



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

**For Unified Contact Center Enterprise**

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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

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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.
<b>Bold</b>	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

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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>.

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## Documentation Feedback

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To provide comments about this document, send an email message to the following address: [contactcenterproducts\\_docfeedback@cisco.com](mailto:contactcenterproducts_docfeedback@cisco.com)

We appreciate your comments.

## Field Alerts and Field Notices

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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](http://www.cisco.com) and then access the tool at <http://www.cisco.com/cisco/support/notifications.html>

## Server Components

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### 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
<b>Operating system (OS)</b>	Microsoft® Windows Server® 2012 R2 Edition: Standard or Datacenter Version: 64-bit Language: English
<b>Database</b>	▶ Microsoft® SQL Server® 2014 (SP1 with CU2 or higher) Standard edition only Version: 64-bit Collation: ASCII (case insensitive)
<b>Application server</b>	▶ WildFly 8.2.0 (installed automatically)
<b>Java</b>	▶ Oracle JDK 1.8 (Update 65) (installed automatically) Version: 64-bit
<b>Anti-virus</b>	▶ 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
<b>Operating system (OS)</b>	Microsoft® Windows Server® 2012 R2 Edition: Standard or Datacenter Version: 64-bit Language: English
<b>Web server</b>	Microsoft® IIS® 8.5 (installed automatically)
<b>Anti-virus</b>	▶ 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
<b>Operating system (OS)</b>	Microsoft® Windows Server® 2012 R2 Edition: Standard or Datacenter Version: 64-bit Language: English

*Software requirements for the file server*

### Application Servers

Item	Requirements
<b>Operating system (OS)</b>	Microsoft® Windows Server® 2012 R2 Edition: Standard or Datacenter Version: 64-bit Language: English
<b>Application server</b>	▶ WildFly 8.2.0 (installed automatically)
<b>Java</b>	▶ Oracle JDK 1.8 (Update 65) (installed automatically) Version: 64-bit
<b>Anti-virus</b>	▶ 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
<b>Operating system (OS)</b>	Microsoft® Windows Server® 2012 R2 Edition: Standard or Datacenter Version: 64-bit Language: English
<b>Web server</b>	Microsoft® IIS® 8.5 (installed automatically)
<b>Anti-virus</b>	▶ 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
<b>Operating system (OS)</b>	Microsoft® Windows Server® 2012 R2 Edition: Standard or Datacenter Version: 64-bit Language: English
<b>Application server</b>	▶ Wildfly 8.2.0 (installed automatically)
<b>Java</b>	▶ Oracle JDK 1.8 (Update 65) (installed automatically) Version: 64-bit
<b>Anti-virus</b>	▶ 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
<b>Operating system (OS)</b>	Microsoft® Windows Server® 2012 R2 Edition: Standard or Datacenter Version: 64-bit Language: English
<b>Java</b>	▶ Oracle JDK 1.8 (Update 65) (installed automatically) Version: 64-bit
<b>Anti-virus</b>	▶ 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
<b>Operating system (OS)</b>	▶ Microsoft® Windows Server® 2012 R2 Edition: Standard or Datacenter Version: 64-bit Language: English
<b>Database</b>	▶ Microsoft® SQL Server® 2014 (SP1 with CU2 or higher) Standard, Business Intelligence, or Enterprise editions Version: 64-bit
<b>Collation</b>	ASCII (case insensitive)
<b>Clustering for failover (optional)</b>	A cluster of database servers can be configured to achieve failover.
<b>Anti-virus</b>	▶ 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
<b>CPU</b>	Intel® or AMD®, 1.4 GHz or higher processor Version: 32-bit or 64-bit
<b>RAM</b>	<ul style="list-style-type: none"><li>▶ For Microsoft® Windows® 7: 4 GB 2 GB available physical memory for ECE</li><li>▶ For Microsoft® Windows® 8: 4 GB 2 GB available physical memory for ECE</li><li>▶ For Microsoft® Windows® 10: 4 GB 2 GB available physical memory for ECE</li></ul>
<b>Hard disk</b>	512 MB for the Temporary Internet Files folder used by Internet Explorer
<b>Screen resolution</b>	1024 x 768 pixels (minimum as well as recommended setting)

