# Port Utilization Guide for Cisco Unified Contact Center Express Solution, Release 11.6(1)

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**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

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# Preface



## Change History

This table lists changes made to this guide. Most recent changes appear at the top.

| Change | See | Date |
|---|---|---|
| **Initial Release of Document for Release 11.6(1)** | | August 2017 |

## About this Guide

This document provides a list of the TCP and UDP ports that Cisco Unified Contact Center products use. You use this information to configure Quality of Service (QoS) and Firewall/VPN solutions. Proper configuration is important on a network with an Architecture for Voice, Video, and Integrated Data (AVVID) solution.

## Audience

This document is intended primarily for network administrators.

# Conventions

This manual uses the following conventions.

| Convention | Description |
|---|---|
| **boldface** font | Boldface font is used to indicate commands, such as user entries, keys, buttons, and folder and submenu names. For example:<br>• Choose **Edit** > **Find**<br>• Click **Finish**. |
| *italic* font | Italic font is used to indicate the following:<br>• To introduce a new term. Example: A *skill group* is a collection of agents who share similar skills.<br>• For emphasis. Example: *Do not* use the numerical naming convention.<br>• An argument for which you must supply values.<br>Example:<br>IF (*condition, true-value, false-value*)<br>• A book title. Example:<br>See the *Cisco Unified Contact Center Express Installation Guide*. |
| `window` font | Window font, such as Courier, is used for the following:<br>• Text as it appears in code or information that the system displays. Example:<br>`<html><title> Cisco Systems,Inc. </title></html>`<br>• File names. Example: `tserver.properties`.<br>• Directory paths. Example:<br>`C:\Program Files\Adobe` |
| string | Nonquoted sets of characters (strings) appear in regular font. Do not use quotation marks around a string or the string will include the quotation marks. |
| [ ] | Optional elements appear in square brackets. |

| Convention | Description |
|---|---|
| { x \| y \| z } | Alternative keywords are grouped in braces and separated by vertical bars. |
| [ x \| y \| z ] | Optional alternative keywords are grouped in brackets and separated by vertical bars. |
| < > | Angle brackets are used to indicate the following:<br>• For arguments where the context does not allow italic, such as ASCII output.<br>• A character string that the user enters but that does not appear on the window such as a password. |
| ^ | The key labeled Control is represented in screen displays by the symbol ^. For example, the screen instruction to hold down the Control key while you press the D key appears as ^D. |

# Related Documents

| Document or Resource | Link |
|---|---|
| Cisco Unified Contact Center Express Documentation Guide | https://www.cisco.com/en/US/products/sw/custcosw/ps1846/products_documentation_roadmaps_list.html |
| cisco.com site for Cisco Unified CCX documentation | https://www.cisco.com/en/US/products/sw/custcosw/ps1846/tsd_products_support_series_home.html |
| cisco.com site for Cisco Unified Intelligence Center documentation | https://www.cisco.com/en/US/products/ps9755/tsd_products_support_series_home.html |
| cisco.com site for Cisco Finesse documentation | https://www.cisco.com/en/US/products/ps11324/tsd_products_support_series_home.html |
| cisco.com site for Cisco SocialMiner documentation | https://www.cisco.com/c/en/us/support/customer-collaboration/socialminer/tsd-products-support-series-home.html |
| cisco.com site for Cisco Mediasense documentation | https://www.cisco.com/c/en/us/support/customer-collaboration/mediasense/tsd-products-support-series-home.html |
| cisco.com site for Cisco Unified CCX Virtualization Information | https://www.cisco.com/c/dam/en/us/td/docs/voice_ip_comm/uc_system/virtualization/virtualization-cisco-unified-contact-center-express.html |

| Document or Resource | Link |
|---|---|
| cisco.com site for Cisco Unified CCX Compatibility Information | https://www.cisco.com/c/en/us/support/customer-collaboration/unified-contact-center-express/products-device-support-tables-list.html |

