

List of TCP and UDP port numbers

This is a **list of TCP and UDP port numbers** used by protocols of the application layer of the Internet protocol suite for the establishment of host-to-host connectivity.

The Transmission Control Protocol (TCP) and the User Datagram Protocol (UDP) needed only one port for full-duplex, bidirectional traffic. The Stream Control Transmission Protocol (SCTP) and the Datagram Congestion Control Protocol (DCCP) also use port numbers. They usually use port numbers that match the services of the corresponding TCP or UDP implementation, if they exist.

The Internet Assigned Numbers Authority (IANA) is responsible for maintaining the official assignments of port numbers for specific uses.^[1] However, many unofficial uses of both well-known and registered port numbers occur in practice. Similarly many of the official assignments refer to protocols that were never or are no longer in common use. This article lists port numbers and their associated protocols that have experienced significant uptake.

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Table legend

- ☐ Official: Port is registered with IANA for the application.^[1]
- ☐ Unofficial: Port is not registered with IANA for the application.
- ☐ Multiple use: Multiple applications are known to use this port.

Legend of TCP and UDP protocol table cells for port numbers

Cell	Description
Yes	Described protocol <i>is</i> standardized, specified or widely used for the port number.
No	Described protocol <i>is not</i> standardized, specified or widely used for the port number.
Assigned	Port number is assigned by IANA for protocol use, ^[1] but may not be standardized, specified or widely used for such.
Yes/No	Port number may use the protocol conditionally only, or alternate its use (fallback if the other protocol fails).
Port 22	Port number doesn't use the protocol, but may use the protocol on another specified port (e.g., port 22).
N/A	Not applicable or currently unassigned port number. For unassigned ports, the port number may be available for assignment upon requesting assignment by IANA. ^[2]
Reserved	Protocol is reserved by IANA ^[1] for future use or special purposes. ^{[2][3]} See "N/A" above.
?	Protocol use by port number is unknown or unverified.

Well-known ports

The port numbers in the range from 0 to 1023 are the *well-known ports* or *system ports*.^[2] They are used by system processes that provide widely used types of network services. On Unix-like operating systems, a process must execute with superuser privileges to be able to bind a network socket to an IP address using one of the well-known ports.^[4]

Well-known ports

Port	TCP	UDP	IANA status ^[1]	Description
0	Reserved	Reserved	Official	
	N/A	N/A	Unofficial	In programming APIs (not in communication between hosts), requests a system-allocated (dynamic) port ^[5]
1	Yes	Assigned	Official	<u>TCP Port Service Multiplexer</u> (TCPMUX). Historic. Both TCP and UDP have been assigned to TCPMUX by IANA, ^[1] but by design only TCP is specified. ^[6]
5	Assigned	Assigned	Official	<u>Remote job entry</u> ^[7]
7	Yes	Yes	Official	<u>Echo Protocol</u> ^{[8][9]}
9	Yes, and SCTP ^[10]	Yes	Official	<u>Discard Protocol</u> ^[11]
	?	Yes	Unofficial	<u>Wake-on-LAN</u> ^[12]
11	Yes	Yes	Official	<u>Active Users</u> (<u>systat</u> service) ^{[13][14]}
13	Yes	Yes	Official	<u>Daytime Protocol</u> ^[15]
15	Yes	No	Unofficial	Previously <u>netstat</u> service ^{[1][13]}
17	Yes	Yes	Official	<u>Quote of the Day</u> (QOTD) ^[16]
18	Yes	Yes	Official	<u>Message Send Protocol</u> ^{[17][18]}
19	Yes	Yes	Official	<u>Character Generator Protocol</u> (CHARGEN) ^[19]
20	Yes, and SCTP ^[10]	Assigned	Official	<u>File Transfer Protocol</u> (FTP) data transfer ^[9]
21	Yes, and SCTP ^[10]	Assigned	Official	<u>File Transfer Protocol</u> (FTP) control (command) ^{[9][10][20][21]}
22	Yes, and SCTP ^[10]	Assigned	Official	<u>Secure Shell</u> (SSH), ^[9] secure logins, <u>file transfers</u> (<u>scp</u> , <u>sftp</u>) and port forwarding
23	Yes	Assigned	Official	<u>Telnet</u> protocol—unencrypted text communications ^{[9][22]}
25	Yes	Assigned	Official	<u>Simple Mail Transfer Protocol</u> (SMTP), ^{[9][23]} used for email routing between mail servers
37	Yes	Yes	Official	<u>Time Protocol</u> ^[24]
38	Yes	Yes	Official	<u>Route Access Protocol</u> (RAP) ^[25]
39	Assigned	Yes	Official	<u>Resource Location Protocol</u> (RLP) ^[26] —used for determining the location of higher level <u>services</u> from <u>hosts</u> on a <u>network</u>
42	Assigned	Yes	Official	<u>Host Name Server Protocol</u> ^[27]
43	Yes	Assigned	Official	<u>WHOIS</u> protocol ^{[28][29][30]}
47	Reserved	Reserved	Official	
49	Yes	Yes	Official	<u>TACACS+</u> Login Host protocol ^[31]
50	Assigned	Yes	Official	<u>Remote Mail Checking Protocol</u> ^[32]
51	Reserved	Reserved	Official	

