalone)	Finesse	EC E	CV P	VV B	CUIC (Standalone)	CUIC-LiveData-IdS (Coresident)	Route r	Logge r	A W	Live Data (Standalone)	P G	SocialMine r	CCMP / CCDM	Notes
															12.0, install CCE 12.0 ES37 before you upgrade CVP to 12.5(1).
VVB				Y											
CUIC (Standalone)	N	N								Y	Y				
CUIC-LiveData-IdS (Coresident)		N						N		N		Y			
Customer Collaboration Platform		N													
CCMP				Y				Y	Y	Y					Not Applicable to Packaged

PCCE/UCCE/HCS for CC Components, Release 12.5(1)	12.0 PCCE/UCCE/HCS for CC Components, Release														
	IdS (Standalone)	Finesse	ECE	CVP	VVB	CUIC (Standalone)	CUIC-LiveData-IdS (Coresident)	Router	Logger	AW	Live Data (Standalone)	PG	SocialMiner	CCMP/CCDM	Notes
															CCE.
CCDM				Y				Y	Y	Y					Applicable only to HCS for CC.

Unified CCE/HCS for CC Components, Release 12.5(x)	Unified CCE/HCS for CC Components, Release 11.6														
	IdS (Standalone)	Finesse	ECE	CVP	VVB	CUIC (Standalone)	CUIC-LiveData-IdS (Coresident)	Router	Logger	AW	Live Data (Standalone)	PG	SocialMiner	CCMP/CCDM	Notes
Router				N			N				N	Y	Y	N	
Logger				N								Y	Y	N	

Unified CCE/HCS for CC Components, Release 12.5(x)	Unified CCE/HCS for CC Components, Release 11.6														
	IdS (Standalone)	Finesse	ECE	CVP	VVB	CUIC (Standalone)	CUIC-LiveData-IdS (Coresident)	Router	Logger	AW	Live Data (Standalone)	PG	SocialMiner	CCMP/CCDM	Notes
AW	N	N	N	N		N	N				N	Y	Y	N	
Live Data (Standalone)		N				N		N		N		Y			24000 Agent Deployment is not supported with PG 11.6.
PG		N	N	N			N	N	N	N	N				

Unified CCE/HCS for CC Components, Release 12.5(1)	Unified CCE/HCS for CC Components, Release 11.6														
	IdS (Standalone)	Finesse	ECE	CVP	VVB	CUIC (Standalone)	CUIC-LiveData-IdS (Coresident)	Router	Logger	AW	Live Data (Standalone)	PG	SocialMiner	CCMP /CCDM	Notes

Unified CCE/HCS for CC Components, Release 12.5(1)	Unified CCE/HCS for CC Components, Release 11.6														
	IdS (Standalone)	Finesse	ECE	CVP	VVB	CUIC (Standalone)	CUIC-LiveData-IdS (Coresident)	Router	Logger	AW	Live Data (Standalone)	PG	SocialMiner	CCMP / CCDM	Notes
Identity Server (Standalone)		Y	Y			Y				Y					
Finesse	N		N			Y	N			Y	Y	Y	Y		For Live data gadgets to load in Cisco Finesse, ensure to install CUIC 11.6(1) ES18 or later on Live Data (Standalone) server. See Notes for more information.
ECE	N	Y								Y		Y			ECE 12.5 is not compatible

Unified CCE/HCS for CC Components, Release 12.5(1)	Unified CCE/HCS for CC Components, Release 11.6														
	IdS (Standalone)	Finess e	EC E	CV P	VV B	CUIC (Standalone)	CUIC-LiveData-IdS (Coresident)	Route r	Logge r	A W	Live Data (Standalone)	P G	SocialMine r	CCMP / CCDM	Notes
															with Packaged CCE 11.6.
CVP					Y			Y	Y	Y		Y			
VVB				Y											
CUIC (Standalone)	N	N								Y	Y				
CUIC-LiveData-IdS (Coresident)		N						N		N		Y			
Customer Collaboration Platform		N													
CCMP				Y				Y	Y	Y					CCMP is not applicable to Packaged

Unified CCE/HCS for CC Components, Release 12.5(1)	Unified CCE/HCS for CC Components, Release 11.6														
	IdS (Standalone)	Finesse	EC E	CV P	VV B	CUIC (Standalone)	CUIC-LiveData-IdS (Coresident)	Router	Logger	AW	Live Data (Standalone)	PG	SocialMine	CCMP / CCDM	Notes
															<p>CCE.</p> <p>On UCCE and HCS for CC 11.6, install UCCE 11.6(1) ES 7 before you upgrade CCMP to 12.5(1).</p>
CCDM				Y				Y	Y	Y					<p>CCDM is applicable only to HCS for CC.</p> <p>On HCS for CC 11.6, install UCCE 11.6(1) ES 7 before you</p>

Unified CCE/HCS for CC Components, Release 12.5(1)	Unified CCE/HCS for CC Components, Release 11.6														
	IdS (Standalone)	Finesse	EC E	CV P	VV B	CUIC (Standalone)	CUIC-LiveData-IdS (Coresident)	Router	Logger	AW	Live Data (Standalone)	PG	SocialMiner	CCMP / CCDM	Notes
															upgrade CCDM to 12.5(1).