# Documentation and Support

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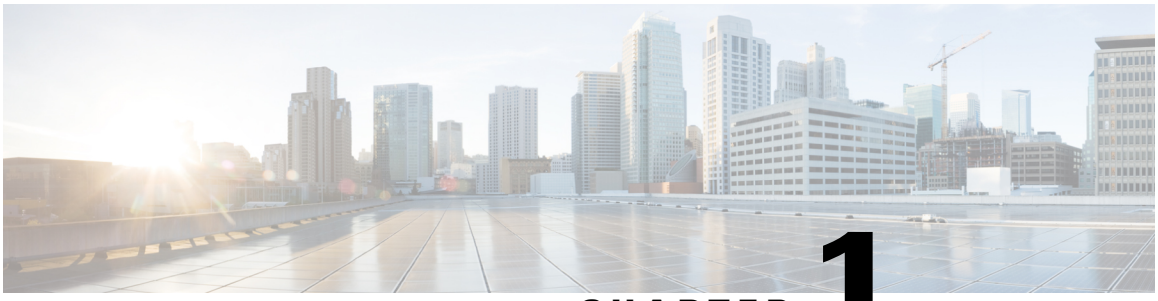
Sign in `www.cisco.com` and then access the tool at https://www.cisco.com/cisco/support/notifications.html.



CHAPTER 1

# Port Utilization in Unified CCX



# Port Utilization Table Columns

The columns in the port utilization tables in this document describe the following:

**Listener (Process or Application Protocol)**

A value representing the server or application and where applicable, the open or proprietary application protocol.

**Listener Protocol and Port**

An identifier for the TCP or UDP port that the server or application is listening on, along with the IP address for incoming connection requests when acting as a server.

**Remote Device (Process or Application Protocol)**

The remote application or device making a connection to the server or service specified by the protocol; or listening on the remote protocol and port.

**Remote Protocol and Port**

The identifier for the TCP or UDP port that the remote service or application is listening on, along with the IP address for incoming connection requests when acting as the server.

**Traffic Direction**

The direction that traffic flows through the port: Inbound, Bidirectional, Outbound.

**Note** The operating system dynamically assigns the source port that the local application or service uses to connect to the destination port of a remote device. In most cases, this port is assigned randomly above TCP/UDP 1024.

# System Services Port Utilization

***Table 1: System Services Port Utilization***

| Listener (Process or Application Protocol) | Listener Protocol and Port | Remote Device (Process or Application Protocol) | Remote Protocol and Port | Traffic direction | Purpose |
|---|---|---|---|---|---|
| System Service | TCP 7 | Editor | — | Bidirectional | - Echo for Editor<br>- ICM Controller |
| System Service | TCP 22 | — | — | Bidirectional | SFTP and SSH access |
| Tomcat (HTTP) | TCP 80 | — | — | Bidirectional | - Web access |
| System Service | UDP 123 | — | — | Bidirectional | NTP, network time sync |
| SNMP Agent | UDP 161 | — | — | Inbound | Provide services for SNMP-based management applications |
| Tomcat | TCP 443 | Client Browser | — | Bidirectional | Web access |
| AON Management Console (AMC) Service | TCP 1090 | Intracluster communication | — | Bidirectional | Provide RTMT data collecting, logging and alerting functionalities (AMC RMI Object Port) |
| AON Management Console (AMC) Service | TCP 1099 | Intracluster communication | — | Bidirectional | Provide RTMT data collecting, logging and alerting functionalities (AMC RMI Registry Port) |
| DBMON | TCP 1500 | — | — | Bidirectional | This is the port where the IDS engine listens for DB clients |

