Contact Center Enterprise Solution Compatibility Matrix, Release 12.6(x)

Contents

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 12.6(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.

Note

■   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.

■   Packaged CCE: In Release 12.6(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 12.6(x).

■   Live Data 12.6(2) requires CUIC to be on the version 12.6(2) and beyond

Central Controller and Component Compatibility

PCCE/UCCE Components, Release 12.6(x)	PCCE/UCCE Components, Release 12.5															
	Cloud Connect	IdS (Standalone)	Finesse	ECE	CVP	VVB	CUIC (Standalone)	CUIC-LiveData-IdS (Coresident)	Router	Logger	AW	Live Data (Standalone)	PG	Customer Collaboration Platform	CCMP	Notes
Cloud Connect		Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		
Identity Server (Standalone)	N		Y	Y			Y				Y					
Finesse	N	N		Y			Y	N			Y	Y	Y	Y		When Cisco Finesse and CUIC are on 12.6, and Live Data is on 12.5, for Live Data gadgets to load in Cisco Finesse, install CUIC 12.5(1) ES 09 or later on all Live Data stand-alone servers.

Central Controller and Component Compatibility

Component	Cloud Connect	IdS (Standalone)	Finesse	ECE	CVP	VVB	CUIC (Standalone)	CUIC-LiveData-IdS	Router	Logger	AW	Live Data (Standalone)	PG	Customer Collaboration	CCMP	Notes
CVP	N					Y			Y	Y	Y		Y			
VVB	N				Y											
CUIC (Standalone)	N	N	N								Y	Y				
CUIC-LiveData-IdS (Coresident)	N		N						N		N		Y			
Router	N			N			N					N	Y	Y	N	
Logger	N			N									Y	Y	N	
AW	N	N	N	Y	N		N	N				N	Y	Y	N	
Live Data (Standalone)	N		N				N		N		N		Y			
PG	N		N	Y	N			N	N	N	N	N		Y		Upgrade CCP to 12.5(1) SU1 for compatibility with CCE 12.6.

PCCE/UCCE Components, Release	PCCE/UCCE, Release 12.5															
	Cloud Connec	IdS (Standalone	Finesse	ECE	CVP	VVB	CUIC (Standalone	CUIC-LiveData-	Router	Logger	AW	Live Data (Standalone	PG	Customer Collaboratio	CCMP	Notes

12.6(1)	t	)				)	IdS (Coresident)			)		n Platform		
ECE		N	Y							Y		Y			
CCMP					Y			Y	Y	Y					Not Applicable to Packaged CCE.

PCCE/UCCE Components, Release 12.6(x)	PCCE/UCCE, Release 12.0														
	IdS (Standalone)	Finesse	ECE	CVP	VVB	CUIC (Standalone)	CUIC-LiveData-IdS (Coresident)	Router	Logger	AW	Live Data (Standalone)	PG	SocialMiner	CCMP	Notes
Cloud Connect		N		N	N	N	N	N	N	N	N	N	N		
Identity Server (Standalone)		Y	Y			Y				Y					
Finesse	N		N			Y	N			Y	Y	Y	Y		When Cisco Finesse and CUIC are on 12.6, and Live Data is on 12.0, for Live Data gadgets to load in Cisco Finesse, install CUIC

PCCE/UCCE Components, Release 12.6(x)	PCCE/UCCE, Release 12.0														
	IdS (Standalone)	Finesse	ECE	CVP	VVB	CUIC (Standalone)	CUIC-LiveData-IdS (Coresident)	Router	Logger	AW	Live Data (Standalone)	PG	SocialMiner	CCMP	Notes
															12.0(1) ES 15 or later on all Live Data stand-alone servers.
CVP					Y			Y	Y	Y		Y			On Packaged CCE 12.0, install CCE 12.0 ES37 before you upgrade CVP to 12.6(1).
VVB				Y											
CUIC (Standalone)	N	N								Y	Y				
CUIC-LiveData-IdS (Coresident)		N						N		N		Y			
Router				N			N				N	Y	Y	N	
Logger				N								Y	Y	N	

