



System Requirements for Enterprise Chat and Email, Release 11.5(1)

For Unified Contact Center Enterprise

First Published: August, 2016

Last Updated: May 18, 2017

Americas Headquarters

Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
<http://www.cisco.com>
Tel: 408 526-4000
800 553-NETS (6387)
Fax: 408 527-0883

THE SPECIFICATIONS AND INFORMATION REGARDING THE PRODUCTS IN THIS MANUAL ARE SUBJECT TO CHANGE WITHOUT NOTICE. ALL STATEMENTS, INFORMATION, AND RECOMMENDATIONS IN THIS MANUAL ARE BELIEVED TO BE ACCURATE BUT ARE PRESENTED WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED. USERS MUST TAKE FULL RESPONSIBILITY FOR THEIR APPLICATION OF ANY PRODUCTS.

THE SOFTWARE LICENSE AND LIMITED WARRANTY FOR THE ACCOMPANYING PRODUCT ARE SET FORTH IN THE INFORMATION PACKET THAT SHIPPED WITH THE PRODUCT AND ARE INCORPORATED HEREIN BY THIS REFERENCE. IF YOU ARE UNABLE TO LOCATE THE SOFTWARE LICENSE OR LIMITED WARRANTY, CONTACT YOUR CISCO REPRESENTATIVE FOR A COPY.

The Cisco implementation of TCP header compression is an adaptation of a program developed by the University of California, Berkeley (UCB) as part of UCBs public domain version of the UNIX operating system. All rights reserved. Copyright 1981, Regents of the University of California.

NOTWITHSTANDING ANY OTHER WARRANTY HEREIN, ALL DOCUMENT FILES AND SOFTWARE OF THESE SUPPLIERS ARE PROVIDED "AS IS" WITH ALL FAULTS. CISCO AND THE ABOVE-NAMED SUPPLIERS DISCLAIM ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THOSE OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OR ARISING FROM A COURSE OF DEALING, USAGE, OR TRADE PRACTICE.

IN NO EVENT SHALL CISCO OR ITS SUPPLIERS BE LIABLE FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES, INCLUDING, WITHOUT LIMITATION, LOST PROFITS OR LOSS OR DAMAGE TO DATA ARISING OUT OF THE USE OR INABILITY TO USE THIS MANUAL, EVEN IF CISCO OR ITS SUPPLIERS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Any Internet Protocol (IP) addresses and phone numbers used in this document are not intended to be actual addresses and phone numbers. Any examples, command display output, network topology diagrams, and other figures included in the document are shown for illustrative purposes only. Any use of actual IP addresses or phone numbers in illustrative content is unintentional and coincidental.

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to <http://www.cisco.com/go/trademarks>. Third-party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1110R)

System Requirements for Enterprise Chat and Email: For Unified Contact Center Enterprise. May 31, 2017

Copyright © 2016, Cisco Systems, Inc. All rights reserved.

Contents

- About This Guide 4
- Obtaining Documentation and Submitting a Service Request 4
- Documentation Feedback 4
- Field Alerts and Field Notices 5
- Server Components 5
 - Virtual Server Support for Server Components 5
 - Hardware for Server Components 5
 - Software for Server Components (With PCCE) 5
 - ECE Server 6
 - Web Server 6
 - Email Servers 6
 - Software for Server Components (With UCCE) 7
 - File Server 7
 - Application Servers 7
 - Web Servers 8
 - Messaging Server 8
 - Services Server 9
 - Database Server 9
 - Email Servers 9
- Agent and User Desktops 10
 - Bandwidth for Agent and User Desktops 10
 - Hardware for Agent and User Desktops 10
 - Software for Agent Desktops 11
 - Software for All Other User Desktops 12
- Customer Desktops 13
 - Hardware for Customer Desktops 13
 - Software for Customer Desktops 13
 - Mobile Devices for Customers 13

Welcome to the Enterprise Chat and Email (ECE) feature, which provides multichannel interaction software used by businesses all over the world as a core component to the Unified Contact Center Enterprise product line. ECE offers a unified suite of the industry's best applications for chat and email interaction management to enable a blended agent for handling of web chat, email and voice interactions.

About This Guide

This document outlines the recommended hardware and software specification for Enterprise Chat and Email. It provides details about compatible third party software requirements and contains links to other documents that provide hardware and bandwidth specifications.