Notes

- Unified CCE and Packaged CCE compatibility with CUCM:
 - CUCM 11.5, 12.0, and 12.5 are supported with Unified CCE, Packaged CCE, and HCS for CC, Release 12.5.
 - CUCM 14 is supported with Unified CCE and Packaged CCE, Release 12.5 if UCCE 12.5(1) ES 72 or 12.5(2) MR is installed.
 - CUCM 15 is supported with Unified CCE, Release 12.5(2). CUCM 15 is supported with Packaged CCE Release 12.5(2) if CCE 12.5(2) ES 38 is installed.
- Cisco Unified Contact Center Management Portal (CCMP) compatibility with CUCM:
 - CUCM 11.5, 12.0, 12.5 and 14 are supported with CCMP, Release 12.5.
 - CUCM 15 is supported with CCMP, Release 12.5 if CCMP 12.5(1) ES 12 is installed.
- CCE 12.5 supports the latest versions of Cisco Smart Software Manager (CSSM) On-Prem 8.x, that were released in the year 2022.

- In Live Data (standalone) 11.6 and 12.0 deployments, when CUIC and Cisco Finesse components are in version 12.5, Live Data gadgets will not load in Cisco Finesse. You must enable Cross-Origin Resource Sharing (CORS) and set Finesse host URLs to load the Live Data gadgets.
- For more information on CORS CLIs, see the [Cisco Unified Contact Center Enterprise Installation and Upgrade Guide](#).
- To find a comprehensive list of the guides available for a specific release, see the respective [Documentation Guides](#).

Cisco Gateway Hardware and Software

			Gateway Functionality		
Central Controller version 12.5(x) Model	Software Version	Software Feature Set	VXML Gateway Browser	Call Progress Analysis for Outbound Options for SIP Trunks (CUBE)	Unified CCE, Packaged CCE, And Cisco HCS for CC Support
ASR 1001X	IOS XE 16.6	Universal	No	Yes	Yes
ASR 1002X	IOS XE 16.9				
ASR 1004 RP2	IOS XE 16.12				
ASR 1006 RP2	IOS XE 17.2				
	IOS XE 17.6				
	IOS XE 17.9				

			Gateway Functionality		
Central Controller version 12.5(x) Model	Software Version	Software Feature Set	VXML Gateway Browser	Call Progress Analysis for Outbound Options for SIP Trunks (CUBE)	Unified CCE, Packaged CCE, And Cisco HCS for CC Support
Virtual CUBE	IOS XE 16.6	Universal	No	No	Yes
	IOS XE 16.9				
	IOS XE 16.12				
	IOS XE 17.2				
	IOS XE 17.6				
	IOS XE 17.9				
ISR G2 29xx, 39xx, 39xxE	15.6(3)M1	Universal	Yes	Yes	Yes
	15.7(3)M1				
ISR G3 43xx (4321, 4331, 4351)	IOS XE 16.6	Universal	No	Yes	Yes
ISR G3 44xx (4431, 4451,	IOS XE 16.9				

			Gateway Functionality		
Central Controller version 12.5(x) Model	Software Version	Software Feature Set	VXML Gateway Browser	Call Progress Analysis for Outbound Options for SIP Trunks (CUBE)	Unified CCE, Packaged CCE, And Cisco HCS for CC Support
4461)	IOS XE 16.12				
	IOS XE 17.2				
	IOS XE 17.6				
	IOS XE 17.9				
Catalyst 8200/8300	IOS XE 17.6	Universal	No	Yes	Yes
	IOS XE 17.9				

Notes

- Virtual CUBE (vCUBE) can run either on Cisco Cloud Services Router (CSR) 1000V (if you use IOS XE 16.9, 16.12, or 17.2) or Cisco Catalyst 8000V Edge Software (if you use IOS XE 17.4 or 17.6).
- For the 17.9 release, it is recommended to use version 17.9.5a or higher version.
- All gateways in the preceding table support inbound contact center calls. For details on support for Call Progress Analysis (CPA) for Outbound Option with TDM Trunks, see the Cisco ASR 1000 Series documentation at <https://www.cisco.com/c/en/us/support/routers/asr-1000-series-aggregation-services-routers/products-documentation-roadmaps-list.html>

- For IPv6-enabled deployments, the supported IOS versions for NAT64 translations are 15.4(2)T3 and later releases.
- Multi-VRF requires IOS XE 16.3.4 to support HCS for CC.
- The Virtual Assistant-Voice (VAV) feature is supported only on Unified CVP and Cisco VVB. It is not supported with the VXML Gateway.

IOS Versioning Key 16.1(4) M3 and 16.1(4) T1 as Examples

- 16.1 is the version number.
- (4) is the release number.
- M3 and T1 are the train release numbers. M is the mainline train and T is the technology train.
- An increment in the release number after M or T refers to additional bug fixes.

IOS-XE Versioning Key 16.12.1a and 16.12.3 as Examples

- 16.12 is the version number.
- 1 and 3 are the increment release numbers with additional bug fixes.
- "a" indicates a special release.
- Every three releases include a maintenance release incremented as 16.3, 16.6, 16.9, 16.12, 17.3, and so on.

Cisco Unified SIP Proxy (Deprecated)

Supported Versions: Unified CCE, Packaged CCE and HCS for CC solutions support Cisco Unified SIP Proxy (CUSP) 10.0(x), 10.1(x) and 10.2(x) only in non-secure mode.