Central Controller and Component Compatibility

PCCE/UCCE Components, Release 12.6(x)	PCCE/UCCE, Release 12.0														
	IdS (Standalone)	Finesse	ECE	CVP	VVB	CUIC (Standalone)	CUIC-LiveData-IdS (Coresident)	Router	Logger	AW	Live Data (Standalone)	PG	SocialMiner	CCMP	Notes
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		N		

PCCE/UCCE Components, Release 12.6(1)	PCCE/UCCE, Release 12.0														
	IdS (Standalone)	Finesse	ECE	CVP	VVB	CUIC (Standalone)	CUIC-LiveData-IdS (Coresident)	Router	Logger	AW	Live Data (Standalone)	PG	SocialMiner	CCMP	Notes
ECE	N	Y								Y		Y			
CCMP				Y				Y	Y	Y					Not Applicable to Packaged CCE.

Unified CCE Components, Release 12.6(1)	Unified CCE, Release 11.6														
	IdS (Standalone)	Finesse	ECE	CVP	VVB	CUIC (Standalone)	CUIC-LiveData-IdS (Coresident)	Router	Logger	AW	Live Data (Standalone)	PG	SocialMiner	CCMP	Notes

Unified CCE Components, Release 12.6(1)	Unified CCE, Release 11.6														
	IdS (Standalone)	Finesse	ECE	CVP	VVB	CUIC (Standalone)	CUIC-LiveData-IdS (Coresident)	Router	Logger	AW	Live Data (Standalone)	PG	SocialMiner	CCMP	Notes
Cloud Connect		N		N	N	N	N	N	N	N	N	N	N		
Identity Server (Standalone)		Y	Y			Y				Y					
Finesse	N		N			Y	N			Y	Y	Y	Y		When Cisco Finesse and CUIC are on 12.6, and Live Data is on 11.6, for Live Data gadgets to load in Cisco Finesse, install CUIC 11.6(1) ES 22 or later on all Live Data stand-alone servers.
ECE	N	Y								Y		Y			
CVP					Y			Y	Y	Y		Y			
VVB				Y											

Unified CCE Components, Release 12.6(1)	Unified CCE, Release 11.6													
	IdS (Standalone)	Finesse	ECE	CVP	VVB	CUIC (Standalone)	CUIC-LiveData-IdS (Coresident)	Router	Logger	AW	Live Data (Standalone)	PG	SocialMiner	CCMP	Notes
CUIC (Standalone)	N	N								Y	Y				
CUIC-LiveData-IdS (Coresident)		N						N		N		Y			
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		N		
CCMP				Y				Y	Y	Y					CCMP is not applicable to Packaged CCE. On UCCE 11.6, install UCCE 11.6(1) ES 7 or 11.6(2) before you upgrade CCMP to

Unified CCE Components, Release 12.6(1)	Unified CCE, Release 11.6														
	IdS (Standalone)	Finesse	ECE	CVP	VVB	CUIC (Standalone)	CUIC-LiveData-IdS (Coresident)	Router	Logger	AW	Live Data (Standalone)	PG	SocialMiner	CCMP	Notes
															12.5(1).

Notes

- Unified CCE and Packaged CCE compatibility with CUCM:

   — CUCM, releases 11.5, 12.0, 12.5 and 14 are supported with Unified CCE and Packaged CCE, Release 12.6.

   — CUCM 15 is supported with Unified CCE, Release 12.6(1) and 12.6(2). CUCM 15 is supported with Packaged CCE Release 12.6(2) if CCE 12.6(2) ES 27 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 12.6.

   — CUCM 15 is supported with CCMP, Release 12.6 if CCMP 12.6(1) ES 12 is installed.

- CCE 12.6 supports the latest versions of Cisco Smart Software Manager (CSSM) On-Prem 8.x.

- In Live Data (standalone) 11.6 and 12.0 deployments, when CUIC and Cisco Finesse components are in version 12.6, 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.

- SSO Deployments upgrading to 12.6(2) should ensure that Reverse Proxy Installer (for VPN-Less deployments) 12.6(2) ES02 or later, followed by IdS 12.6(2) ES02 or later, is installed before upgrading any of the components like Cisco Finesse/CUIC to 12.6.(2)

- For 2000 Agent Coresident Deployment model, CUIC, LD, and Unified CCE (Router, Logger, and AW) should be upgraded in the same maintenance window.