Port	TCP	UDP	IANA status ^[1]	Description
	TCP	UDP	Unofficial	Previously <u>Interface Message Processor</u> logical address management
52	TCP	UDP	Official	<u>Xerox Network Systems</u> (XNS) Time Protocol
53	TCP	UDP	Official	<u>Domain Name System</u> (DNS) ^[9]
54	TCP	UDP	Official	Xerox Network Systems (XNS) clearinghouse
56	TCP	UDP	Official	Xerox Network Systems (XNS) authentication
57	TCP	UDP	Official	Any private terminal access
58	TCP	UDP	Official	Xerox Network Systems (XNS) Mail
61	Reserved	Reserved	Official	
67	Assigned	Yes	Official	<u>Bootstrap Protocol</u> (BOOTP) server; ^[9] also used by <u>Dynamic Host Configuration Protocol</u> (DHCP)
68	Assigned	Yes	Official	<u>Bootstrap Protocol</u> (BOOTP) client; ^[9] also used by <u>Dynamic Host Configuration Protocol</u> (DHCP)
69	Assigned	Yes	Official	<u>Trivial File Transfer Protocol</u> (TFTP) ^{[9][33][34][35]}
70	TCP	UDP	Official	<u>Gopher</u> protocol ^[36]
71–74	TCP	UDP	Official	<u>NETRJS</u> protocol ^{[37][38][39]}
75	TCP	UDP	Official	Any private dial out service
77	TCP	UDP	Official	Any private Remote job entry
79	Yes	Assigned	Official	<u>Finger</u> protocol ^{[9][40][41]}
80	Yes, and SCTP ^[10]	Assigned	Official	<u>Hypertext Transfer Protocol</u> (HTTP) ^{[9][42][43][44]}
		UDP	Unofficial	<u>QUIC</u> (from <u>Chromium</u>) for HTTP
81	TCP		Unofficial	<u>TorPark</u> onion routing
82		UDP	Unofficial	<u>TorPark</u> control
87	Yes	Yes	Official	Any private terminal link
88	Yes	Assigned	Official	<u>Kerberos</u> ^{[9][45][46]} authentication system
90	TCP	UDP	Official	dnsix (DoD Network Security for Information Exchange) Securit [<i>sic</i> ?] Attribute Token Map
	TCP	UDP	Unofficial	<u>PointCast</u> (dotcom) ^[1]
99	TCP		Unofficial	<u>WIP</u> message protocol
101	TCP	UDP	Official	<u>NIC</u> host name
102	TCP	UDP	Official	<u>ISO</u> Transport Service Access Point (TSAP) Class 0 protocol; ^{[47][48]}
104	TCP	UDP	Official	<u>Digital Imaging and Communications in Medicine</u> (DICOM; also port 11112)
105	TCP	UDP	Official	<u>CCSO</u> Nameserver ^[49]
107	TCP	UDP	Official	<u>Remote User Telnet Service</u> (RTelnet) ^[50]
108	TCP	UDP	Official	IBM <u>Systems Network Architecture</u> (SNA) gateway access server
109	TCP	UDP	Official	<u>Post Office Protocol</u> , version 2 (POP2) ^[51]

Port	TCP	UDP	IANA status ^[1]	Description
110	Yes	Assigned	Official	Post Office Protocol, version 3 (POP3) ^{[9][52][53]}
111	TCP	UDP	Official	<u>Open Network Computing Remote Procedure Call (ONC RPC</u> , sometimes referred to as Sun RPC)
113	Yes	No	Official	<u>Ident</u> , authentication service/identification protocol, ^{[9][54]} used by <u>IRC</u> servers to identify users
	Yes	Assigned	Official	Authentication Service (auth), the predecessor to <i>identification protocol</i> . Used to determine a user's identity of a particular TCP connection. ^[55]
115	Yes	Assigned	Official	<u>Simple File Transfer Protocol</u> ^{[9][56]}
117	TCP	UDP	Official	<u>UUCP Mapping Project</u> (path service)
118	TCP	UDP	Official	Structured Query Language (<u>SQL</u>) Services
119	Yes	Assigned	Official	<u>Network News Transfer Protocol (NNTP)</u> , ^[9] retrieval of newsgroup messages ^{[57][58]}
123	Assigned	Yes	Official	<u>Network Time Protocol (NTP)</u> , used for time synchronization ^[9]
126	TCP	UDP	Official	Formerly Unisys Unitary Login, renamed by Unisys to NXEdit. Used by Unisys Programmer's Workbench for Clearpath MCP, an IDE for Unisys MCP software development
135	TCP	UDP	Official	<u>DCE endpoint resolution</u>
	TCP	UDP	Official	<u>Microsoft EPMAP</u> (End Point Mapper), also known as DCE/ <u>RPC Locator service</u> , ^[59] used to remotely manage services including <u>DHCP</u> server, <u>DNS</u> server and <u>WINS</u> . Also used by <u>DCOM</u>
137	Yes	Yes	Official	<u>NetBIOS Name Service</u> , used for name registration and resolution ^{[60][61]}
138	Assigned	Yes	Official	<u>NetBIOS Datagram Service</u> ^{[9][60][61]}
139	Yes	Assigned	Official	<u>NetBIOS Session Service</u> ^{[60][61]}
143	Yes	Assigned	Official	<u>Internet Message Access Protocol (IMAP)</u> , ^[9] management of electronic mail messages on a server ^[62]
152	TCP	UDP	Official	<u>Background File Transfer Program (BFTP)</u> ^[63]
153	TCP	UDP	Official	<u>Simple Gateway Monitoring Protocol (SGMP)</u> , a protocol for remote inspection and alteration of gateway management information ^[64]
156	TCP	UDP	Official	Structured Query Language (<u>SQL</u>) Service
158	TCP	UDP	Official	<u>Distributed Mail System Protocol (DMSP</u> , sometimes referred to as Pcmail) ^[65]
161	Assigned	Yes	Official	<u>Simple Network Management Protocol (SNMP)</u> ^{[66][9]}
162	TCP	UDP	Official	<u>Simple Network Management Protocol Trap (SNMPTRAP)</u> ^{[66][67]}
170	TCP	UDP	Official	<u>Print server</u>
177	TCP	UDP	Official	<u>X Display Manager Control Protocol (XDMCP)</u> , used for remote logins to an <u>X Display Manager</u> server ^[68]
179	Yes, and SCTP ^[10]	Assigned	Official	<u>Border Gateway Protocol (BGP)</u> , ^[69] used to exchange routing and reachability information among <u>autonomous systems (AS)</u> on the <u>Internet</u>