Notes: CUSP is deprecated. For more information, see [End-of-Sale and End-of-Life Announcement for the Cisco Unified SIP Proxy Version 10.](#)

Third-party SIP Proxy

Cisco recommends Oracle® Communication Session Router, version SCZ9.1.0 GA (Build 46) or later. However, you can also choose to deploy any third-party SIP proxy that suits your requirement.

End Points for Agents and Callers

Endpoint	Voice & Finesse Desktop	Video	Unified CM Silent Monitor	BIB-based recording	Agent Greeting	Whisper Announcements	Finesse IP Agent Phone	IPv6 SCCP (UCCE Only)	IPv6 SIP	MRA
7821, 7841, 7861	Y	N	Y	Y	Y	Y	Y	N	Y	Yes Audio Only
7942G,7945G, 7962G,7965G, 7975G	Y	N	Y	Y	Y	Y	N	Y	N	N
8811, 8821, 8841, 8851, 8851NR, 8861	Y	N	Y	Y	Y	Y	Y	N	Y	Yes Audio Only
8845, 8865	Y	Y	Y	Y	Y	Y	Y	Y	Y	Yes Audio Only

Endpoint	Voice & Finesse Desktop	Video	Unified CM Silent Monitor	BIB-based recording	Agent Greeting	Whisper Announcements	Finesse IP Agent Phone	IPv6 SCCP (UCCE Only)	IPv6 SIP	MRA
EX60	Y	Y	N	N	N	N	N	N	Y	N
Jabber for Mac	Y	Y	Voice only	Y	N	Y	N	N	N	Y
Jabber for VDI	Y	N	N	N	N	N	N	N	N	Y
Jabber for Windows	Y	Y	Voice-only	Y	Y	Y	N	N	N	Y
Webex App for MacOS/Windows	Y	Y	Y	Y	Y	Y	N	N	Y	Y
Webex App for VDI	Y	Y	Y	Y	Y	Y	N	N	N	Y
MX300 G2, MX700, MX800 Telepresence	Y	Y	N	N	N	N	N	N	Y	N
SX10, SX20, SX80 Telepresence	Y	Y	N	N	N	N	N	N	Y	N

Notes

- The phone models that are end-of-sale and end-of-software-maintenance will continue to work with Contact Center Enterprise solutions. The phone models that are end-of-support are still compatible with Contact Center Enterprise solutions, but they are neither tested nor supported by Cisco.

- For end-of-life and end-of-sale announcements, see <https://www.cisco.com/c/en/us/products/eos-eol-listing.html>.
- For information on a specific endpoint, see the product page of the endpoint.
- General: Only the Cisco IP Phones listed in the preceding table are supported as contact center agent phones. As an alternative, you can deploy the Mobile Agent solution to enable the contact center to use any phone as an agent phone.
- General: The Join Across Line (JAL) and Direct Transfer Across Line (DTAL) phone features aren't supported, and must be disabled on phones that come packaged with these features and local CTI ports (LCP) for Mobile Agent.
- General: For any phone that allows Single-Line Mode, you can use Shared Line on a non-ACD line. You must have your PG in Single-Line Mode (set the Agent Phone Line Control setting to Single Line).
- General: Other than call initiation, all other call control on the non-ACD extensions is supported from multiline capable desktops. Calls initiated from the hard phone can be controlled after initial call setup.
- 78xx: If Cisco Finesse IPPA agents use 78xx series phone, you must either disable the Cisco Finesse IPPA Inactivity Timeout feature or increase the timeout in the range of 120 seconds to one day (86400 seconds), so that the agent doesn't get logged out of Cisco Finesse IPPA even if the agent is on any other screen.
- 88xx phones are supported only with desktop controls in the Standard Line mode. If both desktop and device controls are required, use the Enhanced Line mode.
- 89xx and 99xx: 89xx and 99xx series phones don't support video prompt and queue.
- 89xx, 99xx: These phones don't support directly disabling the Join Across Line (JAL) and Direct Transfer Across Line (DTAL) phone features. Instead, you must configure the Unified CM PG to use Multi-Line only. This setting applies to all phones controlled by that specific Unified PG. You cannot configure it on a phone-by-phone basis. Also, configure all phones with Set Maximum number of calls to 2 and Set Busy trigger to 1.
- Webex:

- For minimum supported versions of CUCM and Expressway (for MRA deployments) to support Webex, see the Supported Unified CM Releases and the Supported Expressway Releases tables at https://www.cisco.com/c/en/us/td/docs/voice_ip_comm/cloudCollaboration/wbxt/ucmcalling/unified-cm-wbx-teams-deployment-guide/unified-cm-wbx-teams-deployment-guide_chapter_011.html.
- Jabber:
 - Agent Greeting support for Jabber requires minimum Cisco Jabber version 12.9.
 - MRA support for Jabber requires minimum Cisco Jabber version 12.5 and Expressway 12.5. If you have VPN split-tunneling configured, you can use Jabber with MRA and the Finesse desktop on the same client machine. See <https://www.cisco.com/c/en/us/support/security/anyconnect-secure-mobility-client/products-installation-and-configuration-guides-list.html> for Cisco AnyConnect Mobility Client split-tunneling configuration.
 - If VPN split-tunneling isn't available, use one of the following options for the remote agents:
 - A remote agent who runs Jabber with MRA on one client machine and the Finesse desktop with a VPN connection on a second client machine.
 - A remote agent who runs a Jabber softphone on a laptop that is connected over MRA and runs the Finesse desktop as a Xenapp thin client on the same laptop.
 - **Jabber for VDI isn't supported in Video Contact Center deployments.**
 - Jabber Multiline feature is supported from CCE 11.6.
 - For Cisco Jabber software compatibility details, see the Planning guide for Cisco Jabber at <https://www.cisco.com/c/en/us/support/unified-communications/jabber-windows/products-installation-guides-list.html>.
- The phone models that are on end-of-life plan and have reached the end of maintenance for CUCM Release 14 will no longer register. For more information on the end-of-life phones, see the Field Notices at <https://www.cisco.com/c/en/us/support/unified-communications/unified-communications-manager-callmanager/products-field-notices-list.html>.