- For SSO clients, Cisco IDS needs to be on version 12.6(2) as there is no forward compatibility with Cisco IDS version 12.6(1) and 12.6(2) clients.

- For more information on CORS CLIs, see the Cisco Unified Contact Center Enterprise Installation and Upgrade Guide at https://www.cisco.com/c/en/us/support/customer-collaboration/unified-contact-center-enterprise/products-installation-guides-list.html.

■ For Unified CCE and Packaged CCE, Release 11.6, the last date of support is 30 September, 2023. The Unified CCE and Packaged CCE, Release 12.6(1) compatibility with Release 11.6 will be removed from 30 September, 2023. For more information about end of life milestones, see End-of-Sale and End-of-Life Announcement for the Cisco Unified Contact Center Enterprise, Cisco Packaged Contact Center Enterprise, Cisco Unified Intelligent Contact Management Enterprise, and Cisco HCS for Contact Center 11.6.

■ To find a comprehensive list of the guides available for a specific release, see the Documentation Guides.

Cisco Gateway Hardware and Software

			Gateway Functionality		
Central Controller version 12.6(2) Model	Software Version	Software Feature Set	VXML Gateway Browser	Call Progress Analysis for Outbound Options for SIP Trunks (CUBE)	Unified CCE and Packaged CCE Support
ASR 1001X ASR 1002X ASR 1004 RP2 ASR 1006 RP2	IOS XE 16.9	Universal	No	Yes	Yes
	IOS XE 16.12				
	IOS XE 17.2				
	IOS XE 17.4				
	IOS XE 17.6				
	IOS XE 17.9				
Virtual CUBE	IOS XE 17.6	Universal	No	No	Yes
	IOS XE 17.9				
ISR G3 43xx (4321, 4331, 4351) ISR G3 44xx (4431, 4451, 4461)	IOS XE 17.6	Universal	No	Yes	Yes
	IOS XE 17.9				

Catalyst 8200/8300	IOS XE 17.6	Universal	No	Yes	Yes
	IOS XE 17.9				

Central Controller version 12.6(1) Model	Software Version	Software Feature Set	Gateway Functionality			Unified CCE and Packaged CCE Support
			VXML Gateway Browser	Call Progress Analysis for Outbound Options for SIP Trunks (CUBE)		
ASR 1001X ASR 1002X ASR 1004 RP2 ASR 1006 RP2	IOS XE 16.9	Universal	No	Yes		Yes
	IOS XE 16.12					
	IOS XE 17.2					
	IOS XE 17.4					
	IOS XE 17.6					
	IOS XE 17.9					
Virtual CUBE	IOS XE 16.9	Universal	No	No		Yes
	IOS XE 16.12					
	IOS XE 17.2					
	IOS XE 17.4					

	IOS XE 17.6				
	IOS XE 17.9				
ISR G2 29xx, 39xx, 39xxE	15.7(3)M1	Universal	Yes	Yes	Yes
ISR G3 43xx (4321, 4331, 4351) ISR G3 44xx (4431, 4451, 4461)	IOS XE 16.9	Universal	No	Yes	Yes
	IOS XE 16.12				
	IOS XE 17.2				
	IOS XE 17.4				
	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.

- 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 and Packaged CCE solutions support Cisco Unified SIP Proxy (CUSP) 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
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

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
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
Webex DX 80/Webex Desk Pro	Y	Y	Voice-only	N	N	N	N	N	Y	Y

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 disab**led 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.

- Webex:

  — Point-to-Point calls are supported if the lines are registered with CUCM or via SIP URI.

  — 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:**

    o 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.

    o 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)

The following AD FS versions are supported with this Unified CCE release:

■ AD FS 5.0: Windows Server 2019

■ AD FS 4.0: Windows Server 2016

■ AD FS 3.0: Windows Server 2012 R2

Besides the AD FS versions 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

■ Unified CCMP, Release 12.6 support Microsoft AD FS 2012 R2 and 2016 with WS-Federation via JSON Web Token (JWT).