| Listener (Process or Application Protocol) | Listener Protocol and Port | Remote Device (Process or Application Protocol) | Remote Protocol and Port | Traffic direction | Purpose |
|---|---|---|---|---|---|
| DBMON | TCP 1501 | — | — | Bidirectional | - This is an alternate port to bring up a second instance of IDS during upgrade.<br>- Localhost traffic only |
| DBL RPC | TCP 1515 | Intracluster communication | — | Bidirectional | DBL RPC, this is used during installation to set up IDS replication between nodes |
| Real-Time Information Server (RIS) Data Collector service (RISDC) | TCP 2555 | Intracluster communication | — | Bidirectional | Used by the RISDC platform service. The Real-time Information Server (RIS) maintains real-time Cisco Unified CM information such as device registration status, performance counter statistics, critical alarms generated, and so on. The Cisco RISDC service provides an interface for applications, such as RTMT, SOAP applications, Cisco Unified CM Administration and AMC to retrieve the information that is stored in all RIS nodes in the cluster. |
| RISDC | TCP 2556 | Intracluster communication | — | Bidirectional | Allowed RIS client connection to retrieve real-time information |
| Disaster Recovery System (DRS) | TCP 4040 | — | — | Bidirectional | Real-time service |
| Real-time service | TCP 5001 | — | — | Bidirectional | SOAP Monitor<br>Used by SOAP to monitor the Real Time Monitoring Service and fetch the Server information for selection of specific CM devices and other such activities. |

| Listener (Process or Application Protocol) | Listener Protocol and Port | Remote Device (Process or Application Protocol) | Remote Protocol and Port | Traffic direction | Purpose |
|---|---|---|---|---|---|
| Perfmon service | TCP 5002 | — | — | Bidirectional | SOAP Monitor<br>Used by SOAP to monitor the Performance Monitor Service for opening and closing sessions, collecting session data and fetching various other data. |
| Control center service | TCP 5003 | — | — | Bidirectional | SOAP Monitor<br>Used by SOAP to monitor the Control Center Service for activities like getting the Service Status and performing service deployment. |
| Log Collection Service | TCP 5004 | — | — | Bidirectional | SOAP Monitor |
| System Service | TCP 5007 | — | — | Bidirectional | SOAP Monitor - a troubleshooting tool for SOAP infrastructure |
| DBMON (CN) | TCP 8001 | Intracluster communication | — | Bidirectional | DB change notification port. |
| Tomcat (HTTP) | TCP 8080 | Client Browser | — | Bidirectional | - Client browser trying to access any of the Administration interfaces or User Options interface.<br>- Web services client using RTMT, configuration APIs, and mobile supervisor applications. |
| Tomcat (HTTPS) | TCP 8443 | Client Browser | — | Bidirectional | - Client browser trying to access any of the Administration interfaces or User Options interface<br>- Web services client using RTMT, configuration APIs, and mobile supervisor applications<br>- DB access via SOAP; Tomcat forwards the SOAP request to AXL |
| IPSec Manager daemon | TCP 8500 | — | — | Bidirectional | Connectivity testing. Uses a proprietary protocol. |

| Listener (Process or Application Protocol) | Listener Protocol and Port | Remote Device (Process or Application Protocol) | Remote Protocol and Port | Traffic direction | Purpose |
|---|---|---|---|---|---|
| IPSec Manager daemon | UDP 8500 | — | — | Bidirectional | Cluster replication of platform data (hosts) certificates etc. Uses a proprietary protocol. |
| Cisco Identity Service ( Cisco IdS) | TCP 8553 | — | — | — | HTTPS for Cisco IdS |