Endpoints Supported for Callers Only

Callers outside of the enterprise's network can use the following endpoints:

- Jabber for iOS
- Jabber for Android

Single Sign On (SSO) Identity Providers (IdPs)

This Unified CCE release supports the following IdPs:

Identity Providers	Versions
Microsoft AD FS (Active Directory Federation Services)	AD FS 5.0: Windows Server 2019 AD FS 4.0: Windows Server 2016 AD FS 3.0: Windows Server 2012 R2
PingFederate	8.2.2.0
OpenAM	10.0.1
Shibboleth	3.3.0
F5	13

Besides the IdPs listed above, Unified CCE supports all SAML 2.0 compliant IdPs. See the documentation of your IdP for details on configuring the IdP in CCE.

Notes

- CCMP and Cisco Unified Contact Center Domain Manager (CCDM), Release 12.5 support Microsoft AD FS 2012 R2 and 2016 with WS-Federation via JSON Web Token (JWT). However, user authentication access for CCMP and CCDM can be provided by one of the supported IdPs via Federated Trust with Microsoft AD FS. Federated Trust is supported per Microsoft AD FS and third-party IdP documentation and support.
- Kerberos is supported for single-domain authentication (non-federated environments). **Kerberos isn't supported on HCS for CC.**
- For ECE:
 - Agent-based users have the same compatibility as Cisco IDS.
 - Supervisors outside Cisco Finesse support any SAML 2.0 complaint IDP.

Transport Layer Security

The Unified CCE database access encrypts SQL user authentication using TLS, but **the data connection isn't encrypted.**

12.5 Component	TLS 1.2	
	Web Interfaces	Database Access
PCCE	✓	✓
UCCE/ICM	✓	✓

12.5 Component	TLS 1.2	
	Web Interfaces	Database Access
AW Distributor/HDS/Logger	N/A	✓
Internet Script Editor	✓	N/A
CCE Admin	✓	✓
Web Setup	✓	✓
Diagnostic Portal	✓	N/A
Live Data	✓	✓
CTIOS C++ CIL	✓	N/A
SQL Gateway - DB Lookup	N/A	✓
Protocol - CTI Server and Media Routing	N/A	✓

12.5 Component	TLS 1.2	
	Web Interfaces	Database Access
CVP ¹	✓	N/A
VVB	✓	N/A
IdS	✓	N/A
Finesse	✓	✓
CUIC	✓	✓
ECE	✓	✓
Live Data	✓	N/A
Customer Collaboration Platform	✓	N/A
CCMP/CCDM	✓	X

¹ For more information, check the Release Notes at <https://www.cisco.com/c/en/us/support/customer-collaboration/unified-contact-center-enterprise/products-release-notes-list.html>.

12.5 Component	TLS 1.2	
	Web Interfaces	Database Access
ACD	X	N/A
UC Manager	✓	N/A

1 For more information, check the Release Notes at <https://www.cisco.com/c/en/us/support/customer-collaboration/unified-contact-center-enterprise/products-release-notes-list.html>.

Client Operating System

Components	Clients OS
Cisco Finesse	Microsoft Windows 11 (64 bit) Microsoft Windows 10 <i>Note:</i> CCE Release 12.5(1) supports Microsoft Windows 10 only. CCE Release 12.5(2) supports Microsoft Windows 10 and Windows 11 (64 bit).
	Mac OS X 10.12, 10.13 and 10.14
	ChromeOS 70 (64-bit) and higher

Components	Clients OS
Cisco Unified Call Studio	Microsoft Windows 10 (64-bit)
Administration Client	Microsoft Windows Server 2016 and 2019 (Standard and Datacenter editions) <i>Note:</i> CCE Release 12.5(1) supports Microsoft Windows Server 2016 only. CCE Release 12.5(2) supports Microsoft Windows Server 2016 and 2019.
	Microsoft Windows 10 (Enterprise and Professional) Microsoft Windows 11 (Enterprise and Professional) (64-bit)
Internet Script Editor (ISE)	Microsoft Windows 10 (Enterprise and Professional) Microsoft Windows 11 (Enterprise and Professional) (64-bit)
Silent Monitor Service for Unified CCE Toolkit	Microsoft Windows 10 (Enterprise and Professional)
CTI OS Clients	Microsoft Windows 10 (Enterprise and Professional) <i>Note:</i> For more information on the supported versions of Microsoft Windows 10 with specific versions of .NET Framework, see the Microsoft documentation.