Document Conventions

This guide uses the following typographical conventions.

Convention	Indicates
<i>Italic</i>	Emphasis, or the title of a published document.
Bold	Labels of items on the user interface, such as buttons, boxes, and lists.
Monospace	The name of a file or folder, a database table column or value, or a command.
<i>Variable</i>	User-specific text, provided by the user. Or, text that must be typed by the user.

Document conventions

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, using the Cisco Bug Search Tool (BST), submitting a service request, and gathering additional information, see *What's New in Cisco Product Documentation*, at: <http://www.cisco.com/c/en/us/td/docs/general/whatsnew/whatsnew.html>.

Subscribe to *What's New in Cisco Product Documentation*, which lists all new and revised Cisco technical documentation as an RSS feed and delivers content directly to your desktop using a reader application. The RSS feeds are a free service.

Documentation Feedback

To provide comments about this document, send an email message to the following address: contactcenterproducts_docfeedback@cisco.com

We appreciate your comments.

Field Alerts and Field Notices

Cisco products may be modified or key processes may be determined to be important. These are announced through use of the Cisco Field Alerts and Cisco Field Notices. You can register to receive Field Alerts and Field Notices through the Product Alert Tool on Cisco.com. This tool enables you to create a profile to receive announcements by selecting all products of interest.

Log into www.cisco.com and then access the tool at <http://www.cisco.com/cisco/support/notifications.html>

Server Components

Virtual Server Support for Server Components

Enterprise Email and Chat is certified with the following versions of VMWare:

- ▶ VMWare ESXi 5.1 and higher
- ▶ VMWare ESXi 6.x

Virtualized deployments must utilize the OVA templates available on the DocWiki for proper sizing and resource utilization. For more information, see the *Virtualization for Enterprise Chat and Email DocWiki*.

Hardware for Server Components

To determine hardware requirements for servers, use the following document:

- ▶ *Design Guide for Enterprise Chat and Email*.

Software for Server Components (With PCCE)

- ▶ These are the requirements for *Enterprise Chat and Email* server components for deployments with Packaged CCE. This is a two server configuration with the following server components.
 - [ECE Server](#)
 - [Web Server](#)
 - [Email Servers](#)

ECE Server

Item	Requirements
Operating system (OS)	Microsoft® Windows Server® 2012 R2 Edition: Standard or Datacenter Version: 64-bit Language: English
Database	▶ Microsoft® SQL Server® 2014 (SP1 with CU2 or higher) Standard edition only Version: 64-bit Collation: ASCII (case insensitive)
Application server	▶ WildFly 8.2.0 (installed automatically)
Java	▶ Oracle JDK 1.8 (Update 65) (installed automatically) Version: 64-bit
Anti-virus	▶ McAfee® VirusScan® Enterprise version 8.8i or higher or ▶ Symantec® AntiVirus® Endpoint Protection 12.1 or higher

Software requirements for ECE server

Web Server

Item	Requirements
Operating system (OS)	Microsoft® Windows Server® 2012 R2 Edition: Standard or Datacenter Version: 64-bit Language: English
Web server	Microsoft® IIS® 8.5 (installed automatically)
Anti-virus	▶ McAfee® VirusScan® Enterprise version 8.8i or higher or ▶ Symantec® AntiVirus® Endpoint Protection 12.1 or higher

Software requirements for Web server

Email Servers

The application works with all mail servers that support the following protocols

- ▶ For incoming emails: POP3, IMAP
- ▶ For outgoing emails: SMTP

Software for Server Components (With UCCE)

- ▶ These are the requirements for *Enterprise Chat and Email* server components when deployed with Unified CCE. The deployment has the following components.
 - [File Server](#)
 - [Application Servers](#)
 - [Web Servers](#)
 - [Messaging Server](#)
 - [Services Server](#)
 - [Database Server](#)
 - [Email Servers](#)

File Server

Item	Requirements
Operating system (OS)	Microsoft® Windows Server® 2012 R2 Edition: Standard or Datacenter Version: 64-bit Language: English

