



TCP and UDP Port Numbers

This document lists real important TCP/UDP port numbers related to voice QoS.

| TCP or UDP | Port Number | Purpose |
|------------|----------------|---|
| TCP | 2000 to 2002 | Skinnny (CM Encore) |
| TCP | 11000 to 11999 | H.323/H.245 Standard Connect ports |
| TCP | 1720 | H.323/H.245 Fast Connect or H.323/H.225 ports |
| TCP | 1719 | H.323/H.225 |
| UDP | 1719 | Gatekeeper RAS |
| TCP | 8001-8002 | ICCP (CM Encore) |
| UDP | 2427 | MGCP (CM Encore) |
| TCP | 2428 | MGCP (CM Encore) |
| UDP | 5060 | SIP |
| TCP | 5060 | SIP |
| UDP | 16384 to 32767 | RTCP |

| Protocol | Remote Source Port | CallManager Destination Port | CallManager Source Port | Remote Device Destination Port | Remote Devices | Notes |
|----------|--------------------|------------------------------|-------------------------|--------------------------------|-----------------------------------|--|
| DTC | | | TCP 135 | | CallManagers in the same cluster | |
| SSH | | TCP 22 | | | Secure Shell Client | |
| Telnet | | TCP 23 | | | Telnet Client | |
| DNS | | UDP 53 | | | DNS Servers | |
| DHCP | UDP 68 | UDP 67 | | | DHCP Server | |
| DHCP | | | UDP 68 | UDP 67 | DHCP Client | |
| TFTP | | UDP 69 | | | | Dynamic Ports used after initial connect |
| HTTP | | TCP 80 | | | Administrator / User Web browsers | CCMAdmin and CCMUser pages |

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| OSI (DAP, DSP, DISP) | | TCP or UDP 120 | | | DCD Directory | |
| NTP | | UDP 123 | | | | |
| WINS | | UDP 137-139 | | | WINS Server | Windows Internet Name Service |
| SNMP | | UDP 161 | | | | |
| SNMP Trap | | | | UDP 162 | | |
| LDAP | | TCP 389 | | TCP 389 | Directory Services | When integrated with Corporate Directory |
| HTTPS / SSL | | TCP 443 | | | | |
| SMB | | TCP 445 | | TCP 445 | CallManagers in the same cluster | |
| Syslog | | TCP 514 | | UDP 514 | Syslog service | |
| RMI | | TCP 1099-1129 | | | RMI Service. Attendant Console | |
| MS SQL | | TCP 1433 | | TCP 1433 | CallManagers in the same cluster | |
| H.323 RAS | | | | UDP 1719 | Gatekeeper RAS | CallManager prior to 3.3. Cisco Conference Connection |
| H.323 RAS | | | UDP 1024-4999 | UDP 1719 | Gatekeeper RAS | CallManager 3.3 |
| H.323 H.225 | | TCP 1720 | | TCP 1720 | H.323 Gateways / Anonymous Device Cisco Conference Connection / Non-Gatekeeper Controlled H.323 Trunk | |
| H.323 H.225/ICT | | TCP 1024-4999 | | | CallManager Gatekeeper Controlled H.323 Trunks | CallManager 3.3 |
| H.323 H.245 | | TCP 1024-4999 | TCP 1024-4999 | | CallManager H.323 Gateways / Anonymous Device / H.323 Trunks | |

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|-----------------------------|--------------------|------------------------------|-------------------------|--------------------------------|--|--|
| H.323 H.245 | | TCP 11000-65535 | | | IOS H.323 Gateways. Cisco Conference Connection | |
| SCCP | | TCP 2000 | | | Skinny Clients (IP Phones) | |
| Skinny Gateway (Analogue) | | TCP 2001 | | | Analogue Skinny Gateway | Obsolete |
| Skinny Gateway (Digital) | | TCP 2002 | | | Digital Skinny Gateway | Obsolete |
| MGCP Control | | UDP 2427 | | | MGCP Gateway Control | |
| MGCP Backhaul | | TCP 2428 | | | MGCP Gateways Backhaul | |
| RTS Serv | | | 2500 | | | |
| Cisco Extended Service | | TCP 2551 | | | Active / Backup Determination | |
| Cisco Extended Service | | TCP 2552 | | | DB Change Notification | |
| RIS Data Collector | | TCP 2555 | | | Inter RIS communication | |
| RIS Data Collector | | TCP 2556 | | | Used by clients (IIS) to communicate with RIS | |
| CTI/QBE | | TCP 2748 | | | TAPI/JTAPI Applications | Connects with CTI Manager. Used by IVR, CCC, PA, Cisco Softphone, CRS, ICD, IPCC, IPMA, Attendant Console and any other application that utilizes the TAPI or J/TAPI plugin / TSP. |
| IPMA Service | | TCP 2912 | | | IPMA Assistant Console | |
| Media Streaming Application | | UDP 3001 | | | Change Notification | |

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| SCCP | | TCP 3224 | | | Media Resources | Conference Bridges / Xcoders |
| MS Terminal Services | | TCP 3389 | | | Windows Terminal Services | |
| Entercept HID Agent | | | | TCP 5000 | Host Intrusion Detection Console | |
| CallManager SIP | | TCP/UDP 5060 | | TCP 5060 | SIP Trunk Default Port | Can use TCP 1024 - 65535 |
| VNC http helper | | TCP 580x | | | | Remote Control |
| VNC Display | | TCP 690x | | | Virtual Network Computer Display | Remote Control |
| CallManager Change Notification | | TCP 7727 | | | CallManager Change Notification. Cisco database layer monitor, Cisco TFTP, Cisco IP media streaming, Cisco TCD, Cisco MOH | RealTime Change Notification |
| IPMA Service | | TCP 8001 | | | IP Manager Assistant | Change Notification |
| ICCS | | TCP 8002 | | TCP 8002 | CallManagers in the same cluster | Intra Cluster Communication |
| CTIM | | TCP 8003 | | | | |
| Cisco Tomcat | | TCP 8007 | | | Web Requests | |
| Cisco Tomcat | | TCP 8009 | | | Web Requests | |
| Cisco Tomcat | | TCP 8111 | | | IIS, Web Requests to IPMA worker thread | |
| Cisco Tomcat | | TCP 8222 | | | IIS, Web Requests to EM application worker thread | |
| Cisco Tomcat | | TCP 8333 | | | IIS, Web Requests to WebDialer application worker thread | |

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| DC Directory | | TCP 8404 | | | Embedded Directory Services | Used for Directory services. Application Authentication / configuration. SoftPhone Directory. User Directory |
| Cisco Tomcat | | TCP 8444 | | | IIS, Web Requests to EM Service worker thread | |
| Cisco Tomcat | | TCP 8555 | | | IIS, Web Requests to Apache SOAP worker thread | |
| Cisco Tomcat | | TCP 8998 | | | Web Requests | |
| Cisco Tomcat | | TCP 9007 | | | IIS, Web Requests to CAR worker thread | |
| RTP | UDP 16384-32767 | | | UDP 16384-32767 | Voice Media | IP IVR Media. CCC IVR Media, Cisco SoftPhone, Media Streaming Application |
| Cisco SNMP Trap Agent | | UDP 61441 | | | Cisco Alarm Interface | Receives some SNMP alarm in XML format. |