Notes

- CTI OS is only supported for Unified ICM when used in conjunction with Avaya PG, Aspect PG, AACC (Symposium) PG, or non-reference design deployments like Parent-Child that employ Unified CCE System PG. The supported CTI OS version is aligned with the supported PG version.
- CTI OS and CAD are not supported from Unified CCE, Release 11.5(x). New and existing deployments upgrading to Unified CCE release 12.0(1) or later must use Finesse desktop instead of CTI OS and CAD.
- Silent Monitoring Service is not supported on CTI OS deployments starting with Unified CCE release 11.5(1).

Supported Browsers

Operating System	Browser Version
Microsoft Windows Server 2016 (Standard and Datacenter editions) Microsoft Windows Server 2019 (Standard and Datacenter editions)	Internet Explorer v11.3085.14393.0 or later in Native Mode Chrome v76.0.3809 or later Firefox Extended Supported Release (ESR) 68 and later ESRs Edge Chromium (Microsoft Edge v79 and later)
Microsoft Windows 10 and Windows 11 (64 bit) <i>Note:</i> CCE Release 12.5(1) supports Microsoft Windows 10 only. CCE Release 12.5(2) supports Microsoft Windows 10 and Windows 11 (64 bit).	Internet Explorer v11.345.17134 or later in Native Mode Google Chrome v76.0.3809 or later

Operating System	Browser Version
	Firefox ESR 68 and later ESRs
	Edge Chromium (Microsoft Edge v79 and later)
Mac OS X	Firefox ESR 68 and later ESRs
	Google Chrome v76.0.3809 or later
Chromebook with Chrome OS v70	Chromium v73 or later
	Google Chrome v60 or later

Notes

- For information about supported browsers for Cisco Webex Experience Management, refer to <https://cloudcherry.com/docs/user/getting-help/>.
- CCE Release 12.5(1) supports Microsoft Windows Server 2016 only. CCE Release 12.5(2) supports Microsoft Windows Server 2016 and 2019.
- Unified CCE Administration requires full screen view of the browser with the minimum resolution of 1366 x 768.
- All browsers must support SHA-256 certificates.

Browser Exceptions

- Windows 10 has Microsoft Edge as default browser. Enable Internet Explorer v11.345.17134 or later in native mode as default browser, if required.

- CCE Administration Client (AW) Setup tool does not support Firefox and Chrome. Use Internet Explorer v11.345.17134 or later versions, or Microsoft Edge v41.16299.15.0 or later.
- CVP Operations Console (OAMP) and VVB App admin are supported on Internet Explorer, only in compatibility mode. To ensure that all the functionalities of CVP OAMP work in Internet Explorer, set the emulation level to at least 10 by following the steps documented in the Test your sites for document mode compatibility section at [Fix web compatibility issues using document modes and the Enterprise Mode site list](#).
- In Enterprise Chat and Email, Edge Chromium is supported only for Agent Desktops. For more information, see System Requirements for Enterprise Chat and Email, Release 12.5(1) at <https://www.cisco.com/c/en/us/support/customer-collaboration/cisco-enterprise-chat-email/products-implementation-design-guides-list.html>.

Server Operating System

Components	Server OS
Unified CCE, Packaged CCE, ICM, and System PG	Microsoft Windows Server 2016 and 2019 (Standard and Datacenter editions)
Unified CVP	Microsoft Windows Server 2016 and 2019 (Standard and Datacenter editions)
Enterprise Chat and Email	Microsoft Windows Server 2019 (Standard and Datacenter editions)
Unified CCMP	Microsoft Windows Server 2019 (Standard and Datacenter editions)
Silent Monitor Server	Microsoft Windows Server 2016 and 2019 (Standard and Datacenter editions)

CTI OS Server	Microsoft Windows Server 2016 and 2019 (Standard and Datacenter editions)
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Notes

- CCE Release 12.5(1) supports Microsoft Windows Server 2016 only. CCE Release 12.5(2) supports Microsoft Windows Server 2016 and 2019.
- Unified ICM/CCE is qualified only on a retail installation of the Microsoft Windows Server (Standard and Datacenter editions). Cisco doesn't support Unified ICM/CCE on a customized Microsoft Windows image (for example, a corporate image). If you use a customized image of the Microsoft Windows operating system, the Unified ICM/CCE application can fail.

SQL Server and Informix Versions

Components	SQL Server Version
Unified CCE, Packaged CCE, and ICM	<p>Microsoft SQL Server 2017 (Standard and Enterprise editions) with cumulative updates</p> <p>Microsoft SQL Server 2019 (Standard and Enterprise editions) with cumulative updates</p> <p>Note: Microsoft SQL Server 2019 with native compatibility level 150 and backward compatibility level 140 of Microsoft SQL Server 2017 is supported.</p> <p>Note: Contact Center Enterprise solution supports only the 64-bit version of Microsoft SQL Server. Contact Center Enterprise solution does not support the following:</p> <ul style="list-style-type: none"> ■ Encrypted connections to SQL Server. ■ Linked Server feature of SQL Server.