# Unified CCX and IP IVR Port Utilization

***Table 2: Unified CCX Port Utilization***

| Listener (Process or Application Protocol) | Listener Protocol and Port | Remote Device (Process or Application Protocol) | Remote Protocol and Port | Traffic direction | Purpose |
|---|---|---|---|---|---|
| FIPPA Server | TCP 80 | Intracluster communication (see table note) | — | Bidirectional | Used for page push to phone from the FIPPA Service |
| Cisco Unified CCX Socket.IO Service | TCP 12014 | — | — | Bidirectional | This is the port where live-data reporting clients can connect to socket.IO server. |
| Cisco Unified CCX Socket.IO Service | TCP 12015 | — | — | Bidirectional | This is the secure port where live-data reporting clients can connect to socket.IO server. |
| Informix Dynamic Server (IDS) | TCP 1504 | External process like CUIC, WallBoard Client, External DB clients (like Squirrel or others for custom reporting) can connect | — | Bidirectional | Unified CCX database port |
| JTAPI Client (QBE) | TCP 2789 | Unified CM | 2748 | Bidirectional | Provide services to CTI applications |
| Engine | UDP 5065 | SIP gateway | — | Bidirectional | Communicate with SIP gateway |
| Notification Service | TCP 5222 | Openfire/SMAC | BOSH | Bidirectional | OpenFire socket based client connection |

| Listener (Process or Application Protocol) | Listener Protocol and Port | Remote Device (Process or Application Protocol) | Remote Protocol and Port | Traffic direction | Purpose |
|---|---|---|---|---|---|
| Notification Service | TCP 5223 | Finesse Server of other node in cluster | XMPP | Bidirectional | Socket based client connection between Finesse and Notification Service to pull presence information. |
| Cisco Identity Service Data Grid | TCP 5701 | Intracluster communication | — | Bidirectional | Data or Service grid to manage Cisco IdS cluster nodes. |
| CVD | TCP 5900 | CVD of other node in cluster | — | Bidirectional | Heartbeats between CVDs in the cluster |
| CVD<br>ActiveMQ | TCP 6161 | Internal | 6161 | Bidirectional | Publish JMS events across JMS network connectors in the cluster |
| CVD | TCP 6999 | Engine, Tomcat, CVD, and Editor | — | Bidirectional | RMI Port |
| Notification Service | TCP 7071 | Web Browser | — | Bidirectional | HTTP bind |
| Notification Service | TCP 7443 | Web Browser | — | Bidirectional | Secure HTTP bind |
| Cisco Unified Intelligence Center Tomcat (HTTP) | TCP 8081 | Client Browsers | — | Bidirectional | Client browser trying to access the Cisco Unified Intelligence Center web interface |
| Cisco Finesse Tomcat (HTTP) | TCP 8082 | Cisco Finesse Agent/Supervisor Desktop, Cisco Finesse Administration Console, and REST APIs | — | Bidirectional | HTTP port to access Cisco Finesse Tomcat web applications.<br>**Note** Cisco Finesse Agent/Supervisor Desktop and Cisco Finesse Administration Console accessed using port 8082 is automatically redirected to port 8445. |
| Cisco Unified Intelligence Center Tomcat (HTTPs) | TCP 8444 | Client Browsers | — | Bidirectional | Client browser trying to access the Cisco Unified Intelligence Center web interface |

| Listener (Process or Application Protocol) | Listener Protocol and Port | Remote Device (Process or Application Protocol) | Remote Protocol and Port | Traffic direction | Purpose |
|---|---|---|---|---|---|
| Cisco Finesse Tomcat (HTTPs) | TCP 8445 | Cisco Finesse Agent/Supervisor Desktop, Cisco Finesse Administration Console, and REST APIs | — | Bidirectional | Secured HTTP port to access Cisco Finesse Tomcat web applications. |
| Cisco Identity Service Tomcat (HTTPs) | TCP 8553 | — | — | Bidirectional | Client browser trying to access the Cisco Identity Service Management web interface.<br>Single Sign-On (SSO) components access this interface to know the operating status of Cisco IdS. |
| Engine | TCP 9080 | — | — | Bidirectional | - Tomcat instance used by Unified CCX engine<br>- Clients trying to access HTTP triggers or documents / prompts / grammars / live data |
| Engine | TCP 9443 | — | — | Bidirectional | - Secure port used by Tomcat instance of Unified CCX<br>- Used to fetch real-time statistics from CCX Engine. |
| Unified CCX Engine, Cisco Mobile Supervisor | TCP 12028 | — | — | Bidirectional | CTI Server |
| Cisco IP Voice Media Streaming application (RTP RTCP) | UDP 24576 ~ 32767 | — | — | Bidirectional | - Audio media streaming<br>- Kernel streaming device driver |
| | TCP 32768 ~ 61000 | — | — | Bidirectional | Generic ephemeral TCP ports (see table note) |
| | UDP 32768 ~ 61000 | — | — | Bidirectional | Generic ephemeral UDP ports (see table note) |
| Notification Service<br>ActiveMQ | TCP 61616 | Chat applications | — | Bidirectional | Notification Service — ActiveMQ OpenWire transport connector |
| Unified CCX | TCP 1994 | — | — | Bidirectional | — |