However, user authentication access for Unified CCMP 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).

■ 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.

| 12.6 Component | TLS 1.2 | |
	Web Interfaces	Database Access
PCCE	✓	✓
UCCE/ICM	✓	✓
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	✓
CVP[1]	✓	N/A
VVB	✓	N/A

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[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.

12.6 Component	TLS 1.2	
	Web Interfaces	Database Access
IdS	✓	N/A
Finesse	✓	✓
CUIC	✓	✓
ECE	✓	✓
Live Data	✓	N/A
Customer Collaboration Platform	✓	N/A
CCMP	✓	X
ACD	X	N/A
UC Manager	✓	N/A

Client Operating System

Components	Clients OS
Cisco Finesse	Microsoft Windows 10 and Windows 11 (64-bit)
	Mac OS X 10.15.x or later
	Chrome OS 88.0.4324 or later

Components	Clients OS
Cisco Unified Call Studio	Microsoft Windows 10 (64-bit)
Administration Client	Microsoft Windows Server 2016 (Standard and Datacenter editions) Microsoft Windows Server 2019 (Standard and Datacenter editions) (64-bit)
	Microsoft Windows 10 (Enterprise and Professional) (64-bit) Microsoft Windows 11 (Enterprise and Professional) (64-bit)
Internet Script Editor (ISE)	Microsoft Windows 10 (Enterprise and Professional) (64-bit) Microsoft Windows 11 (Enterprise and Professional) (64-bit)
Silent Monitor Service for Unified CCE Toolkit	Microsoft Windows 10 (Enterprise and Professional) (64-bit)
CTI OS Clients	Microsoft Windows 10 (Enterprise and Professional) (64-bit) Note: 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 for Release 12.6(1)	Browser Version for Release 12.6(2)
Microsoft Windows Server 2016 (Standard and Datacenter editions) Microsoft Windows Server 2019 (Standard and Datacenter editions)	Google Chrome 88.0.4324 or later	Google Chrome 106.0.5249 or later
	Edge Chromium 88.0.4324 or later	Edge Chromium 106.0.5249 or later
	Firefox Extended Supported Release (ESR) 68.4 and later ESRs	Firefox Extended Supported Release (ESR) 78.11 and later ESRs
Microsoft Windows 10 and Windows 11 (64-bit)	Google Chrome 88.0.4324 or later	Google Chrome 106.0.5249 or later
	Edge Chromium 88.0.4324 or later	Edge Chromium 106.0.5249 or later
	Firefox ESR 68.4 and later ESRs	Firefox ESR 78.11 and later ESRs
Mac OS X	Google Chrome 88.0.4324 or later	Google Chrome 106.0.5249 or later
	Edge Chromium 88.0.4324 or later	Edge Chromium 106.0.5249 or later
	Firefox ESR 68.4 and later ESRs	Firefox ESR 78.11 and later ESRs
Chromebook with Chrome OS 70	Google Chrome 60 or later	Google Chrome 60 or later
	Chromium 73 or later	Chromium 73 or later

Note: Unified CCE Administration Client supports only Microsoft Chromium Edge browser.

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)

Notes

- 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.

- ECE 12.6 is supported only on Windows Server 2019 (Standard and Datacenter). For Windows Server 2016 support across the deployment, continue to use ECE 12.5 with CCE 12.6.

SQL Server and Informix Versions

Components	SQL Server Version

Unified CCE, Packaged CCE, and ICM	Microsoft SQL Server 2017 (Standard and Enterprise editions) with cumulative updates
	
	Microsoft SQL Server 2019 (Standard and Enterprise editions) with cumulative updates
	
	Note: Microsoft SQL Server 2019 with native compatibility level 150 and backward compatibility level 140 of Microsoft SQL Server 2017 is supported.
	
	Note: Contact Center Enterprise solution supports only the 64-bit version of Microsoft SQL Server. Contact Center Enterprise solution does not support the following:
	
	  ■ Encrypted connections to SQL Server.
	
	  ■ Linked Server feature of SQL Server.