Components	SQL Server Version
Unified CVP	IBM Informix Dynamic Server Version 14.10.FC8
Enterprise Chat and Email	<ul style="list-style-type: none"> ■ ECE 400 agent deployment: Microsoft SQL Server 2016 SP2 (Standard and Enterprise editions) ■ ECE 1500 agent deployment: Microsoft SQL Server 2016 SP2 (Standard and Enterprise editions) ■ ECE Geographically Redundant/High Availability installation: Microsoft SQL Server 2016 (Enterprise edition)
Unified CCMP	Microsoft SQL Server 2016 SP2 (Standard edition)
Unified CCDM	Microsoft SQL Server 2016 SP2 (Standard edition)

Notes

- CCE Release 12.5(1) supports Microsoft SQL Server 2017 only. CCE Release 12.5(2) supports Microsoft SQL Server 2017 and 2019.
- For CCE components, the combination of Windows Server 2016 with SQL Server 2019, or Windows Server 2019 with SQL Server 2017 is not supported.

Java JRE and JDK

The following are the Java Runtime Environment (JRE) versions that are supported:

- Unified CCE uses OpenLogic's **OpenJDK JRE version 1.8 (32-bit)**, update 272 or later with the 12.5(1a) base installer and 12.5(1) ES55 (and all subsequent updates). 12.5(1) installations prior to ES55 support Oracle JRE versions.
- Unified CVP uses OpenLogic's OpenJDK JRE version 1.8 (64-bit), update 275 or later with the 12.5(1a) base installer and 12.5(1) ES18 (and all subsequent updates). 12.5(1) installations prior to ES18 support Oracle JRE versions.
- Cisco Enterprise Chat and Email, Cisco CCMP, and CCDM use Oracle JRE version 1.8 (32-bit), update 121 or later.
- Cisco Voice Operating System (VOS) components:
 - Cisco Unified Intelligence Center, Live Data, and Cisco Finesse, release 12.5(1) use OpenJDK JRE version 1.7 (32-bit), update 231 and OpenJDK JRE version 1.8 (64-bit), update 222. 12.5(2) installations support OpenJDK JRE version 1.8 (64-bit), update 262 and OpenJDK JRE version 1.8 (32-bit), update 282.
 - Cisco VVB release 12.5(1) uses OpenJDK JRE version 1.7 (32-bit), update 231 and OpenJDK JRE version 11.0.2.7-0.e17_6 (64-bit). 12.5(2) installations support OpenJDK JRE version 1.8 (32-bit), update 262 and OpenJDK JRE version 11.0.16.0.8-1.e17_9 (64-bit).
- For instructions on applying newer Java security updates, see Security Guide for Cisco Unified ICM/Contact Center Enterprise guide at <http://www.cisco.com/c/en/us/support/customer-collaboration/unified-contact-center-enterprise/products-installation-and-configuration-guides-list.html>.

Supported Languages

	Unified CCE Administration	Unified CCE Reporting Templates	Unified Intelligence Center	Finesse	Social Miner	Enterprise Chat and Email	CCMP/CCDM
Bulgarian	No	Yes	Yes	Yes	Yes	No	No
Catalan	No	Yes	Yes	Yes	Yes	No	No

	Unified CCE Administration	Unified CCE Reporting Templates	Unified Intelligence Center	Finesse	Social Miner	Enterprise Chat and Email	CCMP/CCDM
Chinese (China)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Chinese (Taiwan)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Croatian	No	Yes	Yes	Yes	Yes	No	No
Czech	No	Yes	Yes	Yes	Yes	Yes	No
Danish	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Dutch	Yes	Yes	Yes	Yes	Yes	Yes	Yes
English (United States)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Finnish	No	Yes	Yes	Yes	Yes	No	No
French (France)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
French (Canada)	No	No	No	No	No	Yes	Yes
German	Yes	Yes	Yes	Yes	Yes	Yes	Yes

	Unified CCE Administration	Unified CCE Reporting Templates	Unified Intelligence Center	Finesse	Social Miner	Enterprise Chat and Email	CCMP/CCDM
Hungarian	No	Yes	Yes	Yes	Yes	No	No
Italian	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Japanese	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Korean	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Norwegian	No	Yes	Yes	Yes	Yes	No	No
Polish	No	Yes	Yes	Yes	Yes	Yes	No
Portuguese (Brazil)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Romanian	No	Yes	Yes	Yes	Yes	No	No
Russian	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Serbian	No	Yes	Yes	Yes	Yes	No	No
Slovenian	No	Yes	Yes	Yes	Yes	No	No

	Unified CCE Administration	Unified CCE Reporting Templates	Unified Intelligence Center	Finesse	Social Miner	Enterprise Chat and Email	CCMP/CCDM
Slovakian	No	Yes	Yes	Yes	Yes	No	No
Spanish	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Swedish	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Turkish	No	Yes	Yes	Yes	Yes	No	Yes

Microsoft .NET Framework

For release 12.5(1):

- Microsoft Windows Server 2016 (Standard and Datacenter editions) comes with pre-installed .NET version 4.6.2.
- Unified CCE and Administration client install .NET version 4.7.2, and CTI OS Client installs .NET version 4.7.1.

For release 12.5(2)

- Microsoft Windows Server 2016 (Standard and Datacenter editions) comes with pre-installed .NET version 4.6.2.
- Microsoft Windows Server 2019 (Standard and Datacenter editions) comes with pre-installed .NET version 4.7.2.
- Unified CCE, Administration client, and CTI OS client install .NET version 4.8.