Port	TCP	UDP	IANA status ^[1]	Description
194	TCP	UDP	Official	Internet Relay Chat (IRC) ^[70]
199	TCP	UDP	Official	SNMP multiplexing protocol (SMUX) ^{[71][72]}
201	TCP	UDP	Official	AppleTalk Routing Maintenance
209	Yes	Assigned	Official	Quick Mail Transfer Protocol ^[73]
210	TCP	UDP	Official	ANSI Z39.50
213	TCP	UDP	Official	Internetwork Packet Exchange (IPX)
218	TCP	UDP	Official	Message posting protocol (MPP)
220	TCP	UDP	Official	Internet Message Access Protocol (IMAP) , version 3
225–241	Reserved	Reserved	Official	
249–255	Reserved	Reserved	Official	
259	TCP	UDP	Official	Efficient Short Remote Operations (ESRO)
262	TCP	UDP	Official	Arcisdms
264	TCP	UDP	Official	Border Gateway Multicast Protocol (BGMP)
280	TCP	UDP	Official	http-mgmt
300	TCP		Unofficial	ThinLinc Web Access
308	TCP		Official	Novastor Online Backup
311	Yes	Assigned	Official	Mac OS X Server Admin ^[9] (officially AppleShare IP Web administration ^[1])
318	TCP	UDP	Official	PKIX Time Stamp Protocol (TSP)
319		UDP	Official	Precision Time Protocol (PTP) event messages
320		UDP	Official	Precision Time Protocol (PTP) general messages
350	TCP	UDP	Official	Mapping of Airline Traffic over Internet Protocol (MATIP) type A
351	TCP	UDP	Official	MATIP type B
356	TCP	UDP	Official	cloanto-net-1 (used by Cloanto Amiga Explorer and VMs)
366	TCP	UDP	Official	On-Demand Mail Relay (ODMR)
369	TCP	UDP	Official	Rpc2portmap
370	TCP	UDP	Official	codaaauth2 , Coda authentication server
		UDP	Official	securecast1 , outgoing packets to NAI's SecureCast servers ^[74] As of 2000
371	TCP	UDP	Official	ClearCase albd
383	TCP	UDP	Official	HP data alarm manager
384	TCP	UDP	Official	A Remote Network Server System
387	TCP	UDP	Official	AURP (AppleTalk Update-based Routing Protocol) ^[75]
389	Yes	Assigned	Official	Lightweight Directory Access Protocol (LDAP) ^[9]
399	TCP	UDP	Official	Digital Equipment Corporation DECnet (Phase V+) over TCP/IP

Port	TCP	UDP	IANA status ^[1]	Description
401	TCP	UDP	Official	<u>Uninterruptible power supply</u> (UPS)
427	Yes	Yes	Official	<u>Service Location Protocol</u> (SLP) ^[9]
433	TCP	UDP	Official	NNSP, part of <u>Network News Transfer Protocol</u>
434	TCP	UDP	Official	<u>Mobile IP Agent</u> (RFC 5944)
443	Yes, and SCTP ^[10]	Assigned	Official	<u>Hypertext Transfer Protocol over TLS/SSL</u> (HTTPS) ^[9]
		UDP	Unofficial	<u>QUIC</u> (from Chromium) for HTTPS
444	TCP	UDP	Official	<u>Simple Network Paging Protocol</u> (SNPP), RFC 1568
	TCP		Unofficial	Well known <u>Slither.io</u> port
445	TCP	UDP	Official	Microsoft-DS <u>Active Directory</u> , ^[76] Windows shares
	Yes	Assigned	Official	Microsoft-DS <u>SMB</u> ^[9] file sharing
464	TCP	UDP	Official	<u>Kerberos</u> Change/Set password
465	Yes	No	Official	URL Rendezvous Directory for SSM (Cisco protocol)
	Yes	No	Official	Authenticated <u>SMTP</u> ^[9] over <u>TLS/SSL</u> (<u>SMTPS</u>) ^[77]
475	TCP	UDP	Official	tcpnethaspsrv, <u>Aladdin Knowledge Systems</u> Hasp services
491	TCP		Unofficial	<u>GO-Global</u> remote access and application publishing software
497	TCP	UDP	Official	<u>Retrospect</u>
500	Assigned	Yes	Official	<u>Internet Security Association and Key Management Protocol</u> (ISAKMP) / <u>Internet Key Exchange</u> (IKE) ^[9]
502	TCP	UDP	Official	<u>Modbus</u> Protocol
504	TCP	UDP	Official	<u>Citadel</u> , multiservice protocol for dedicated clients for the Citadel groupware system
510	TCP	UDP	Official	FirstClass Protocol (FCP), used by <u>FirstClass</u> client/server groupware system
512	TCP		Official	<u>Rexec</u> , Remote Process Execution
		UDP	Official	comsat, together with <u>biff</u>
513	TCP		Official	<u>rlogin</u>
		UDP	Official	<u>Who</u> ^[78]
514	TCP		Official	Remote Shell, used to execute non-interactive commands on a remote system (Remote Shell, rsh, remsh)
	No	Yes	Official	<u>Syslog</u> , ^[9] used for system logging
515	Yes	Assigned	Official	<u>Line Printer Daemon</u> (LPD), ^[9] print service
517		UDP	Official	Talk
518		UDP	Official	NTalk
520	TCP		Official	efs, extended file name server
		UDP	Official	<u>Routing Information Protocol</u> (RIP)
521		UDP	Official	<u>Routing Information Protocol Next Generation</u> (RIPng)