Unified CVP	IBM Informix Dynamic Server Version 14.10.FC8
Enterprise Chat and Email	■ ECE 400 agent deployment: Microsoft SQL Server 2019 (Standard and Enterprise editions) ■ ECE 1500 agent deployment: Microsoft SQL Server 2019 (Standard and Enterprise editions) ■ ECE 2500 agent deployment: Microsoft SQL Server 2019 (Standard and Enterprise editions) ■ ECE Geographically Redundant/High Availability installation: Microsoft SQL Server 2019

Components	SQL Server Version
	(Enterprise edition)
Unified CCMP	Microsoft SQL Server 2019 (Standard and Enterprise editions)

Note: For CCE components, the combination of Windows Server 2016 with SQL Server 2019, or Windows Server 2019 with SQL Server 2017 is not supported.

Microsoft Windows and Microsoft SQL Server Localization Support

The following table lists the supported localized versions of Microsoft Windows Server and SQL Server to use with Cisco Unified ICM and Unified CCE components.

Microsoft Windows Server	Microsoft SQL Server	SQL Collation Setting
Danish		Latin1_General
Dutch		
Finnish		
French	French	
German	German	
Italian	Italian	
Norwegian		
Portuguese (Brazil)	Portuguse (Brazil)	

Microsoft Windows and Microsoft SQL Server Localization Support

Microsoft Windows Server	Microsoft SQL Server	SQL Collation Setting
Spanish	Spanish	
Swedish		
Chinese (simplified)	Chinese (simplified)	Chinese_PRC
Chinese (traditional)	Chinese (traditional)	Chinese_Taiwan_Stroke
Japanese	Japanese	Japanese
Korean	Korean	Korean_Wansung
Polish		Polish
Russian		Cyrillic_General
Turkish		Turkish

Notes

- In the above table, if a corresponding localized SQL Server in the Microsoft SQL Server column for a particular language in the Microsoft Windows Server column is not shown, use the English SQL Server with the applicable setting in the SQL Collation Setting column.

- Unified CCE supports multilingual versions of Microsoft Windows Server (English Windows Server with language packs installed). For details about how to set up multilingual versions of Microsoft Windows Server, see the http://www.cisco.com/en/US/products/sw/custcosw/ps1844/prod_installation_guides_list.html.

- Use English SQL Server on multilingual versions of the Microsoft Windows Server environment. These are examples of supported multilingual environments:

  — English Windows Server with Japanese Windows language pack installed, and English SQL Server with Japanese SQL Collation Setting.

  — English Windows Server with Russian Windows language pack installed, and English SQL Server with Cyrillic_General SQL Collation Setting.

OpenJDK and JRE

Note: OpenLogic is the only supported and certified OpenJDK JRE vendor for ICM Core, Unified CCE, and Unified CVP applications.

Table 1. Supported OpenLogic's OpenJDK JRE Versions

CCE Component(s)	Release 12.6(1)	Release 12.6(2)
Unified CCE	version 1.8 (32-bit), update 272 or later	version 1.8 (32-bit), update 352 or later
Unified CVP	version 1.8 (64-bit), update 275 or later	version 1.8 (64-bit), update 342 or later
Cisco Enterprise Chat and Email, and Unified CCMP	version 11	These components do not have a 12.6(2) release.
Unified Intelligence Center, Live Data, Cisco IdS, and Cisco Finesse	version 1.8 (64-bit), update 282	version 1.8 (64-bit), update 282
Platform services for the Cisco Voice Operating System (VOS) components	version 1.8 (32-bit), update 262	version 1.8 (32-bit), update 262
Cisco VVB	version 1.8 (32-bit), update 262	version 1.8 (32-bit), update 262
Speech server	version 11.0.16 (64-bit)	version 11.0.16 (64-bit)
Cloud Connect	version 1.8 (32-bit), update 262 version 1.8 (64-bit), update 345	version 1.8 (32-bit), update 262 version 1.8 (64-bit), update 345
Customer Collaboration Platform 12.5(1) SU1	version 1.8, update 262	version 1.8, update 262

For instructions on applying newer Java security updates, see the Security Guide for Cisco Unified ICM/Contact Center Enterprise guide.

