



Technical Requirements

Copyright © 2021, 8x8, Inc. All rights reserved.

This document is provided for information purposes only and the contents hereof are subject to change without notice. This document is not warranted to be error-free, nor subject to any other warranties or conditions, whether expressed orally or implied in law, including implied warranties and conditions of merchantability or fitness for a particular purpose. We specifically disclaim any liability with respect to this document and no contractual obligations are formed either directly or indirectly by this document. This document may not be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without our prior written permission.

8x8® is a registered trademark of 8x8, Inc.

Microsoft® Internet Explorer is a trademark or a registered trademark of Microsoft Corporation in the United States and other countries.

All other trademarks, service marks, registered trademarks, or registered service marks are the property of their respective owner/s. All other brands and/or product names are the trademarks (or registered trademarks) and property of their respective owner/s.

ii

Contents

Overview of 8x8 Contact Center requirements for agents	1
Agent technical requirements	2
Agent network connectivity requirements	3
Agent computer hardware and software requirements	4
Agent browser configuration requirements	5
Manage agent browser security zones	6
Configure Internet Explorer	6
Agent telephone connection and equipment requirements	9
Agent PSTN equipment requirements	9
Agent VoIP telephone requirements	9
Agent VoIP headset selection guidelines	11
8x8-suggested headsets	11
Tips for choosing headsets	12

Overview of 8x8 Contact Center requirements for agents

The primary requirements to use 8x8 Contact Center for agents are:

- A personal computer with a web browser.
- A high-speed connection to the Internet.
- A telephone device.

In typical small business and home setups, you can open your browser, log in to the 8x8 Contact Center services site, and gain full access to the service. In larger business environments, you may be required to configure various browser and network permissions and security policies to allow full access to 8x8 Contact Center features.

Find out about the agent's technical requirements, network connectivity, hardware and software requirements, browser, telephone, and equipment requirements, and VoIP headsets. For each agent workstation supported by the 8x8 Contact Center, you must provide the agent with appropriately-configured network, computer, and telephony equipment.

You must also configure your network to interoperate with 8x8 Contact Center. In networks with aggressive security policies, you may need to selectively enable access for specific IP addresses and associated firewall ports used by 8x8 Contact Center. For 8x8 Contact Center network requirements, see X Series Technical Requirements on our Knowledge Base.

On most networks, the only required configuration tasks are to allow 8x8 Contact Center to:

- Retrieve email messages from your organization's email server.
- Allow 8x8 Agent Console to access the 8x8 Contact Center platform assigned to them.

8x8

Agent technical requirements

Each 8x8 Contact Center agent requires:

- A properly equipped and configured computer.
- A high-speed network connection.
- A telephone device.

Depending on the types of transactions being managed by 8x8 Contact Center, an agent workstation may also require additional equipment or configuration steps.

Agent network connectivity requirements

All 8x8 Contact Center agents, supervisors, and administrators must have high-speed Internet access. Examples of high-speed Internet include DSL, Cable, or most corporate LANs.

Although 8x8 Contact Center can interoperate with high-speed satellite connections, the round-trip transmission delay inherent in all satellite connections is likely to result in an undesirable degradation in performance.



Note: Dial-up Internet connections are not supported.

Agent computer hardware and software requirements

The following table is a list of the computer hardware and software required to run 8x8 Contact Center's 8x8 Agent Console.

Computer Component	Requirements	
Computer hardware	• Agents require a personal computer and a high-speed Internet connection capable of running Microsoft Internet Explorer 11, Firefox, or Chrome quickly when accessing popular search sites such as Google and Yahoo.	
	• If an agent uses a Voice over IP (VoIP) softphone provided by 8x8, then the agent's computer and Internet connection must consistently perform well while processing all other desktop applications required for the agent's tasks.	
	• Agent screens must support a resolution of no less than 1200 x 900 pixels. If available, a higher screen resolution is recommended.	
Firewall and Network	For details, see X Series Technical Requirements.	
Address Translation	• 8x8 Contact Center works with typical default stateful inspection firewall settings.	
(NAT) Requirements	• 8x8 Contact Center requires standard NAT with any VoIP Application Layer Gateway (ALG) address fix up features disabled.	
	• The 8x8 Contact Center browser and VoIP phone sessions periodically generate activity to keep stateful inspection ports open.	
	• For organizations with restrictive firewall settings, 8x8 Contact Center recommends stateful inspection to open the following ports automatically when needed:	
	 Agent browser sessions use TCP ports 80 and 443. 	
	\circ VoIP softphones use UDP port 5060, plus UDP ports in the range of 10000-35000.	
	 The Collaborate feature uses TCP port 5907. 	
	 Downloading call recordings through FTPS clients uses TCP port 21 and TCP ports in the range of 30000-30999. 	
	• Agents using Counterpath software-based softphones (such as eyeBeam and Bria) may need to configure any firewall products (for example, Windows firewall, Symantec, or Trend Micro) to allow the softphones to receive calls.	

