



# Port Utilization for System Services

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## 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.



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#### **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.
  - For security reasons, keep open only the ports mentioned in this guide and those required by your application. Keep the rest of the ports blocked.
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# 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 - ICM Controller
System Service	TCP 22	—	—	Bidirectional	SFTP and SSH access
Tomcat (HTTP)	TCP 80	—	—	Bidirectional	- Web access - Call recording server - Unified CCMP Web server and AXL provisioning - CRM Connector server - Default port for voice browsers to fetch media and "external VXML" files from media server
System Service	UDP 123	—	—	Bidirectional	NTP, network time sync
SNMP Agent	UDP 161	—	—	Bidirectional	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)
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

Listener (Process or Application Protocol)	Listener Protocol and Port	Remote Device (Process or Application Protocol)	Remote Protocol and Port	Traffic direction	Purpose
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 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.
Perfmon service	TCP 5002	—	—	Bidirectional	SOAP Monitor Used by SOAP to monitor the Performance Monitor Service for opening and closing sessions, collecting session data and fetching various other data.

Listener (Process or Application Protocol)	Listener Protocol and Port	Remote Device (Process or Application Protocol)	Remote Protocol and Port	Traffic direction	Purpose
Control center service	TCP 5003	—	—	Bidirectional	SOAP Monitor 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
Cisco Identity Service Data Grid	TCP 5701	Intra-cluster communication	—	Bidirectional	Data or Service grid to manage Cisco IdS cluster nodes.
DBMON (CN)	TCP 8001	Intracluster communication	—	Bidirectional	DB change notification port.
Tomcat (HTTP)	TCP 8080	Client Browser	—	Bidirectional	<ul style="list-style-type: none"> <li>- Client browser trying to access any of the Administration interfaces or User Options interface.</li> <li>- Web services client using RTMT, configuration APIs, and mobile supervisor applications.</li> <li>- Data replication for call recording server</li> <li>- OAMP for Live Data</li> <li>- CRM Connector for SAP (adjustable through registry)</li> </ul>
Tomcat (HTTPS)	TCP 8443	Client Browser	—	Bidirectional	<ul style="list-style-type: none"> <li>- Client browser trying to access any of the Administration interfaces or User Options interface.</li> <li>- Web services client using RTMT, configuration APIs, and mobile supervisor applications.</li> <li>- DB access via SOAP; Tomcat forwards the SOAP request to AXL.</li> </ul>

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	TCP 8500	—	—	Bidirectional	Connectivity testing. Uses a proprietary protocol.
IPSec Manager daemon	UDP 8500	—	—	Bidirectional	Cluster replication of platform data (hosts) certificates etc. Uses a proprietary protocol.
Cisco Identity Service ( Cisco IdS) <a href="#">1</a>	TCP 8553	—	—	—	HTTPS for Cisco IdS

<sup>1</sup> Not applicable to Cisco Virtualized Voice Browser.

### SOAP Port Considerations

The following considerations apply to the Simple Object Access Protocol (SOAP) ports:

- SOAP monitor uses specific ports to send the corresponding SOAP API requests.
- Access to the ports are always authenticated with the Username and Password authentication.

**Table 2: Unified CCE Port Utilization: Packaged CCE**

Listener (Process or Application Protocol)	Listener Protocol and Port	Remote Device (Process or Application Protocol)	Remote Protocol and Port	Traffic Direction	Notes
Data Servers and external HDSs	HTTPS 443	ESXi Hosts	HTTPS 443	Bi-directional	—