Software requirements for the file server

Application Servers

Item	Requirements
Operating system (OS)	Microsoft® Windows Server® 2012 R2 Edition: Standard or Datacenter Version: 64-bit Language: English
Application server	▶ WildFly 8.2.0 (installed automatically)
Java	▶ Oracle JDK 1.8 (Update 65) (installed automatically) Version: 64-bit
Anti-virus	▶ McAfee® VirusScan® Enterprise version 8.8i or higher or ▶ Symantec® AntiVirus® Endpoint Protection 12.1 or higher

Software requirements for application servers

Web Servers

Item	Requirements
Operating system (OS)	Microsoft® Windows Server® 2012 R2 Edition: Standard or Datacenter Version: 64-bit Language: English
Web server	Microsoft® IIS® 8.5 (installed automatically)
Anti-virus	▶ McAfee® VirusScan® Enterprise version 8.8i or higher or ▶ Symantec® AntiVirus® Endpoint Protection 12.1 or higher

Software requirements for web servers

Messaging Server

Item	Requirements
Operating system (OS)	Microsoft® Windows Server® 2012 R2 Edition: Standard or Datacenter Version: 64-bit Language: English
Application server	▶ Wildfly 8.2.0 (installed automatically)
Java	▶ Oracle JDK 1.8 (Update 65) (installed automatically) Version: 64-bit
Anti-virus	▶ McAfee® VirusScan® Enterprise version 8.8i or higher or ▶ Symantec® AntiVirus® Endpoint Protection 12.1 or higher

Software requirements for the messaging server

Services Server

Item	Requirements
Operating system (OS)	Microsoft® Windows Server® 2012 R2 Edition: Standard or Datacenter Version: 64-bit Language: English
Java	▶ Oracle JDK 1.8 (Update 65) (installed automatically) Version: 64-bit
Anti-virus	▶ McAfee® VirusScan® Enterprise version 8.8i or higher or ▶ Symantec® AntiVirus® Endpoint Protection 12.1 or higher

Software requirements for the services server

Database Server

Item	Requirements
Operating system (OS)	▶ Microsoft® Windows Server® 2012 R2 Edition: Standard or Datacenter Version: 64-bit Language: English
Database	▶ Microsoft® SQL Server® 2014 (SP1 with CU2 or higher) Standard, Business Intelligence, or Enterprise editions Version: 64-bit
Collation	ASCII (case insensitive)
Clustering for failover (optional)	A cluster of database servers can be configured to achieve failover.
Anti-virus	▶ McAfee® VirusScan® Enterprise version 8.8i or higher or ▶ Symantec® AntiVirus® Endpoint Protection 12.1 or higher

Software requirements for the database server

Email Servers

The application works with all mail servers that support the following protocols

- ▶ For incoming emails: POP3, IMAP
- ▶ For outgoing emails: SMTP

Agent and User Desktops

Bandwidth for Agent and User Desktops

This section describes the bandwidth required between the user desktops and the web servers in the ECE deployment.

- ▶ **At sign in:** Average bandwidth requirement at login is 384 kilobits/second per user.
- ▶ **At steady state:** Average bandwidth requirement after login, working at a steady state, is 40 kilobits/second per user.

These values are based on load tests run in our labs.

Hardware for Agent and User Desktops

While determining hardware needs, in addition to the minimum requirements mentioned here, consider the resources required for other applications that will be running on the desktop at the same time as ECE.

Item	Minimum requirements
CPU	Intel® or AMD®, 1.4 GHz or higher processor Version: 32-bit or 64-bit
RAM	<ul style="list-style-type: none">▶ For Microsoft® Windows® 7: 4 GB 2 GB available physical memory for ECE▶ For Microsoft® Windows® 8: 4 GB 2 GB available physical memory for ECE▶ For Microsoft® Windows® 10: 4 GB 2 GB available physical memory for ECE
Hard disk	512 MB for the Temporary Internet Files folder used by Internet Explorer
Screen resolution	1024 x 768 pixels (minimum as well as recommended setting)