Agent browser configuration requirements

We fully support the following browsers for 8x8 Contact Center:

- Google Chrome (latest version)
- Mozilla Firefox (latest version)
- Microsoft Edge (Chromium)

We do our best to support the following browsers for 8x8 Contact Center:

- Microsoft Internet Explorer 11 (latest version)
- Apple Safari (latest version)

You can test your current browser's security standard compatibility.



Known Issue: If you use Internet Explorer to run 8x8 Contact Center applications, you may encounter high memory usage. To resolve this issue, clear your browser cookies and cache, activate the setting to clear history, clear history on exit, and reboot.



Note: We do not support 8x8 Contact Center on mobile browsers.



Note: Firefox requires the QuickTime plug-in for audio features.

2		
1	=	1
王		٢
王	= 11	
王	=09	
Ť	-	

Note: To maintain uninterrupted access, update your web browsers or SSL libraries to the latest available versions. Attempts to access 8x8 web portals on a computer without a TLS 1.2+ compliant browser or SSL library prevents you from configuring your services.



Note: For APIs customization in the 8x8 Contact Center, check with your system administrators or developers to ensure that the system SSL libraries are updated to support TLS 1.2 or better. Affected



products may include (but are not limited to) older distributions of Linux-based operating systems (using old versions of OpenSSL) or Java Runtime Environments (JRE) older than 1.8.

Manage agent browser security zones

8x8 Contact Center agents may need to configure Internet Explorer to work with all 8x8 Agent Console features.

Internet Explorer places Web sites in one of four security zones:

- Internet (most trusted, least strict security settings)
- Local intranet
- Trusted sites
- Restricted sites (least trusted, strictest security settings)

When you assign a site's URL to an Internet Explorer security zone, you are specifying the security settings that Internet Explorer uses when you visit that site. Depending on your call center's security policies, if you are a Supervisor, in Internet Explorer you add the URL of your 8x8 Supervisor Console to either the **Internet** or **Trusted sites** zone.

If 8x8 Contact Center updates the URL of your 8x8 Agent Console or 8x8 Supervisor Console, you then need to update your Internet Explorer settings in response to that change. More specifically, you must:

- 1. Remove the old URL from its security zone.
- 2. Add the new URL to the zone.
- Configure the new URL's security settings as described in the table for Internet Explorer configuration
 requirements for Agent and Agent Supervisor accounts, which lists the Internet Explorer tasks you must perform
 to configure your 8x8 Agent Console or 8x8 Supervisor Console to interoperate with your 8x8 Contact Center tenant.

Configure Internet Explorer

The configuration requirements for Internet Explorer differ slightly, depending on whether the agent account type is Agent or Agent Supervisor. The following table is a list of Internet Explorer configuration requirements for Agent and Agent Supervisor accounts.

Agent	Agent Supervisor	IE11	Configuration Task
X	X	X	 For both Agent and Agent Supervisor accounts, you must disable Internet Explorer's SmartScreen Filter feature. To disable SmartScreen Filter for Agents and Agent Supervisors: 1. In Tools, choose Internet Options, then click the Advanced tab. 2. In the Security area of the Advanced tab, clear the Enable SmartScreen Filter check box to disable the feature.
	X	X	 For Agent Supervisor accounts, you must disable file download prompts in Internet Explorer. To disable download prompt for Agent Supervisors: In Tools, choose Internet Options, then click the Security tab. In the Security tab, choose the Internet or Trusted site zone. For information about security zones, see Managing Agent Browser Security Zones. In the Security tab, click Custom Level, then in the Download section enable Automatic Prompting for File Downloads.
X	X	X	 For Agent and Agent Supervisor accounts that use CRM integration, such as Salesforce and NetSuite, you must disable pop-up blocking and all Internet accelerators in Internet Explorer. To disable pop-up blocking and Internet accelerators for Agent and Agent Supervisor accounts that use CRM integration: In Tools, choose Pop-up Blocker, then choose Turn Off Pop-up Blocker. In Tools, choose Manage Add-ons, then in Accelerators right-click each accelerator and choose Disable.
X	X	X	 In Internet Explorer, you must turn off compatibility view. To disable compatibility view for Agents and Agent Supervisors: 1. In your browser session, tap or click Tools, and then tap or click Compatibility View Settings.

Agent	Agent Supervisor	IE11	Configuration Task
Agent	_	IE11	Configuration Task
			 2. Disable all compatibility view settings.

Agent telephone connection and equipment requirements

To receive telephone calls from the 8x8 Contact Center application, agents must have access to one of the following types of telephone connection:

- Public switched telephone network (PSTN) connection.
- Voice over IP (VoIP) connection.