Port	TCP	UDP	IANA status ^[1]	Description
524	TCP	UDP	Official	NetWare Core Protocol (NCP) is used for a variety things such as access to primary NetWare server resources, Time Synchronization, etc.
525		UDP	Official	Timed, <u>Timeserver</u>
530	TCP	UDP	Official	<u>Remote procedure call</u> (RPC)
532	Yes	Assigned	Official	netnews ^[9]
533		UDP	Official	netwall, For Emergency Broadcasts
540	TCP		Official	Unix-to-Unix Copy Protocol (<u>UUCP</u>)
542	TCP	UDP	Official	<u>commerce</u> (Commerce Applications)
543	TCP		Official	klogin, <u>Kerberos</u> login
544	TCP		Official	kshell, <u>Kerberos</u> Remote shell
546	TCP	UDP	Official	<u>DHCPv6</u> client
547	TCP	UDP	Official	<u>DHCPv6</u> server
548	Yes	Assigned	Official	<u>Apple Filing Protocol</u> (AFP) over <u>TCP</u> ^[9]
550	TCP	UDP	Official	new-rwho, new-who ^[78]
554	Yes	Yes	Official	<u>Real Time Streaming Protocol</u> (RTSP) ^[9]
556	TCP		Official	Remotefs, <u>RFS</u> , rfs_server
560		UDP	Official	rmonitor, Remote Monitor
561		UDP	Official	monitor
563	TCP	UDP	Official	<u>NNTP</u> over <u>TLS/SSL</u> (NNTPS)
564	TCP		Unofficial	<u>9P</u> (Plan 9)
585	Port 993	?	Unofficial	Legacy use of <u>Internet Message Access Protocol</u> over <u>TLS/SSL</u> (IMAPS), now in use at port 993. ^[79]
587	Yes	Assigned	Official	<u>email message submission</u> ^{[9][80]} (SMTP)
591	TCP		Official	<u>FileMaker</u> 6.0 (and later) Web Sharing (HTTP Alternate, also see port 80)
593	TCP	UDP	Official	HTTP RPC Ep Map, Remote procedure call over <u>Hypertext Transfer Protocol</u> , often used by <u>Distributed Component Object Model</u> services and <u>Microsoft Exchange Server</u>
601	TCP		Official	Reliable <u>Syslog</u> Service — used for system logging
604	TCP		Official	TUNNEL profile, ^[81] a protocol for <u>BEEP</u> peers to form an <u>application layer tunnel</u>
623		UDP	Official	ASF Remote Management and Control Protocol (ASF-RMCP) & IPMI Remote Management Protocol
625	Yes	No	Unofficial	Open Directory Proxy (ODProxy) ^[9]
631	TCP	UDP	Official	<u>Internet Printing Protocol</u> (IPP) ^[9]
	TCP	UDP	Unofficial	<u>Common Unix Printing System</u> (CUPS) administration console (extension to IPP)
635	TCP	UDP	Official	RLZ DBase

Port	TCP	UDP	IANA status ^[1]	Description
636	Yes	Assigned	Official	<u>Lightweight Directory Access Protocol over TLS/SSL (LDAPS)</u> ^[9]
639	TCP	UDP	Official	<u>MSDP, Multicast Source Discovery Protocol</u>
641	TCP	UDP	Official	SupportSoft Nexus Remote Command (control/listening), a proxy gateway connecting remote control traffic
643	TCP	UDP	Official	<u>SANity</u>
646	TCP	UDP	Official	<u>Label Distribution Protocol (LDP)</u> , a routing protocol used in <u>MPLS networks</u>
647	TCP		Official	<u>DHCP Failover protocol</u> ^[82]
648	TCP		Official	<u>Registry Registrar Protocol (RRP)</u> ^[83]
651	TCP	UDP	Official	<u>IEEE-MMS</u>
653	TCP	UDP	Official	SupportSoft Nexus Remote Command (data), a proxy gateway connecting remote control traffic
654	TCP		Official	<u>Media Management System (MMS) Media Management Protocol (MMP)</u> ^[84]
655	TCP	UDP	Official	<u>Tinc VPN daemon</u>
657	TCP	UDP	Official	<u>IBM RMC (Remote monitoring and Control) protocol</u> , used by <u>System p5 AIX Integrated Virtualization Manager (IVM)</u> ^[85] and <u>Hardware Management Console</u> to connect managed <u>logical partitions (LPAR)</u> to enable dynamic partition reconfiguration
660	Yes	Assigned	Official	<u>Mac OS X Server administration</u> , ^[1] version 10.4 and earlier ^[9]
666	TCP	UDP	Official	<u>Doom</u> , first online first-person shooter
	TCP		Unofficial	<u>airserv-ng</u> (http://www.aircrack-ng.org/doku.php?id=airserv-ng), <u>aircrack-ng's server for remote-controlling wireless devices</u>
674	TCP		Official	<u>Application Configuration Access Protocol (ACAP)</u>
688	TCP	UDP	Official	<u>REALM-RUSD (ApplianceWare Server Appliance Management Protocol)</u>
690	TCP	UDP	Official	<u>Velneo Application Transfer Protocol (VATP)</u>
691	TCP		Official	<u>MS Exchange Routing</u>
694	TCP	UDP	Official	<u>Linux-HA high-availability heartbeat</u>
695	TCP		Official	<u>IEEE Media Management System over SSL (IEEE-MMS-SSL)</u> ^[86]
698		UDP	Official	<u>Optimized Link State Routing (OLSR)</u>
700	TCP		Official	<u>Extensible Provisioning Protocol (EPP)</u> , a protocol for communication between <u>domain name registries</u> and <u>registrars</u> (<u>RFC 5734</u>)
701	TCP		Official	<u>Link Management Protocol (LMP)</u> , ^[87] a protocol that runs between a pair of <u>nodes</u> and is used to manage <u>traffic engineering (TE) links</u>
702	TCP		Official	<u>IRIS</u> ^{[88][89]} (<u>Internet Registry Information Service</u>) over <u>BEEP (Blocks Extensible Exchange Protocol)</u> ^[90] (<u>RFC 3983</u>)
706	TCP		Official	<u>Secure Internet Live Conferencing (SILC)</u>
711	TCP		Official	<u>Cisco Tag Distribution Protocol</u> ^{[91][92][93]} —being replaced by the <u>MPLS Label Distribution Protocol</u> ^[94]

