



Cisco Intercompany Media Engine TCP and UDP Port Usage, Release 9.0(1)

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CONTENTS

CHAPTER 1

Cisco Intercompany Media Engine 1

Release 9.0(1) TCP and UDP Port Usage 1

Port Descriptions 2

References 5

Port Usage Guides 5

Firewall Application Inspection Guides 5

IETF TCP/UDP Port Assignment List 5



CHAPTER 1

Cisco Intercompany Media Engine

- [Release 9.0\(1\) TCP and UDP Port Usage, page 1](#)
- [Port Descriptions, page 2](#)
- [References, page 5](#)

Release 9.0(1) TCP and UDP Port Usage

This document provides a list of the TCP and UDP ports that Cisco Intercompany Media Engine Release 9.0(1) uses for intracluster connections and for communications with external applications or devices. It provides important information for the configuration of firewalls, Access Control Lists (ACLs), and quality of service (QoS) on a network when an IP Communications solution is implemented.



Note

Cisco has not verified all possible configuration scenarios for these ports. If you are having configuration problems using this list, contact Cisco technical support for assistance.

While virtually all protocols are bidirectional, this document gives directionality from the session originator perspective. In some cases, the administrator can manually change the default port numbers, though Cisco does not recommend this as a best practice. Be aware that Cisco IME opens several ports strictly for internal use.

Ports in this document apply specifically to Cisco Intercompany Media Engine Release 9.0(1). Some ports change from one release to another, and future releases may introduce new ports. Therefore, make sure that you are using the correct version of this document for the version of Cisco IME that is installed.

Installing Cisco Intercompany Media Engine 9.0(1) software automatically installs the following network services for serviceability and activates them by default.

- Cisco Log Partition Monitoring (To monitor and purge the common partition. This uses no custom common port.)
- Cisco Trace Collection Service (TCTS port usage.)
- Cisco RIS Data Collector (RIS server port usage)
- Cisco AMC Service (AMC port usage)

Configuration of firewalls, ACLs, or QoS will vary depending on topology, placement of telephony devices and services relative to the placement of network security devices, and which applications and telephony extensions are in use. Also, bear in mind that ACLs vary in format with different devices and versions.

**Note**

The Ephemeral port range for the system is 32768 - 61000. See, http://www.cisco.com/en/US/products/ps6120/tsd_products_support_series_home.html

Port Descriptions

Cisco recommends that you do not allow external Internet traffic to or from the ports in the following table. The server uses these ports for services, such as NTP and DNS.

Table 1: Common service ports

From (Sender)	To (Listener)	Destination Port	Purpose
Cisco IME	Syslog Server	514 / UDP	System logging service
RTMT	Cisco IME	1090, 1099 / TCP	Cisco AMC Service for RTMT performance monitors, data collection, logging, and alerting
Endpoint	Cisco IME	7	Internet Control Message Protocol (ICMP) This protocol number carries echo-related traffic. It does not constitute a port as indicated in the column heading.
Cisco IME	Endpoint		
Cisco IME	Endpoint	21 / TCP	FTP. Outgoing only.
Endpoint	Cisco IME	22 / TCP	Secure FTP service, SSH access
Cisco IME	DNS Server	53 / UDP	Cisco IME acts as a DNS client and requires DNS service
DNS Server	Cisco IME	Ephemeral / UDP	

From (Sender)	To (Listener)	Destination Port	Purpose
Cisco IME	Broadcast 255.255.255.0 DHCP Server	67 / UDP	Cisco IME server acting as a DHCP client Note Cisco does not recommend running DHCP client on Cisco IME. Configure Cisco IME with static IP addresses instead.
DHCP Server	Broadcast 255.255.255.0 DHCP Server	68 / UDP	Cisco IME acting as a DHCP client Note Cisco does not recommend running DHCP client on Cisco IME. Configure Cisco IME with static IP addresses instead.
Cisco IME	NTP Server	123 / UDP	Network Time Protocol (NTP)
SNMP Server	Cisco IME	161 / UDP	SNMP service response (requests from management applications)
Cisco IME	SNMP Manager	162 / UDP	SNMP traps
Cisco IME	Netdump Server	6601 / UDP	Outgoing to a Netdump server
Netdump Client	Cisco IME	6601 / UDP	Cisco IME as Netdump Server

The ports in the following table may require external Internet access, as indicated below. Cisco recommends that you block external Internet access for those ports requiring internal intranet access.

Table 2: HTTP protocols

From (Sender)	To (Listener)	Destination Port	Purpose
Cisco IME	GoDaddy (External Internet connection required.)	80 / TCP	Hypertext Transport Protocol (HTTP)

From (Sender)	To (Listener)	Destination Port	Purpose
Cisco IME	GoDaddy (External Internet connection required.)	443 / TCP	Hypertext Transport Protocol over SSL (HTTPS)
Endpoint	Cisco IME (Internal intranet connection required)	8080 / TCP	Hypertext Transport Protocol (HTTP) Cisco recommends that you do not open this port to the external Internet.
Endpoint	Cisco IME (Internal intranet connection required)	8443 / TCP	Hypertext Transport Protocol over SSL (HTTPS) Cisco recommends that you do not open this port to the external Internet.

The ports in the following table do not require external Internet connectivity. Cisco requires that you block external Internet connections to and from these ports.

Table 3: Communication between applications and Cisco IME server

From (Sender)	To (Listener)	Destination Port	Purpose
Unified CM	Cisco IME Server	5620 / TCP Cisco recommends a value of 5620 for this port, but you can change the value by executing the add ime vapserver or set ime vapserver port CLI command on the Cisco IME server.	VAP protocol used to communicate to the Cisco Intercompany Media Engine server.

You are required to connect to and from the ports in the following table over the external Internet.

Table 4: Cisco IME server peer to peer connections

From (Sender)	To (Listener)	Destination Port	Purpose
Cisco IME Server	Cisco IME Server	8470 / TCP	Cisco IME Validation
Cisco IME Server	Cisco IME Server	6084 / TCP	Cisco IME Peer to peer TLS

References

Port Usage Guides

Cisco Unified Communications Manager 9.0(1) TCP and UDP Port Usage

http://www.cisco.com/en/US/products/sw/voicesw/ps556/prod_maintenance_guides_list.html

Firewall Application Inspection Guides

ASA Series reference information

http://www.cisco.com/en/US/products/ps6120/tsd_products_support_series_home.html

PIX 6.3 Application Inspection Configuration Guide

<http://www.cisco.com/en/US/docs/security/pix/pix63/configuration/guide/fixup.html>

PIX 7.1 Application Inspection Configuration Guide

<http://www.cisco.com/en/US/docs/security/asa/asa71/configuration/guide/inspect.html>

FWSM 3.1 Application Inspection Configuration Guide

http://www.cisco.com/en/US/docs/security/fwsm/fwsm31/configuration/guide/inspect_f.html

IETF TCP/UDP Port Assignment List

Internet Assigned Numbers Authority (IANA) IETF assigned Port List

<http://www.iana.org/assignments/port-numbers>

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