For both VoIP or PSTN telephones, the telephone assigned to the 8x8 Contact Center must:

- Always be available to receive incoming calls.
- Not forward calls to a non-8x8 Contact Center voicemail box before 8x8 Contact Center can offer an incoming call to an agent, and forward that call to an agent's 8x8 Contact Center voicemail box if no agent accepts the call.

Agent PSTN equipment requirements

8x8 Contact Center agents require Public Switched Telephone Network (PSTN) telephone connections that:

- Is directly accessed by dialing a Direct Inward Dialing (DID) phone number.
- Does not prompt or otherwise require a caller to dial a separate extension number.

8x8 Contact Center supports the following types of PSTN equipment:

- A telephone connected to a conventional telephone wire (landline)
- A cell phone
- A direct-access IP phone

Agent VoIP telephone requirements

Voice over IP (VoIP) telephone connections use a data connection to originate and transport telephone calls. 8x8 Contact Center supports the following types of VoIP telephone equipment:

- Software-based VoIP phones such as Counterpath eyeBeam
- · Hardware-based VoIP phones, such as the Cisco

Based on your business site, the IP address you use will vary. For details, see X Series Technical Requirements.

Site	IPs
US-West	8.21.164.0/24
US-East	8.28.3.0/24
Europe 2	217.163.57.0/24
Europe 3	109.70.58.0/24
Hong Kong	103.252.162.0/24
Australia	103.239.164.0/24
Brazil	168.90.173.112/28
Canada	142.165.219.0/24
Bell Canada	50.100.15.0/24
Sandbox	Same as US-West

For details about using CounterPath softphones, see the firewall and NAT requirements in the table listing computer hardware and software required to run 8x8 Agent Console. In addition, see how you can configure Bria 5. For details about VoIP equipment and configuration, see X Series Technical Requirements or contact 8x8 Support.

Agent VoIP headset selection guidelines

To help agents select headsets, 8x8 Contact Center recommends professional-quality equipment manufactured by leading companies such as Plantronics or Jabra (AKA GN Netcom).

Consider the following criteria when selecting an agent headset:

Headset Component	Description	
Connection interface	 Manufacturers of high-quality telephone headsets offer products that can be connected to either: Different models and brands of desktop telephones. Computer-based softphones via a computer's USB connector. Avoid PC sound card analog headsets that require the use of separate headphone and microphone plugs. These headsets generally do not deliver high-quality sound, and tend to have poor-quality microphones. 	
Microphone sensitivity	 Select a headset that is suitable for the agent's work environment (e.g. quiet or noisy surroundings). Avoid headsets that use omnidirectional microphones, as they can pick up too much background noise. Conversely, be sure the headset microphone is sensitive enough to transmit the full spectrum of the human voice. Test with external callers. 	



Note: Consumer-grade headsets are generally not suitable for contact center agents due to inferior audio performance, lack of all-day comfort, and limited durability. Agent productivity and customer frustration losses quickly negate any benefits of low-cost and ill-suited headsets.

8x8-suggested headsets

8x8 recommends using any of the professional Plantronics models listed on the 8x8 web store. You may also use alternative brands such as Jabra. Professional headsets are sometimes sold in two parts. In this case, the TOP PART is the headset itself, and the BOTTOM PART is the interface adapter (which is either USB for softphones, or an adapter designed for a particular brand and model of desk phone).

Headset	Description
Plantronics	TOP PART = headset
	HW261N binaural noise-canceling microphone
	HW251N monaural noise-canceling microphone
	BOTTOM PART = USB adapter
	DA55 USB-to-Headset Adapter
GN Netcom or JABRA	TOP PART = headset
	GN2125 binaural noise-canceling microphone
	GN2120 monaural noise-canceling microphone
	BOTTOM PART = USB adapter = Jabra Link 220

8x8 suggests the following professional headsets with USB connectors for softphones:

Important: The headset components listed above are suitable for a USB softphone connection. For a desk phone, substitute the headset BOTTOM PART with a desk phone adapter. Refer to the headset manufacturer's web site for the BOTTOM PART adapter that is designed for your brand and model of desk phone.

Tips for choosing headsets

- Many alternate TOP PART headset styles are available from Plantronics and Jabra (GN Netcom), and can be respectively substituted for the TOP PART models listed above.
- For environments with high ambient noise, select models with noise-canceling microphones and binaural ear speakers.
- Select TOP and BOTTOM parts from the same manufacturer. TOP and BOTTOM parts from different manufacturers do not interoperate.
- Avoid using units with built-in line volume controls. Adjusting the volume between the headset and PC/softphone can be confusing in these units.
- · An agent's preferences for in-ear vs. over-ear headset designs should be respected.
- Select hardwired or wireless models based on need. If you choose a wireless model, be sure that local radio

frequency congestion is not excessive (check the manufacturer's recommendations).

• Select a headset interface based on need for use with a softphone or desk phone, or both.

For more information, visit support.8x8.com.