Port	TCP	UDP	IANA status ^[1]	Description
712	TCP		Official	<u>Topology Broadcast based on Reverse-Path Forwarding routing protocol</u> (TBRPF; RFC 3684)
749	Yes	Yes	Official	<u>Kerberos (protocol) administration</u> ^[9]
750		UDP	Official	kerberos-iv, <u>Kerberos</u> version IV
751	TCP	UDP	Unofficial	kerberos_master, <u>Kerberos</u> authentication
752		UDP	Unofficial	passwd_server, <u>Kerberos</u> password (kpasswd) server
753	TCP	UDP	Official	Reverse Routing Header (RRH) ^[95]
		UDP	Unofficial	userreg_server, <u>Kerberos</u> userreg server
754	TCP	UDP	Official	tell send
	TCP		Unofficial	krb5_prop, <u>Kerberos</u> v5 slave propagation
760	TCP	UDP	Unofficial	krbupdate [kreg], <u>Kerberos</u> registration
782	TCP		Unofficial	<u>Conserver</u> serial-console management server
783	TCP		Unofficial	<u>SpamAssassin</u> spamd daemon
800	TCP	UDP	Official	mdbs-daemon
808	TCP		Unofficial	Microsoft Net.TCP Port Sharing Service
829	Yes	Assigned	Official	<u>Certificate Management Protocol</u> ^[96]
830	TCP	UDP	Official	<u>NETCONF</u> over <u>SSH</u>
831	TCP	UDP	Official	<u>NETCONF</u> over <u>BEEP</u>
832	TCP	UDP	Official	<u>NETCONF</u> for <u>SOAP</u> over <u>HTTPS</u>
833	TCP	UDP	Official	<u>NETCONF</u> for <u>SOAP</u> over <u>BEEP</u>
843	TCP		Unofficial	<u>Adobe Flash</u> ^[97]
847	TCP		Official	<u>DHCP Failover</u> protocol
848	TCP	UDP	Official	Group Domain Of Interpretation (GDOI) protocol
853	TCP	UDP	Official	<u>DNS</u> over <u>TLS</u> (RFC 7858)
860	TCP		Official	<u>iSCSI</u> (RFC 3720)
861	TCP	UDP	Official	OWAMP control (RFC 4656)
862	TCP	UDP	Official	TWAMP control (<u>RFC 5357</u>)
873	TCP		Official	<u>rsync</u> file synchronization protocol
888	TCP		Unofficial	cddbp, <u>CD DataBase</u> (CDDb) protocol (CDDbP)
	TCP		Unofficial	IBM Endpoint Manager Remote Control
897	TCP	UDP	Unofficial	<u>Brocade</u> SMI-S RPC
898	TCP	UDP	Unofficial	Brocade SMI-S RPC SSL
902	TCP	UDP	Unofficial	<u>VMware ESXi</u> ^{[98][99]}
903	TCP		Unofficial	<u>VMware ESXi</u> ^{[98][99]}
953	Yes	Reserved	Official	<u>BIND</u> remote name daemon control (RNDC) ^{[100][101]}

Port	TCP	UDP	IANA status ^[1]	Description
981	TCP		Unofficial	Remote HTTPS management for firewall devices running embedded Check Point VPN-1 software ^[102]
987	TCP		Unofficial	Microsoft Remote Web Workplace, a feature of Windows Small Business Server ^[103]
989	TCP	UDP	Official	FTPS Protocol (data), FTP over TLS/SSL
990	TCP	UDP	Official	FTPS Protocol (control), FTP over TLS/SSL
991	TCP	UDP	Official	Netnews Administration System (NAS) ^[104]
992	TCP	UDP	Official	Telnet protocol over TLS/SSL
993	Yes	Assigned	Official	Internet Message Access Protocol over TLS/SSL (IMAPS) ^[9]
994	Reserved	Reserved	Official	
	Maybe	Maybe	Unofficial	Internet Relay Chat over TLS/SSL (IRCS). Previously assigned, but not used in common practice. ^[70]
995	Yes	Yes	Official	Post Office Protocol 3 over TLS/SSL (POP3S) ^[9]
1010	TCP		Unofficial	ThinLinc web-based administration interface ^[105]
1011–1020	Reserved	Reserved	Official	
1023	Reserved	Reserved	Official	^[1]
	Yes	Yes	Unofficial	z/OS Network File System (NFS) (potentially ports 991–1023) ^[106]

Registered ports

The range of port numbers from 1024 to 49151 are the registered ports. They are assigned by [IANA](#) for specific service upon application by a requesting entity.^[1] On most systems, registered ports can be used without superuser privileges.