Supported Languages

	Unified CCE Administration	Unified CCE Reporting Templates	Unified Intelligence Center	Finesse	Customer Collaboration Platform	Enterprise Chat and Email	CCMP
Bulgarian	No	Yes	Yes	Yes	Yes	No	No
Catalan	No	Yes	Yes	Yes	Yes	No	No
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	Customer Collaboration Platform	Enterprise Chat and Email	CCMP
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
Slovakian	No	Yes	Yes	Yes	Yes	No	No
Spanish	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Swedish	Yes	Yes	Yes	Yes	Yes	Yes	Yes

	Unified CCE Administration	Unified CCE Reporting Templates	Unified Intelligence Center	Finesse	Customer Collaboration Platform	Enterprise Chat and Email	CCMP
Turkish	No	Yes	Yes	Yes	Yes	No	Yes

Microsoft .NET Framework

■ 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 installs .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 and Packaged CCE solutions.
Remote Administration	For Remote Desktop usage information, see the *Remote Administration* section in the Security Guide for Cisco Unified ICM/Contact Center Enterprise.
Antivirus Software	Cisco Contact Center Enterprise solution supports all the third-party antivirus software and scanners. For more information, see the following documents: ■ *General Antivirus Guidelines* section in the Security Guide for Cisco Unified ICM/Contact Center Enterprise. ■ Cisco Customer Contact Software Policy for Use of Third-Party Software Bulletin

Function	Software
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	Microsoft Excel Versions 2013, 2016, Office 365. Note: **Office 365 doesn't support** Authenticated excel report permalink.

Virtual Desktop Infrastructure Support

■   Unified CCE and Packaged CCE 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:

Category	Requirements
Nuance Speech Suite 11.0.12	Speech Server 7.9.0
	Recognizer 11.8.0
	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
	Krypton-4.8.1

Category	Requirements
	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
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.

Category	Requirements
Operating System	Use vendor-recommended operating system software.
MRCP Protocol Version	1.0 and 2.0
VoiceXML Protocol Version	2.0

Load Balancers

Note: SSO access to the Unified Contact Center Enterprise web applications through the load balancer is not qualified.

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 NetScalar 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)	Parent PG 12.6(x)
Child PG 11.6(x)	Yes	Yes	Yes	Yes
Child PG 12.0(x)	Yes	Yes	Yes	Yes
Child PG 12.5(x)	Yes	Yes	Yes	Yes
Child PG 12.6(x)	Yes	Yes	Yes	Yes

ICM-to-ICM Gateway Compatibility

ICM Client	ICM Server
12.6	12.6
12.6	12.5
12.6	12.0
12.6	11.6
12.5	12.6

Non-Reference Design Compatibility

ICM Client	ICM Server
12.0	12.6
11.6	12.6

Packaged CCE 12.6 supports ICM-to-ICM Gateway in 4000 and 12000 Agent deployments only.

Third Party ACDs

Avaya

Avaya Considerations

■ Avaya changed names from DEFINITY to MultiVantage to Avaya Communications Manager (ACM) to Avaya Aura Communications Manager (AACM).

■ Packaged CCE 12.6 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 12.6(1) is the last supported release in the 12.6 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 12.6
6.0(x)	Yes
6.0 Extended	No

Avaya Communications Manager (ACM) Support

ACM Version	ICM/Packaged CCE 12.6
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 12.6
6.3 (x) to 8.1(x)	Yes	Yes[2]	Yes

Notes on AES Server and CVLAN/TSAPI Client Support

ICM/Packaged CCE 12.6 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. 12.6(1) is the last supported release in the 12.6 release train for the Unified ICM PG integration with Avaya Communications Manager using

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[2] Starting ICM Release 12.6(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 12.6(1) or lower, you must install the TSAPI client library version that is the same as the AES server.

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 12.6(1).

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 (over CVLAN and TSAPI in CCE release 12.6(1) and over TSAPI only, in CCE release 12.6(2))	Yes	Yes
Cisco	Unified CCE (only when integrated via Unified CCE System PG)	Yes	Yes

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