Other Supported Software

Function	Software
Microsoft Active Directory	Microsoft Active Directory versions 2012 R2, 2016, 2019, and 2022 are supported with Unified ICM/Unified CCE, Packaged CCE and HCS for CC solutions.
Remote Administration	For Remote Desktop usage information, see the <i>Remote Administration</i> section in the Security Guide for Cisco Unified ICM/Contact Center Enterprise .
Antivirus Software	<p>Cisco Contact Center Enterprise solution supports all the third-party antivirus software and scanners.</p> <p>For more information, see the following documents:</p> <ul style="list-style-type: none"> ■ <i>General Antivirus Guidelines</i> section in the Security Guide for Cisco Unified ICM/Contact Center Enterprise. ■ Cisco Customer Contact Software Policy for Use of Third-Party Software Bulletin
Virtualization	For more information about virtualization for all Unified CCE components, see the Unified Communications in a Virtualization page https://www.cisco.com/c/dam/en/us/td/docs/voice_ip_comm/uc_system/virtualization/cisco-collaboration-virtualization.html .
Unified Intelligence Center reporting	<p>Microsoft Excel Versions 2013, 2016, Office 365.</p> <p>Note: Office 365 doesn't support Authenticated excel report permalink.</p>

Virtual Desktop Infrastructure Support

- Unified CCE, Packaged CCE and HCS for CC solutions support third-party VDI infrastructures for Cisco Finesse and CUIC. Ensure that your third-party VDI infrastructure is supported by Cisco softphone endpoints used on agent and supervisor VDI-based desktops.
- Unified Communications Manager Silent Monitoring is the only silent monitoring type supported with VDI.
- Desktop solutions are only supported on PC-like devices that utilize a keyboard and mouse. Tablets and mobile devices aren't currently supported.
- Verify that the bandwidth and deployment considerations of the solution meet the performance and timing requirements.
- Cisco Unified Contact Center Enterprise Administration isn't supported on virtual desktops.

VMWare ESXi Compatibility

For information on the VMware ESXi versions compatible with Unified CCE solution components see Cisco Collaboration Virtualization at https://www.cisco.com/c/dam/en/us/td/docs/voice_ip_comm/uc_system/virtualization/cisco-collaboration-virtualization.html.

Automatic Speech Recognition and Text to Speech

Category	Requirements
Nuance Software	Cisco Virtualized Voice Browser (VVB) supports the following Nuance components:
Nuance Speech Suite 11.0.12	Speech Server 7.9.0
	Recognizer 11.8.0

Category	Requirements
	Vocalizer Server 21.12.7
	Management Station 6.7.0
	Krypton-4.17.0
	NLE-4.14.2
	NLPS-1.10.0
	NRM-1.8.0
	NTpE-5.0.8
	License Manager 11.19.1
Nuance Speech Suite 11.0.9	Speech Server 7.6.0
	Recognizer 11.5.0
	Vocalizer Server 21.06.0
	Management Station 6.4.0

Category	Requirements
	Krypton-4.8.1
	NLE-4.9.1
	NLPS-1.7.0
	NRM-1.5.0
	NTpE-4.7.1
	License Manager 11.16.5
Nuance Speech Suite 10.5.4	Nuance Recognizer 10.5.5
	Nuance Vocalizer 6.5.8
	Nuance Management Station 5.5.5
	Nuance License Manager 11.14.1.1
	Nuance Speech Server 6.5.5

Category	Requirements
Nuance Speech 10.2	Nuance Recognizer 10.2.10
	Nuance Vocalizer 6.0.7
	Nuance Speech Server 6.2.11
	Note: Since Nuance Speech Suite 10.5 the underlying component versions are not able to be separately installed. It is all part of 1 install executable. The only important version number is the Speech Suite version.
Operating System	Use vendor-recommended operating system software.
MRCP Protocol Version	1.0 and 2.0
VoiceXML Protocol Version	2.0

Load Balancers

These Cisco components support third-party load balancers in redirect mode.

- Unified CCE
- Unified CVP
- Unified Intelligence Center

- Finesse
- Enterprise Chat and Email

Third-party load balancers must meet these requirements:

- Both SSL offloading and SSL pass through must be supported
- Load Balancer High Availability
- Persistence - cookie-insert
- Distribution algorithm - Round-robin

See these documents for the interoperability notes and any known caveats of F5 Big-IP and Citrix NetScaler 1000v:

- <https://www.cisco.com/c/dam/en/us/solutions/collateral/enterprise/interoperability-portal/bigip.pdf>
- <https://www.cisco.com/c/dam/en/us/solutions/collateral/enterprise/interoperability-portal/interop-note-customer-voice-portal.pdf>

Note: For specific interfaces where you can use load balancers in your deployment, see the Solution Design Guide for Cisco Unified Contact Center Enterprise at <https://www.cisco.com/c/en/us/support/customer-collaboration/unified-contact-center-enterprise/products-implementation-design-guides-list.html>.

