



Port Utilization Guide for Cisco Unified Contact Center Express Solutions, Release 11.0(1)

First Published: 2015-08-27

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 UCB's 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 this URL: 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)

© 2003-2015 Cisco Systems, Inc. All rights reserved.



CONTENTS

CHAPTER 1 Port Utilization in Unified CCX 1

Port Utilization Table Columns 1

Unified CCX Port Utilization 2

Unified IP IVR Port Utilization 7

CHAPTER 2 Port Utilization in Finesse 13

Port Utilization Table Columns 13

Finesse Port Utilization 14

CHAPTER 3 Port Utilization in MediaSense 19

Port Utilization Table Columns 19

MediaSense Port Utilization 20

CHAPTER 4 Port Utilization in SocialMiner 23

Port Utilization Table Columns 23

SocialMiner Port Utilization 24

CHAPTER 5 Port Utilization in Unified Intelligence Center 27

Port Utilization Table Columns 27

Unified Intelligence Center Port Utilization 28

Contents



Port Utilization in Unified CCX

- Port Utilization Table Columns, page 1
- Unified CCX Port Utilization, page 2
- Unified IP IVR Port Utilization, page 7

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.

Unified CCX Port Utilization

Table 1: 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
System	TCP 7	Editor	_	Bidirectional	- Echo for Editor
Service					- ICM Controller
System Service	TCP 22	_	_	Bidirectional	SFTP and SSH access
Tomcat (HTTP)	TCP 80	_	_	Bidirectional	Web access
FIPPA Server	TCP 80	Intracluster communication (see table note)	_	Bidirectional	Used for page push to phone from the FIPPA Service
System Service	UDP 123	_	_	Bidirectional	Network time sync
SNMP Agent	UDP 161	_	_	Inbound	Provide services for SNMP-based management applications
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)
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
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.
DBMON	TCP 1500	_	_	Bidirectional	This is the port where the IDS engine listens for DB clients
DBMON	TCP 1501	_	_	Bidirectional	 This is an alternate port to bring up a second instance of IDS during upgrade. Localhost traffic only
Informix Dynamic Server (IDS)	TCP 1504	External process like HRC, WallBoard Client, External DB clients (like Squirrel or others for custom reporting) can connect	_	Bidirectional	Unified CCX database port
DBL RPC (XML)	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	Connect to other RISDC services in the cluster to provide cluster-wide real-time information
RISDC	TCP 2556	Intracluster communication	_	Bidirectional	Allowed RIS client connection to retrieve real-time information
JTAPI Client (QBE)	TCP 2789	Unified CM	2748	Bidirectional	Provide services to CTI applications
Disaster Recovery System (DRS)	TCP 4040		_	Bidirectional	DRF master agent server port accepts connections from local agent GUI and CLI

Listener (Process or Application Protocol)	Listener Protocol and Port	Remote Device (Process or Application Protocol)	Remote Protocol and Port	Traffic direction	Purpose
Real-time service	TCP 5001	_	_	Bidirectional	SOAP Monitor
Perfmon service	TCP 5002	_	_	Bidirectional	SOAP Monitor
Control center service	TCP 5003	_	_	Bidirectional	SOAP Monitor
Log Collection Service	TCP 5004	_	_	Bidirectional	SOAP Monitor
System Service	TCP 5007	_	_	Bidirectional	SOAP Monitor - a troubleshooting tool for SOAP infrastructure
Engine	UDP 5065	SIP gateway	_	Bidirectional	Communicate with SIP gateway
Notification Service	TCP 5222	Openfire/SMAC	_	Bidirectional	OpenFire socket based client connection
Notification Service	TCP 5443	Openfire/SMAC	_	Bidirectional	OpenFire socket based client connection
CVD	TCP 5900	CVD of other node in cluster	_	Bidirectional	Heartbeats between CVDs in the cluster
CVD 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
DBMON (CN)	TCP 8001	Intracluster communication	_	Bidirectional	DB change notification port

Listener (Process or Application Protocol)	Listener Protocol and Port	Remote Device (Process or Application Protocol)	Remote Protocol and Port	Traffic direction	Purpose
Tomcat (HTTP)	TCP 8080	Client Browser	_	Bidirectional	-Client browser trying to access any of the Administration interfaces or User Options interface.
					-Web services client using RTMT, configuration APIs, and mobile supervisor applications.
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. Note Cisco Finesse Agent/Supervisor Desktop and Cisco Finesse Administration Console accessed using port 8082 is automatically redirected to port 8445.
Tomcat (HTTPs)	TCP 8443	Client Browser	_	Bidirectional	- Client browser trying to access any of the Administration interfaces or User Options interface - Web services client using RTMT, configuration APIs, and mobile supervisor applications
Cisco Unified Intelligence Center Tomcat (HTTPs)	TCP 8444	Client Browsers	_	Bidirectional	Client browser trying to access the Cisco Unified Intelligence Center web interface
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.