| Listener (Process or Application Protocol) | Listener Protocol and Port | Remote Device (Process or Application Protocol) | Remote Protocol and Port | Traffic direction | Purpose |
|---|---|---|---|---|---|
| Unified IP IVR Cluster View Daemon (CVD) | TCP 1994 | — | — | Bidirectional | — |
| Unified IP IVR Engine | TCP 5000 | Unified ICM | — | Bidirectional | Using this port Unified ICM Subsystem listens to GED-125Clients. This port is modifiable |

### Table Notes

1. Intracluster communication in the table represents communication between Unified CCX servers in a cluster.
2. TCP Ephemeral ports are used to accept connections during Java RMI communication. Java RMI clients know which port it need to connect, because RMI first connects to RMI Registry (well-known port - 6999) and get the information which ephemeral port client need to connect to Unified

   CCX Administration page, Engine and CVD use RMI communication in CCX/IP-IVR, so TCP ephemeral port range is opened up for intracluster communication between these processes.
3. UDP Ephemeral ports are used to receive audio/video RTP streams; so UDP Ephemeral port range is opened for incoming connections for streaming RTP media from CTI ports.
4. Port 38983 is open only on Unified CCX systems that were upgraded from versions earlier than 9.0(1).
5. Intracluster communication in the table represents communication between Unified IP IVR servers in a cluster.
6. TCP Ephemeral ports are used to accept connections during Java RMI communication. Java RMI clients know which port it need to connect, because RMI first connects to RMI Registry (well-known port - 6999) and get the information which ephemeral port client need to connect to. AppAdmin, Engine and CVD use RMI communication in CCX/IP-IVR, so TCP ephemeral port range is opened up for intracluster communication between these processes.
7. UDP Ephemeral ports are used to receive audio/video RTP streams; so UDP Ephemeral port range is opened for incoming connections for streaming RTP media from CTI ports.

# Finesse Port Utilization

*Table 3: Cisco Finesse Tomcat*

| Listener (Process or Application Protocol) | Listener Protocol and Port | Remote Device (Process or Application Protocol) | Remote Protocol and Port | Traffic Direction | Notes |
|---|---|---|---|---|---|
| HTTP | TCP 80, 8082 | Browser | — | Bidirectional | Unsecure port used for Finesse administration console, Finesse agent and supervisor desktop, Finesse Web Services, and Finesse Desktop Modules (gadgets) with the Finesse desktop. |
| HTTPS | TCP 443, 8445 | Browser | — | Bidirectional | Secure port used for Finesse administration console, Finesse agent and supervisor desktop, Finesse Web Services, and Finesse Desktop Modules (gadgets) with the Finesse desktop. |

*Table 4: Cisco Finesse Notification Service*

| Listener (Process or Application Protocol) | Listener Protocol and Port | Remote Device (Process or Application Protocol) | Remote Protocol and Port | Traffic Direction | Notes |
|---|---|---|---|---|---|
| XMPP | TCP 5223 | Browser, agent desktop | — | Bidirectional | Secure XMPP connection between the Finesse server and custom third party applications. |
| BOSH (HTTP) | TCP 7071 | Browser, agent desktop | — | Bidirectional | Unsecure BOSH connection between the Finesse server and agent and supervisor desktops for communication over HTTP. |
| BOSH (HTTPS) | TCP 7443 | Browser, agent desktop | — | Bidirectional | Secure BOSH connection between the Finesse server and agent and supervisor desktops for communication over HTTPS. |