Registered ports

Port	TCP	UDP	Description	IANA status ^[1]
1024	Reserved	Reserved	Reserved	Official
1027	Reserved		Reserved	Official
1027		UDP	Native IPv6 behind IPv4-to-IPv4 NAT Customer Premises Equipment (6a44) ^[107]	Official
1028			Deprecated	Official
1029			Microsoft <u>DCOM</u> services	Official
1058	TCP	UDP	nim, <u>IBM AIX Network Installation Manager</u> (NIM)	Official
1059	TCP	UDP	nimreg, IBM AIX Network Installation Manager (NIM)	Official
1080	TCP	UDP	<u>SOCKS</u> proxy	Official
1085	TCP	UDP	<u>WebObjects</u> ^[9]	Official
1098	TCP	UDP	rmiactivation, <u>Java remote method invocation</u> (RMI) activation	Official
1099	TCP	Assigned	rmiregistry, Java remote method invocation (RMI) registry	Official
1109			Reserved – IANA	Official
1109	TCP		<u>Kerberos</u> Post Office Protocol (KPOP)	Unofficial
1119	TCP	UDP	<u>Battle.net</u> chat/game protocol, used by <u>Blizzard's</u> games ^[108]	Official
1167	TCP SCTP	UDP	Cisco <u>IP SLA</u> (Service Assurance Agent)	Official
1194	TCP	UDP	<u>OpenVPN</u>	Official
1198	TCP	UDP	The <u>cajo project</u> Free dynamic transparent distributed computing in Java	Official
1214	TCP	UDP	<u>Kazaa</u>	Official
1220	TCP	Assigned	<u>QuickTime Streaming Server</u> administration ^[9]	Official
1234	TCP	UDP	<u>Infoseek</u> search agent	Official
1234		UDP	<u>VLC media player</u> default port for UDP/RTP stream	Unofficial
1241	TCP	UDP	<u>Nessus</u> Security Scanner	Official
1270	TCP	UDP	Microsoft System Center Operations Manager (SCOM) (formerly Microsoft Operations Manager (MOM)) agent	Official
1293	TCP	UDP	Internet Protocol Security (<u>IPSec</u>)	Official
1311	TCP	UDP	Windows RxMon.exe	Official
1311	TCP		Dell <u>OpenManage</u> HTTPS ^[109]	Unofficial
1314	?	?	<u>Festival Speech Synthesis System</u> server ^[110]	Unofficial
1337	TCP		neo4j-shell	Unofficial
1337	TCP		<u>WASTE</u> Encrypted File Sharing Program	Unofficial
1341	TCP	UDP	<u>Qubes</u> (Manufacturing Execution System)	Official
1344	TCP	UDP	<u>Internet Content Adaptation Protocol</u>	Official
1352	TCP	UDP	IBM <u>Lotus Notes/Domino</u> (RPC) protocol	Official

Port	TCP	UDP	Description	IANA status ^[1]
1360	TCP	UDP	<u>Mimer SQL</u>	Official
1414	TCP	UDP	<u>IBM WebSphere MQ</u> (formerly known as <u>MQSeries</u>)	Official
1417	TCP	UDP	<u>Timbuktu Service 1 Port</u>	Official
1418	TCP	UDP	Timbuktu Service 2 Port	Official
1419	TCP	UDP	Timbuktu Service 3 Port	Official
1420	TCP	UDP	Timbuktu Service 4 Port	Official
1431	TCP		Reverse Gossip Transport Protocol (RGTP), used to access a General-purpose Reverse-Ordered Gossip Gathering System (GROGGS) bulletin board, such as that implemented on the Cambridge University's <u>Phoenix system</u>	Official
1433	TCP	UDP	<u>Microsoft SQL Server database management system</u> (MSSQL) server	Official
1434	TCP	UDP	Microsoft SQL Server database management system (MSSQL) monitor	Official
1492	TCP		<i><u>Sid Meier's CivNet</u></i> , a multiplayer remake of the original <i><u>Sid Meier's Civilization</u></i> game	Unofficial
1494	TCP	UDP	Citrix <u>Independent Computing Architecture</u> (ICA) ^[111]	Unofficial
1500	TCP		<u>IBM Tivoli Storage Manager server</u> ^[112]	Unofficial
1501	TCP		IBM Tivoli Storage Manager client scheduler ^[112]	Unofficial
1503	TCP	UDP	<u>Windows Live Messenger</u> (Whiteboard and Application Sharing) ^[113]	Unofficial
1512	TCP	UDP	Microsoft's <u>Windows Internet Name Service</u> (WINS)	Official
1513	TCP	UDP	<u>Garena game client</u>	Unofficial
1521	TCP	UDP	<u>nCUBE License Manager</u>	Official
1521	TCP		<u>Oracle database default listener</u> , in future releases ^[114] official port 2483 (TCP/IP) and 2484 (TCP/IP with SSL)	Unofficial
1524	TCP	UDP	<u>ingreslock</u> , <u>ingres</u>	Official
1527	TCP	UDP	<u>Oracle Net Services</u> , formerly known as <u>SQL*Net</u> ^[115]	Official
1527	TCP		<u>Apache Derby Network Server</u> ^[116]	Unofficial
1533	TCP	UDP	<u>IBM Sametime Virtual Places Chat</u>	Official
1547	TCP	UDP	<u>Laplink</u>	Official
1550	TCP		<u>Gadu-Gadu</u> (direct client-to-client)	Unofficial
1581	TCP	UDP	<u>MIL STD 2045-47001 VMF</u>	Official
1581	TCP		<u>IBM Tivoli Storage Manager web client</u> ^[112]	Unofficial
1582–1583	TCP		IBM Tivoli Storage Manager server web interface ^[112]	Unofficial
1583	?	?	<u>Pervasive PSQL</u> ^[117]	Unofficial
1589	TCP	UDP	Cisco <u>VLAN Query Protocol</u> (<u>VQP</u>)	Official
1604	TCP	UDP	<u>DarkComet</u> remote administration tool (RAT)	Unofficial
1626	TCP		<u>iSketch</u> ^[118]	Unofficial