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. Uses a proprietary protocol.
IPSec Manager daemon	TCP 8500	_	_	Bidirectional	Connectivity testing. Uses a proprietary protocol.
Engine	TCP 9080	_	_	Bidirectional	- Tomcat instance used by Unified CCX engine - Clients trying to access HTTP triggers or documents / prompts / grammars / live data
Engine	TCP 9443	_	_	Bidirectional	- Secure port used by Tomcat instance - Used by live-data client for authentication
Unified CCX Engine, Cisco Mobile Supervisor	TCP 12028	_	_	Bidirectional	CTI Server
Cisco IP Voice Media Streaming	UDP 24576 ~ 32767	_	_	Bidirectional	- Audio media streaming - Kernel streaming device driver
application (RTP RTCP)	TCP 32768 ~ 61000	_	_	Bidirectional	Generic ephemeral TCP ports (see table note)
	UDP 32768 ~ 61000	_	_	Bidirectional	Generic ephemeral UDP ports (see table note)
	UDP 58000	Custom application	_	Bidirectional	Provides an interface to control Agent Desktop over a custom protocol.
Notification Service ActiveMQ	TCP 61616	Chat applications	_	Bidirectional	Notification Service — ActiveMQ OpenWire transport connector

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).

Unified IP IVR Port Utilization

Table 2: Cisco Unified IP IVR 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 - ICM Controller
System Service	TCP 22	_	_	Bidirectional	SFTP and SSH access
Tomcat (HTTP)	TCP 80	_	_	Bidirectional	Web access
System Service	UDP 123	_	_	Bidirectional	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 (see table note 1)	_	Bidirectional	Provide RTMT data collecting, logging and alerting functionalities (AMC RMI Object Port)

Listener (Process or Application Protocol)	Listener Protocol and Port	Remote Device (Process or Application Protocol)	Remote Protocol and Port	Traffic direction	Purpose
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
DBMON	TCP 1501	_	_	Bidirectional	This is an alternate port to bring up a second instance of IDS during upgrade.Localhost traffic only
Informix Dynamic Server (IDS)	TCP 1504	External process like HRC, WallBoard Client, External DB clients (like Squirrel or others for custom reporting) can connect	_	Bidirectional	Unified IP IVR database port
DBL RPC (XML)	TCP 1515	Intracluster communication	_	Bidirectional	DBL RPC, this is used during installation to set up IDS replication between nodes
Unified IP IVR Cluster View Daemon (CVD)	TCP 1994	_	_	Bidirectional	_
Real-Time Information Server (RIS) Data Collector service (RISDC)	TCP 2555	Intracluster communication	_	Bidirectional	Connect to other RISDC services in the cluster to provide cluster-wide real-time information
RISDC	TCP 2556	Intracluster communication	_	Bidirectional	Allowed RIS client connection to retrieve real-time information
JTAPI Client (QBE)	TCP 2789	Unified CM	2748	Bidirectional	Provide services to CTI applications
Disaster Recovery System (DRS)	TCP 4040	_	_	Bidirectional	DRF master agent server port accepts connections from local agent GUI and CLI

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 Engine	TCP 5000	Unified ICM	_	Bidirectional	Using this port Unified ICM Subsystem listens to GED-125Clients. This port is modifiable
Real-time service	TCP 5001	_	_	Bidirectional	SOAP Monitor
Perfmon service	TCP 5002	_	_	Bidirectional	SOAP Monitor
Control center service	TCP 5003	_	_	Bidirectional	SOAP Monitor
Log Collection Service	TCP 5004	_	_	Bidirectional	SOAP Monitor
System Service	TCP 5007	_	_	Bidirectional	SOAP Monitor - a troubleshooting tool for SOAP infrastructure
CVD	TCP 5900	CVD of other node in cluster	_	Bidirectional	Heartbeats between CVDs in the cluster
CVD	TCP 6161	Intracluster communication only	6161	Bidirectional	Publish JMS events across JMS network connectors in the cluster (ActiveMQ)
CVD	TCP 6999	Engine, Tomcat, CVD, and Editor	_	Bidirectional	RMI Port
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.
					Web services client using RTMT, configuration APIs, and mobile supervisor applications.
Finesse Tomcat (HTTP)	TCP 8082	Client Browser	_	Bidirectional	To access the Finesse Administration page and Finesse Agent Desktop.

Listener (Process or Application Protocol)	Listener Protocol and Port	Remote Device (Process or Application Protocol)	Remote Protocol and Port	Traffic direction	Purpose
Tomcat	TCP 8443	_	_	Bidirectional	DB access via SOAP; Tomcat forwards the SOAP request to AXL
Tomcat (HTTPS)	TCP 8443	Client Browser	_	Bidirectional	- Client browser trying to access any of the Administration interfaces or User Options interface - Web services client using RTMT, configuration APIs, and mobile supervisor applications
IPSec Manager daemon	UDP 8500	_	_	Bidirectional	Cluster replication of platform data (hosts) certificates etc. Uses a proprietary protocol.
IPSec Manager daemon	TCP 8500	_	_	Bidirectional	Connectivity testing. Uses a proprietary protocol.
Engine	TCP 9080	_	_	Bidirectional	- Tomcat instance used by Unified CCX engine - Clients trying to access HTTP triggers or documents / prompts / grammars
Cisco IP Voice Media Streaming application (RTP RTCP)	UDP 24576 ~ 32767	_	_	Bidirectional	- Audio media streaming Kernel streaming device driver
_	TCP 32768 ~ 61000	_	_	Bidirectional	Generic ephemeral TCP ports (see table note 2)
_	UDP 32768 ~ 61000	_	_	Bidirectional	Generic ephemeral UDP ports (see table note 3)

Table Notes

- 1 Intracluster communication in the table represents communication between Unified IP IVR 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. 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.
- 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.