Minimum hardware requirements for user desktops

Software for Agent Desktops

Item	Requirements
Operating system (OS)	No specific OS is required for ECE. Note: See <i>Cisco Finesse Installation Guide</i> to identify the OS that will work with both ECE and Cisco Finesse.
Operating system (OS) language	Chinese (Simplified), Danish, Dutch, English, French, French Canadian, German, Italian, Japanese, Korean, Spanish, Swedish, Brazilian Portuguese, Portuguese, and Russian
Web browser	<ul style="list-style-type: none"> ▶ Google Chrome, most recent generally available version ▶ Mozilla® Firefox®, most recent generally available version ▶ Microsoft® Internet Explorer® - version 11.0 or higher Note: For the most current information on supported browsers, see the Unified CCE Software Compatibility Matrix: http://docwiki.cisco.com/wiki/Compatibility_Matrix_for_Unified_CCE
Cisco Finesse	▶ Cisco Finesse 11.5(1)
Anti-virus	<ul style="list-style-type: none"> ▶ McAfee® VirusScan® Enterprise version 8.8i or higher <i>or</i> <ul style="list-style-type: none"> ▶ Symantec® AntiVirus® Endpoint Protection 12.1 or higher
Popup blockers	Popup blockers need to be disabled.
Localized user interface	Chinese (Simplified), Danish, Dutch, English, French, French Canadian, German, Italian, Japanese, Korean, Spanish, Swedish, Brazilian Portuguese, Portuguese, and Russian. NOTE: Chinese (Simplified), Japanese, and Korean user interfaces require operating systems in corresponding languages.

Software requirements for agent desktops

Software for All Other User Desktops

The section describes software requirements for all users who need to access the Supervision, Reports, Knowledge Base, Administration, System, and Tools Consoles of ECE.

Item	Requirements
Operating system (OS)	<ul style="list-style-type: none"> ▶ Microsoft® Windows® 7 <i>or</i> ▶ Microsoft® Windows® 8 (Desktop mode) <i>or</i> ▶ Microsoft® Windows® 10 (Desktop mode) <p>Note: See <i>Cisco Finesse Installation Guide</i> to identify the OS that will work with both ECE and Cisco Finesse.</p>
Operating system (OS) language	Chinese (Simplified), Danish, Dutch, English, French, French Canadian, German, Italian, Japanese, Korean, Spanish, Swedish, Brazilian Portuguese, Portuguese, and Russian
Java runtime environment	<ul style="list-style-type: none"> ▶ Oracle JRE 1.8.0 (update 66 or higher) <p>This is required only to administer workflows from the Administration Console.</p>
Web browser	<ul style="list-style-type: none"> ▶ Microsoft® Internet Explorer® 11.0 or higher <p>Internet Explorer runs in compatibility mode.</p> <p>For the most current information on supported browsers, see the Unified CCE Software Compatibility Matrix: http://docwiki.cisco.com/wiki/Compatibility_Matrix_for_Unified_CCE</p>
Anti-virus	<ul style="list-style-type: none"> ▶ McAfee® VirusScan® Enterprise version 8.8i or higher <i>or</i> ▶ Symantec® AntiVirus® Endpoint Protection 12.1 or higher
Native xmlHTTP	Native xmlhttp must be enabled. This is required for Ajax.
JavaScript	JavaScript must be enabled.
Cookies	Cookies must be enabled.
Popup blockers	Popup blockers need to be disabled.
Localized user interface	Chinese (Simplified), Danish, Dutch, English, French, French Canadian, German, Italian, Japanese, Korean, Spanish, Swedish, Brazilian Portuguese, Portuguese, and Russian. <p>NOTE: Chinese (Simplified), Japanese, and Korean user interfaces require operating systems in corresponding languages.</p>

Software requirements for all other desktops

Customer Desktops

Hardware for Customer Desktops

We do not mandate any minimum requirements for customer desktops used in chat interactions.

Software for Customer Desktops

These software requirements are for customer desktops used in chat interactions. There are no specific software requirements for desktops used for emails.

Item	Requirements
Browsers	One of the following: <ul style="list-style-type: none">▶ Microsoft® Internet Explorer® 11 or higher▶ Mozilla® Firefox®, most recent generally available version▶ Safari, most recent generally available version▶ Google Chrome, most recent generally available version▶ Microsoft® Edge®, most recent generally available version
JavaScript	JavaScript must be enabled.
Cookies	Cookies must be enabled.
Popup blockers	Popup blockers need to be disabled for page-push.

Browsers supported for chat interactions

Mobile Devices for Customers

- ▶ Apple iOS (3.3 or higher) and Android (2.1 or higher) devices are supported for chat.