*Table 5: Primary and Secondary Node Communication*

| Listener (Process or Application Protocol) | Listener Protocol and Port | Remote Device (Process or Application Protocol) | Remote Protocol and Port | Traffic Direction | Notes |
|---|---|---|---|---|---|
| XMPP | TCP 5222 | — | — | Bidirectional | The primary and secondary Finesse servers use this XMPP connection to communicate with each other to monitor connectivity. |

**Third-Party (External) Web Server**

**Note** Gadgets hosted on a third-party (external) web server are fetched through the Finesse server on the port exposed by said web server.

# Unified Intelligence Center Port Utilization

*Table 6: Web Requests to Cisco Unified Intelligence Center and Operation Administration Maintenance and Provisioning (OAMP)*

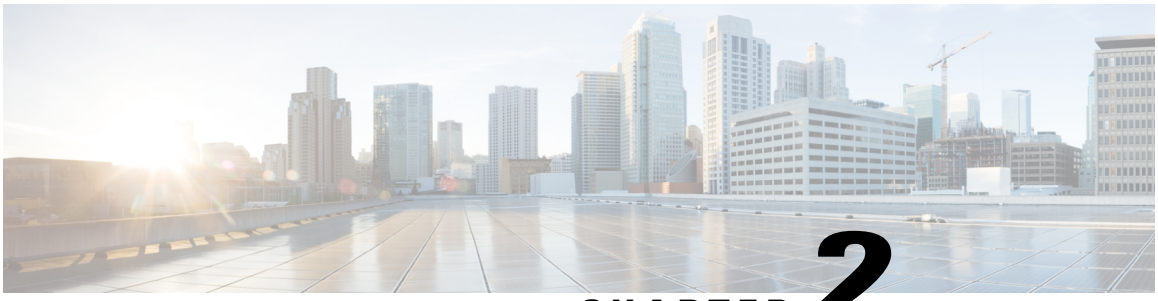
| Listener (Process or Application Protocol) | Listener Protocol and Port | Remote Device (Process or Application Protocol) | Remote Protocol and Port | Traffic Direction | Notes |
|---|---|---|---|---|---|
| Unified Intelligence Center | TCP 8081 | Browser | — | — | HTTP - Unified Intelligence Center |
| | TCP 8444 | Browser | — | — | HTTPS - Unified Intelligence Center |

*Table 7: Intracluster Ports Between Cisco Unified Intelligence Center*

| Listener (Process or Application Protocol) | Listener Protocol and Port | Remote Device (Process or Application Protocol) | Remote Protocol and Port | Traffic Direction | Notes |
|---|---|---|---|---|---|
| CUIC Reporting Process | UDP 54327 (Multicast) | Unified Intelligence Center node | — | — | Hazelcast Discovery |

| Listener (Process or Application Protocol) | Listener Protocol and Port | Remote Device (Process or Application Protocol) | Remote Protocol and Port | Traffic Direction | Notes |
|---|---|---|---|---|---|
| CUIC Reporting Process | TCP 57011 | Unified Intelligence Center Node | — | — | Hazelcast |

For more information on other port usages, see: http://www.cisco.com/c/en/us/support/unified-communications/unified-communications-manager-callmanager/products-maintenance-guides-list.html



CHAPTER 2

# Port Utilization in MediaSense



## Port Utilization Table Columns

The columns in the port utilization tables in this document describe the following:

**Listener (Process or Application Protocol)**

A value representing the server or application and where applicable, the open or proprietary application protocol.

**Listener Protocol and Port**

An identifier for the TCP or UDP port that the server or application is listening on, along with the IP address for incoming connection requests when acting as a server.