Port	TCP	UDP	Description	IANA status ^[1]
1627	TCP		iSketch ^[118]	Unofficial
1628	TCP	UDP	<u>LonTalk</u> normal	Official
1629	TCP	UDP	<u>LonTalk</u> urgent	Official
1645		UDP	Early deployment of RADIUS before RFC standardization was done using UDP port number 1645. Enabled for compatibility reasons by default on Cisco and Juniper Networks RADIUS servers. ^[119] Official port is 1812. TCP port 1645 MUST NOT be used. ^[120]	Unofficial
1646		UDP	Old radacct port, RADIUS accounting protocol. Enabled for compatibility reasons by default on Cisco and Juniper Networks RADIUS servers. ^[119] Official port is 1813. TCP port 1646 MUST NOT be used. ^[120]	Unofficial
1666	TCP		<u>Perforce</u> ^[121]	Unofficial
1677	TCP	UDP	<u>Novell GroupWise</u> clients in client/server access mode	Official
1688	TCP		<u>Microsoft Key Management Service (KMS) for Windows Activation</u> ^[122]	Unofficial
1701	TCP	UDP	<u>Layer 2 Forwarding Protocol (L2F)</u>	Official
1701	Assigned	UDP	<u>Layer 2 Tunneling Protocol (L2TP)</u> ^[9]	Official
1707	TCP	UDP	<u>Windward Studios</u> games (vdmplay)	Official
1707		UDP	L2TP/IPsec, for establish an initial connection ^[123]	Unofficial
1716		UDP	<u>America's Army, a massively multiplayer online game (MMO)</u> ^[124]	Unofficial
1719	TCP	UDP	<u>H.323</u> registration and alternate communication	Official
1720	TCP	UDP	<u>H.323</u> call signaling	Official
1723	TCP	Assigned	<u>Point-to-Point Tunneling Protocol (PPTP)</u> ^[9]	Official
1755	TCP	UDP	<u>Microsoft Media Services (MMS, ms-streaming)</u>	Official
1761	TCP	UDP	<u>Novell ZENworks</u> ^{[125][126]}	Unofficial
1783			Decomissioned [<i>sic</i>] Port 04/14/00, ms	Official
1801	TCP	UDP	<u>Microsoft Message Queuing</u>	Official
1812	TCP	UDP	<u>RADIUS</u> authentication protocol, radius	Official
1813	TCP	UDP	<u>RADIUS</u> accounting protocol, radius-acct	Official
1863	TCP	UDP	<u>Microsoft Notification Protocol (MSNP)</u> , used by the <u>Microsoft Messenger service</u> and a number of instant messaging <u>Messenger clients</u>	Official
1880	?	?	<u>Node-RED</u> ^[127]	Unofficial
1883	TCP	UDP	<u>MQTT</u> (formerly MQ Telemetry Transport)	Official
1900	Assigned	Yes	<u>Simple Service Discovery Protocol (SSDP)</u> , ^[9] discovery of <u>UPnP</u> devices	Official
1935	TCP	UDP	<u>Macromedia Flash Communications Server MX</u> , the precursor to <u>Adobe Flash Media Server</u> before Macromedia's acquisition by Adobe on December 3, 2005	Official

Port	TCP	UDP	Description	IANA status ^[1]
1935	TCP	UDP	<u>Real Time Messaging Protocol</u> (RTMP), primarily used in <u>Adobe Flash</u> ^[128]	Unofficial
1967		UDP	Cisco IOS IP Service Level Agreements (IP SLAs) Control Protocol	Unofficial
1970	TCP	UDP	<u>Netop Remote Control</u>	Official
1972	TCP	UDP	<u>InterSystems Caché</u>	Official
1984	TCP	UDP	<u>Big Brother</u>	Official
1985	Assigned	Yes	Cisco <u>Hot Standby Router Protocol</u> (HSRP) ^[129]	Official
1998	TCP	UDP	<u>Cisco X.25 over TCP (XOT)</u> service	Official
2000	TCP	UDP	Cisco <u>Skinny Client Control Protocol</u> (SCCP)	Official
2010	?	?	<u>Artemis: Spaceship Bridge Simulator</u> ^[130]	Unofficial
2033	TCP	UDP	<u>Civilization IV</u> multiplayer ^[131]	Unofficial
2049	TCP SCTP	UDP	<u>Network File System</u> (NFS) ^[9]	Official
2056	TCP	UDP	<u>Civilization IV</u> multiplayer ^[131]	Unofficial
2080	TCP	UDP	<u>Autodesk NLM (FLEXlm)</u>	Official
2082	TCP		<u>cPanel</u> default ^[132]	Unofficial
2083	TCP	UDP	Secure <u>RADIUS</u> Service (radsec)	Official
2083	TCP		<u>cPanel</u> default <u>SSL</u> ^[132]	Unofficial
2086	TCP	UDP	<u>GNUnet</u>	Official
2086	TCP		<u>WebHost Manager</u> default ^[132]	Unofficial
2087	TCP		<u>WebHost Manager</u> default <u>SSL</u> ^[132]	Unofficial
2095	TCP		<u>cPanel</u> default web mail ^[132]	Official
2096	TCP		<u>cPanel</u> default <u>SSL</u> web mail ^[132]	Unofficial
2100	TCP		<u>Warzone 2100</u> multiplayer	Unofficial
2101	TCP		<u>Networked Transport of RTCM via Internet Protocol</u> (NTRIP)	Unofficial
2102	TCP	UDP	<u>Zephyr Notification Service</u> server	Official
2103	TCP	UDP	<u>Zephyr Notification Service</u> serv-hm connection	Official
2104	TCP	UDP	<u>Zephyr Notification Service</u> hostmanager	Official
2123	TCP	UDP	<u>GTP</u> control messages (GTP-C)	Official
2142	TCP	UDP	<u>TDMoIP</u> (TDM over IP)	Official
2152	TCP	UDP	<u>GTP</u> user data messages (GTP-U)	Official
2159	TCP	UDP	<u>GDB</u> remote debug port	Official
2181	TCP	UDP	<u>EForward</u> -document transport system	Official
2181	TCP		<u>Apache ZooKeeper</u> default client port	Unofficial
2195	TCP		<u>Apple Push Notification Service</u> ^{[9][133]}	Unofficial