*Minimum hardware requirements for user desktops*

## Software for Agent Desktops

Item	Requirements
<b>Operating system (OS)</b>	No specific OS is required for ECE. <b>Note:</b> See <i>Cisco Finesse Installation Guide</i> to identify the OS that will work with both ECE and Cisco Finesse.
<b>Operating system (OS) language</b>	Chinese (Simplified), Danish, Dutch, English, French, French Canadian, German, Italian, Japanese, Korean, Spanish, Swedish, Brazilian Portuguese, Portuguese, and Russian
<b>Web browser</b>	<ul style="list-style-type: none"> <li>▶ Google Chrome, most recent generally available version</li> <li>▶ Mozilla® Firefox®, most recent generally available version</li> <li>▶ Microsoft® Internet Explorer® - version 11.0 or higher</li> </ul> <b>Note:</b> For the most current information on supported browsers, see the Unified CCE Software Compatibility Matrix: <a href="http://docwiki.cisco.com/wiki/Compatibility_Matrix_for_Unified_CCE">http://docwiki.cisco.com/wiki/Compatibility_Matrix_for_Unified_CCE</a>
<b>Cisco Finesse</b>	▶ Cisco Finesse 11.5(1)
<b>Anti-virus</b>	<ul style="list-style-type: none"> <li>▶ McAfee® VirusScan® Enterprise version 8.8i or higher</li> </ul> <i>or</i> <ul style="list-style-type: none"> <li>▶ Symantec® AntiVirus® Endpoint Protection 12.1 or higher</li> </ul>
<b>Popup blockers</b>	Popup blockers need to be disabled.
<b>Localized user interface</b>	Chinese (Simplified), Danish, Dutch, English, French, French Canadian, German, Italian, Japanese, Korean, Spanish, Swedish, Brazilian Portuguese, Portuguese, and Russian. <b>NOTE:</b> 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
<b>Operating system (OS)</b>	<ul style="list-style-type: none"> <li>▶ Microsoft® Windows® 7</li> <li><i>or</i></li> <li>▶ Microsoft® Windows® 8 (Desktop mode)</li> <li><i>or</i></li> <li>▶ Microsoft® Windows® 10 (Desktop mode)</li> </ul> <p><b>Note:</b> See <i>Cisco Finesse Installation Guide</i> to identify the OS that will work with both ECE and Cisco Finesse.</p>
<b>Operating system (OS) language</b>	Chinese (Simplified), Danish, Dutch, English, French, French Canadian, German, Italian, Japanese, Korean, Spanish, Swedish, Brazilian Portuguese, Portuguese, and Russian
<b>Java runtime environment</b>	<ul style="list-style-type: none"> <li>▶ Oracle JRE 1.8.0 (update 66 or higher)</li> </ul> <p>This is required only to administer workflows from the Administration Console.</p>
<b>Web browser</b>	<ul style="list-style-type: none"> <li>▶ Microsoft® Internet Explorer® 11.0 or higher</li> </ul> <p>Internet Explorer runs in compatibility mode.</p> <p>For the most current information on supported browsers, see the Unified CCE Software Compatibility Matrix:  <a href="http://docwiki.cisco.com/wiki/Compatibility_Matrix_for_Unified_CCE">http://docwiki.cisco.com/wiki/Compatibility_Matrix_for_Unified_CCE</a></p>
<b>Anti-virus</b>	<ul style="list-style-type: none"> <li>▶ McAfee® VirusScan® Enterprise version 8.8i or higher</li> <li><i>or</i></li> <li>▶ Symantec® AntiVirus® Endpoint Protection 12.1 or higher</li> </ul>
<b>Native xmlHTTP</b>	Native xmlhttp must be enabled. This is required for Ajax.
<b>JavaScript</b>	JavaScript must be enabled.
<b>Cookies</b>	Cookies must be enabled.
<b>Popup blockers</b>	Popup blockers need to be disabled.
<b>Localized user interface</b>	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

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## 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
<b>Browsers</b>	One of the following: <ul style="list-style-type: none"><li>▶ Microsoft® Internet Explorer® 11 or higher</li><li>▶ Mozilla® Firefox®, most recent generally available version</li><li>▶ Safari, most recent generally available version</li><li>▶ Google Chrome, most recent generally available version</li><li>▶ Microsoft® Edge®, most recent generally available version</li></ul>
<b>JavaScript</b>	JavaScript must be enabled.
<b>Cookies</b>	Cookies must be enabled.
<b>Popup blockers</b>	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.