**Remote Device (Process or Application Protocol)**

The remote application or device making a connection to the server or service specified by the protocol; or listening on the remote protocol and port.

**Remote Protocol and Port**

The identifier for the TCP or UDP port that the remote service or application is listening on, along with the IP address for incoming connection requests when acting as the server.

**Traffic Direction**

The direction that traffic flows through the port: Inbound, Bidirectional, Outbound.

**Note** The operating system dynamically assigns the source port that the local application or service uses to connect to the destination port of a remote device. In most cases, this port is assigned randomly above TCP/UDP 1024.

# MediaSense Port Utilization

***Table 8: MediaSense Port Utilization***

| Listener (Process or Application Protocol) | Listener Protocol and Port | Remote Device (Process or Application Protocol) | Remote Protocol and Port | Traffic Direction | Note |
|---|---|---|---|---|---|
| HTTPS | TCP 443, 8443 | Web browser | Any | | Used by Administration, serviceability |
| HTTPS | TCP 8440 | Client application | Any | | Used by API access |
| HTTPS | TCP 9443 | Client application | Any | | Used by media service to redirect authenticated requests. |
| HTTPS | TCP 8446 | Web browser, API client | Any | | Used by Call control service. |
| HTTPS | TCP 9081 | Client application | Any | | Used by media service to redirect authenticated requests. |
| HTTP | TCP 80, 8080 | Web browser | Any | | Used by Administration, serviceability |
| HTTP | TCP 8081 | Web browser, API client | Any | | Used by Call control service |
| HTTP | TCP 8085 | Another CMS node | Any | | Used by Call control service |
| HTTP | TCP 8087 | CMS cluster nodes only | Any | | Used by System service |
| HTTP | TCP 8088 | CMS cluster nodes only | Any | | Used by Configuration service |
| RTSP | TCP 554, 8554 | RTSP media player | Any | | Used by SM agent |
| RTSP | TCP 9554 | Client application or media player | Any | | Used by media service to redirect authenticated requests. |
| SIP | TCP 5060<br>UDP 5060 | Unified Communications Manager or Unified Border Element | TCP 5060<br>UDP 5060 | | Call control service. |
| TCP/IP | TCP 1543 | CMS cluster nodes only | Any | | Used by Informix ER to make connections between primary server and secondary servers.<br>Used by API service or configuration service to make JDBC connections with Informix. |

| Listener (Process or Application Protocol) | Listener Protocol and Port | Remote Device (Process or Application Protocol) | Remote Protocol and Port | Traffic Direction | Note |
|---|---|---|---|---|---|
| Keep-alive heartbeats | UDP 8091 | CMS cluster nodes only | UDP 8091 | | Used by a call control service to detect availability of other call control services. |
| JMS | TCP 61610 | CMS cluster nodes only | Any | | Used by API service |
| JMS | TCP 61612 | CMS cluster nodes only | Any | | Used by Call control service |
| JMS | TCP 61616 | CMS cluster nodes only | Any | | Used by SM agent |
| Ephemeral port range | UDP 32768 - 61000 | Phone or gateway that sends RTP media streams. | Any | | Range of ports used by media service to receive RTP media streams. |

CHAPTER 3

# Port Utilization in SocialMiner



# Port Utilization Table Columns

The columns in the port utilization tables in this document describe the following:

**Listener (Process or Application Protocol)**

A value representing the server or application and where applicable, the open or proprietary application protocol.

**Listener Protocol and Port**

An identifier for the TCP or UDP port that the server or application is listening on, along with the IP address for incoming connection requests when acting as a server.

**Remote Device (Process or Application Protocol)**

The remote application or device making a connection to the server or service specified by the protocol; or listening on the remote protocol and port.

**Remote Protocol and Port**

The identifier for the TCP or UDP port that the remote service or application is listening on, along with the IP address for incoming connection requests when acting as the server.