Non-Reference Design Compatibility

Unified CCE Parent Child Compatibility

	Parent PG 11.6(x)	Parent PG 12.0(x)	Parent PG 12.5(x)
Child PG 11.6(x)	Yes	Yes	Yes

	Parent PG 11.6(x)	Parent PG 12.0(x)	Parent PG 12.5(x)
Child PG 12.0(x)	Yes	Yes	Yes
Child PG 12.5(x)	Yes	Yes	Yes

ICM-to-ICM Gateway Compatibility

ICM Client	ICM Server
12.5	12.5
12.5	12.0
12.5	11.6
12.0	12.5
11.6	12.5

Third Party ACDs

Avaya

Avaya Considerations

- Avaya changed names from DEFINITY to MultiVantage to Avaya Communications Manager (ACM) to Avaya Aura Communications Manager (AACM).
- Cisco HCS for CC supports Avaya Peripheral Gateways.
- Packaged CCE 12.5 and 12.0(1) ES26 (and above) versions support Avaya Peripheral Gateways for AACM in the 4000 and 12000 Agent deployments only.
- Real-Time Agent (RTA) 5.0.5 and 6.0 enhanced functionality (60 skills per agent and 2000 skill groups per system) are not supported by ICM.
- ICM does not support more than 12000 active associations on a single system.
- All Call Management System (CMS) versions are supported as long as a supported RTA is used.
- Cisco supports the Avaya S8300, S8400, S85XX, S87XX, and S88XX Servers in support of ACM.
- Cisco supports the general use of Avaya IP Phones.
- Although Avaya stopped supporting the CVLAN interface in 2012, Unified CCE still uses this interface to communicate with Avaya products. Note that 12.5(1) is the last supported release in the 12.5 release train for the CVLAN interface.
- Avaya Multi-Application Platform for DEFINITY (MAPD) is not supported.
- Support for third-party ACD clients, SDKs, and interfaces integrated with ICM stops when the third-party ACD manufacturer ends mainstream support.
- Ten-digit Agent extensions and Agent IDs are supported from ICM 9.0(3) and later that have ACM 6.2 and later, AES 6.2 and later, and CMS R16 with RTA 6.0 pl: 13g.

Avaya CMS RTA Support

RTA Version	ICM/Packaged CCE 12.5
6.0(x)	Yes
6.0 Extended	No

Avaya Communications Manager (ACM) Support

ACM Version	ICM/Packaged CCE 12.5
ACM 6.3 (x) to 8.1 (x)	Yes

Notes on Avaya Communications Manager Support

Avaya Product Support Notice patch PSN020249u is required for ACM 7.0 (x) and above. For details, see the Product Support Notice at <https://downloads.avaya.com/css/P8/documents/101020687>.

AES Server and CVLAN/TSAPI Client Support

AES Server	CVLAN Client Supported	TSAPI Client Supported	ICM/Packaged CCE 12.5
6.3 (x) to 8.1(x)	Yes	Yes ²	Yes

² Starting ICM Release 12.5(2), Cisco recommends that you install TSAPI client library version 10.1 on

² Starting ICM Release 12.5(2), Cisco recommends that you install TSAPI client library version 10.1 on the Avaya Peripheral Gateway machine as we have refreshed the TAESPIM using the TSAPI 10.1 SDK. If you are on the ICM Release 12.5(1) or lower, you must install the TSAPI client library version that is the same as the AES server.

the Avaya Peripheral Gateway machine as we have refreshed the TAESPIM using the TSAPI 10.1 SDK. If you are on the ICM Release 12.5(1) or lower, you must install the TSAPI client library version that is the same as the AES server.

Notes on AES Server and CVLAN/TSAPI Client Support

ICM/Packaged CCE 12.5 supports all CVLAN Client and TSAPI Client versions currently supported by Avaya.

Note: Support for an ACM or AES version depends on the Avaya release cycles (patches and upgrades). For more details on supported versions, refer Avaya documentation. 12.5(1) is the last supported release in the 12.5 release train for the Unified ICM PG integration with Avaya Communications Manager using the ECS PIM / CVLAN interface PG. For more information, refer to the [CVLAN to TSAPI Migration chapter in the Cisco Unified ICM ACD Supplement for Avaya Communication Manager](#), Release 12.5(1).

Avaya Nortel

Note Starting CCE release 12.5(2), the Avaya Nortel is not supported.

These notes apply to the support of Avaya/Nortel's ACD switch types:

- Cisco only supports certain Succession platforms with Symposium. See the following chart for details.
- Cisco does not support more than one PG pair connected to a single Symposium server.
- You must request the SCCS Toolkit from Cisco. To do so, send an email with the following information to icm-nortelpg-sdk@cisco.com:
 - Customer name
 - Maintenance contract number
 - ICM version
 - PG version

— Number of PGs

Avaya Aura Contact Center

AACC Version	ICM 12.5
6	Yes
6.4	Yes
7.1	Yes

Notes to Avaya Aura Contact Center

The Automated Administrator for Symposium (AAS) feature is not supported with AACC 6.4.

Nortel SDK

ACD Version	ICM 12.5	Notes
Nortel SDK 5.0 (with SCCS 5.0 and NCCM 6.0)	No	As of September 2008, Nortel does not provide support for SCCS 5.0.
Nortel SDK 6.0 (with NCCM 6.0, NCCM 7.0 and AACC 6.0)	Yes	For HDX 6, you must install RTD 6 on the PG.
		Note: SDKs are not integrated with ICM.

Notes to Nortel SDK

- Cisco does not support any major ACD version not shown in this matrix.
- Nortel Contact Center Manager (NCCM), earlier known as Symposium (SCCS), was renamed to Avaya Aura Contact Center (AACC).

CTI Support for ACD Types

ACD Vendor	ACD Model	CTI Server Protocol Support	CTI OS Support
Avaya	Avaya Communication Manager v6.3 to v8.1	Yes	Yes
Cisco	Unified CCE (only when integrated via Unified CCE System PG)	Yes	Yes

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