Unified IP IVR Port Utilization



Port Utilization in Finesse

- Port Utilization Table Columns, page 13
- Finesse Port Utilization, page 14

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

TCP/UDP 1024.

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



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

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
НТТР	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: Platform Tomcat

Listener (Process or Application Protocol)	Listener Protocol and Port	Remote Device (Process or Application Protocol)	Remote Protocol and Port	Traffic Direction	Notes
НТТР	UDP 8080	Browser		Bidirectional	Unsecure port used for access to platform administration, platform serviceability, and Disaster Recovery System.
HTTPS	UDP 8443	Browser		Bidirectional	Secure port used for access to platform administration, platform serviceability, and Disaster Recovery System.

Table 5: Platform Database

Listener (Process or Application Protocol)	Listener Protocol and Port	Remote Device (Process or Application Protocol)	Remote Protocol and Port	Traffic Direction	Notes
DBMON	TCP 1500			Bidirectional	Informix Database Software (IDS) access and replication
DBL RPC	TCP 1515	Intra-Cluster communication		Bidirectional	DBL RPC, this is used during installation to set up IDS replication between nodes

Table 6: 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 5222	Browser, agent desktop		Bidirectional	Unsecure XMPP connection between the Finesse server and custom applications on the agent or supervisor desktops for communication over HTTP.
XMPP	TCP 5223	Browser, agent desktop		Bidirectional	Secure XMPP connection between the Finesse server and custom applications on the agent or supervisor desktops for communication over HTTPS.
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 7: Platform System Services

Listener (Process or Application Protocol)	Listener Protocol and Port	Remote Device (Process or Application Protocol)	Remote Protocol and Port	Traffic Direction	Notes
SFTP	TCP 22			Bidirectional	SFTP access for hosted third-party gadget support
SSH	TCP 22	SSH client		Bidirectional	Platform CLI
NTP	UPD 123	NTP server		Bidirectional	Network time synchronization
Platform Alert Manager and Collector (AMC) service	TCP 1090, 1099	RTMT client		Bidirectional	The platform AMC service uses this connection to allow the RTMT tool to retrieve and display platform alerts.
Real-time Information Service Data Collector (RISDC) service	TCP 2555	RTMT client		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.
Disaster Recovery Framework (DRF) Master Agent Service	TCP 4040	Platform Administration webapp		Bidirectional	DRF service

Table 8: 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.

Table 9: Third-Party (External) Web Server

Listener (Process or Application Protocol)	Listener Protocol and Port	Remote Device (Process or Application Protocol)	Remote Protocol and Port	Traffic Direction	Notes
НТТР			TCP 80, 8082	Bidirectional	Gadgets hosted on a third-party (external) web server are fetched through the Finesse server on the port exposed by said web server.
HTTPS			TCP 443, 8445	Bidirectional	Gadgets hosted on a third-party (external) web server are fetched through the Finesse server on the port exposed by said web server.

Finesse Port Utilization



Port Utilization in MediaSense

- Port Utilization Table Columns, page 19
- MediaSense Port Utilization, page 20

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 10: 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.
НТТР	TCP 80, 8080	Web browser	Any		Used by Administration, serviceability
НТТР	TCP 8081	Web browser, API client	Any		Used by Call control service
НТТР	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	Unified Communications	TCP 5060		Call control service.
	UDP 5060 Manager or Unified Bo Element		UDP 5060		
TCP/IP	TCP 1543	CMS cluster nodes only	Any		Used by Informix ER to make connections between primary server and secondary servers.
					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.

MediaSense Port Utilization



Port Utilization in SocialMiner

- Port Utilization Table Columns, page 23
- SocialMiner Port Utilization, page 24

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 11: 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.	
НТТР	Port 80			Bidirectional	Used for unsecure (HTTP) traffic: • From the SocialMiner user interface (browser) or APIs to the SocialMiner server. • 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: • From the SocialMiner user interface (browser) or APIs to the SocialMiner server. • From the SocialMiner server to the UCCX server. • 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. 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. 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.	the configured XMPP
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.



Port Utilization in Unified Intelligence Center

- Port Utilization Table Columns, page 27
- Unified Intelligence Center Port Utilization, page 28

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.

Unified Intelligence Center Port Utilization

Table 12: 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 13: 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
Platform (DB)	TCP 1500 - 1501	Platform (DB)			IDS access and replication (but not open to external access)
CUIC Reporting Process	UDP 54327 (Multicast)	Unified Intelligence Center node			Hazelcast Discovery
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