**Traffic Direction**

The direction that traffic flows through the port: Inbound, Bidirectional, Outbound.

**Note** The operating system dynamically assigns the source port that the local application or service uses to connect to the destination port of a remote device. In most cases, this port is assigned randomly above TCP/UDP 1024.

# SocialMiner Port Utilization

*Table 9: SocialMiner Port Utilization*

| Listener (Process or Application Protocol) | Listener Protocol and Port | Remote Device (Process or Application Protocol) | Remote Protocol and Port | Traffic Direction | Notes |
|---|---|---|---|---|---|
| Email notifications | — | — | Port 25 | Outward, from SocialMiner to the configured email server. | SocialMiner communicates with the configured email server (that can be in the corporate intranet or on the internet) to send email notifications. |
| HTTP | Port 80 | — | — | Bidirectional | Used for unsecure (HTTP) traffic:<br>• From the UCCX server to the SocialMiner server.<br>• From the SocialMiner user interface (browser) or APIs to the SocialMiner server.<br>• From the internet or corporate website to the SocialMiner server. SocialMiner receives incoming chat and callback requests from the internet or corporate website over HTTP. |

| Listener (Process or Application Protocol) | Listener Protocol and Port | Remote Device (Process or Application Protocol) | Remote Protocol and Port | Traffic Direction | Notes |
|---|---|---|---|---|---|
| HTTPS | Port 443 | — | — | Bidirectional | Used for secure (HTTPS) traffic:<br>• From the SocialMiner user interface (browser) or APIs to the SocialMiner server.<br>• From the SocialMiner server to the UCCX server.<br>• From the internet or corporate website to the SocialMiner server. SocialMiner receives incoming chat and callback requests from the internet or corporate website over HTTPS. |
| Email notifications SSL/TLS | — | — | Port 465 (configurable) | Outward, from SocialMiner to the configured email server. | SocialMiner communicates with the configured email server (that can be in the corporate intranet or on the internet) to send email notifications. |
| Email (SMTP) | — | — | Port 587 (configurable in Unified CCX Administration) | Outward, from SocialMiner to the Exchange Server. | Used by the Email Reply API to send email.<br>The Email Reply API uses SMTP to send a response to a customer email message. |
| Email (secure IMAP/IMAPS) | — | — | Port 993 (configurable in Unified CCX Administration) | Outward, from SocialMiner to the Exchange Server. | Used by email feeds to retrieve email.<br>IMAPS allows email feeds to fetch email from the Exchange Servers and allows the Email Reply API to retrieve email and save draft email messages. |
| Reporting | Port 1526 | — | — | Inward, from CUIC to the SocialMiner server. | CUIC communicates with SocialMiner to gather reporting information. |

| Listener (Process or Application Protocol) | Listener Protocol and Port | Remote Device (Process or Application Protocol) | Remote Protocol and Port | Traffic Direction | Notes |
|---|---|---|---|---|---|
| XMPP (IM) notifications using an external XMPP server | | — | Port 5222 (configurable) | Outward, from SocialMiner to the configured XMPP Notifications server. | SocialMiner communicates with the configured XMPP Notifications server (that can be in the corporate intranet or on the internet) to send XMPP (IM) notifications. |
| Notification Service (XMPP eventing over TCP sockets) | Port 5222 | — | — | Inward, from CCX to the SocialMiner server. | SocialMiner listens for incoming TCP socket connections to register and send XMPP events. Unified CCX uses this port to receive social contact events. |
| Eventing and chat (BOSH) | Port 7071 | — | — | Bidirectional | The unsecure BOSH connection supports eventing and chat communication between the SocialMiner user interface and the SocialMiner server. |
| Eventing and chat (secure BOSH) | Port 7443 is used for secure BOSH connections to the XMPP eventing server. | — | — | Bidirectional | The secure BOSH connection supports eventing and chat communication between the SocialMiner user interface and the SocialMiner server. |