Port	TCP	UDP	Description	IANA status ^[1]
2196	TCP		Apple Push Notification Service, feedback service ^{[9][133]}	Unofficial
2210	TCP	UDP	<u>NOAA</u> PORT Broadcast Network	Official
2211	TCP	UDP	<u>EMWIN</u>	Official
2221	TCP		<u>ESET</u> anti-virus updates ^[134]	Unofficial
2222	TCP	UDP	<u>EtherNet/IP</u> implicit messaging for IO data	Official
2222	?	?	<u>DirectAdmin</u> Access ^[135]	Unofficial
2222–2226	TCP		ESET Remote administrator ^[134]	Official
2261	TCP	UDP	<u>CoMotion</u> master	Official
2262	TCP	UDP	CoMotion backup	Official
2266	TCP	UDP	<u>M-Files</u>	Official
2302		UDP	<u>ArmA</u> multiplayer	Unofficial
		UDP	<u>Halo: Combat Evolved</u> multiplayer host ^[136]	Unofficial
2303		UDP	<u>ArmA</u> multiplayer (<i>default port for game +1</i>)	Unofficial
		UDP	<u>Halo: Combat Evolved</u> multiplayer listener ^[136]	Unofficial
2305		UDP	<u>ArmA</u> multiplayer (<i>default port for game +3</i>)	Unofficial
2351	TCP		<u>AIM</u> game LAN network port	Unofficial
2368	TCP		<u>Ghost</u> (blogging platform) ^[137]	Unofficial
2369	TCP		Default for <u>BMC Control-M/Server</u> Configuration Agent	Unofficial
2370	TCP		Default for BMC Control-M/Server, to allow the Control-M/Enterprise Manager to connect to the Control-M/Server	Unofficial
2372	TCP		Default for <u>K9 Web Protection</u> /parental controls, content filtering agent	Unofficial
2375	TCP	Reserved	<u>Docker</u> REST API (plain)	Official
2376	TCP	Reserved	Docker REST API (SSL)	Official
2377	Yes	Reserved	Docker Swarm cluster management communications ^[138]	Official
2379	TCP	Reserved	CoreOS <u>etcd</u> client communication	Official
2379	TCP		<u>KGS Go Server</u> ^[139]	Unofficial
2380	TCP	Reserved	CoreOS <u>etcd</u> server communication	Official
2399	TCP	UDP	<u>FileMaker</u> Data Access Layer (ODBC/JDBC)	Official
2401	TCP	UDP	<u>CVS</u> version control system password-based server	Official
2404	TCP	UDP	<u>IEC 60870-5-104</u> , used to send electric power telecontrol messages between two systems via directly connected <u>data circuits</u>	Official
2424	TCP		<u>OrientDB</u> database listening for binary client connections ^[140]	Unofficial
2427	TCP	UDP	<u>Media Gateway Control Protocol</u> (MGCP) media gateway	Official
2447	TCP	UDP	<u>ovwdb</u> — <u>OpenView Network Node Manager</u> (NNM) daemon	Official
2480	TCP		<u>OrientDB</u> database listening for HTTP client connections ^[140]	Unofficial

Port	TCP	UDP	Description	IANA status ^[1]
2483	TCP	UDP	Oracle database listening for insecure client connections to the listener, replaces port 1521	Official
2484	TCP	UDP	Oracle database listening for <u>SSL</u> client connections to the listener	Official
2535	TCP	UDP	<u>Multicast Address Dynamic Client Allocation Protocol</u> (MADCAP). ^[141] All standard messages are UDP datagrams. ^[142]	Official
2541	TCP	UDP	<u>LonTalk</u> /IP	Official
2546– 2548	TCP	UDP	<u>EVault</u> data protection services	Official
2593	TCP	UDP	<u>Ultima Online</u> servers	Unofficial
2598	TCP		Citrix <u>Independent Computing Architecture</u> (ICA) with Session Reliability; port 1494 without session reliability ^[111]	Unofficial
2599	TCP	UDP	Ultima Online servers	Unofficial
2638	TCP	UDP	<u>SQL Anywhere</u> database server ^{[143][144]}	Official
2710	TCP	UDP	<u>XBT Tracker</u> . ^[145] UDP tracker extension is considered experimental. ^[146]	Unofficial
2727	TCP	UDP	<u>Media Gateway Control Protocol</u> (MGCP) media gateway controller (call agent)	Official
2809	TCP	UDP	corbaloc:iiop URL, per the <u>CORBA</u> 3.0.3 specification	Official
2811	TCP	UDP	gsi ftp, per the <u>GridFTP</u> specification	Official
2827	TCP		<u>I2P BOB Bridge</u> ^[147]	Unofficial
2944	TCP	UDP	<u>Megaco</u> text H.248	Official
2945	TCP	UDP	Megaco binary (ASN.1) H.248	Official
2947	TCP	UDP	<u>gpsd</u> , GPS daemon	Official
2948	TCP	UDP	<u>WAP push</u> <u>Multimedia Messaging Service</u> (MMS)	Official
2949	TCP	UDP	WAP push secure (MMS)	Official
2967	TCP	UDP	<u>Symantec System Center</u> agent (SSC-AGENT)	Official
3000	TCP		<u>Cloud9 IDE</u> server	Unofficial
3000	TCP		<u>Ruby on Rails</u> development default ^[148]	Unofficial
3000	TCP		<u>Meteor</u> development default ^[149]	Unofficial
3000	TCP	UDP	<u>Resilio Sync</u> , ^[150] spun from BitTorrent Sync.	Unofficial
3000		UDP	<u>Distributed Interactive Simulation</u> (DIS)	Unofficial
3004	TCP		<u>iSync</u> ^[9]	Unofficial
3020	TCP	UDP	<u>Common Internet File System</u> (CIFS). See also port 445 for <u>Server Message Block</u> (SMB), a dialect of CIFS.	Official
3050	TCP	UDP	gds-db (<u>Interbase</u> / <u>Firebird</u> databases)	Official
3052	TCP	UDP	<u>APC PowerChute Network</u>	Official
3074	TCP	UDP	Xbox LIVE and <u>Games for Windows – Live</u>	Official
3101	TCP		<u>BlackBerry Enterprise Server</u> communication protocol ^[151]	Unofficial

Port	TCP	UDP	Description	IANA status ^[1]
3128	TCP	?	<u>Squid</u> caching web proxy ^[152]	Unofficial
3225	TCP	UDP	<u>Fibre Channel over IP</u> (FCIP)	Official
3233	TCP	UDP	<u>WhiskerControl</u> research control protocol	Official
3260	TCP	UDP	<u>iSCSI</u>	Official
3268	TCP	UDP	msft-gc, Microsoft Global Catalog (<u>LDAP</u> service which contains data from <u>Active Directory</u> forests)	Official
3269	TCP	UDP	msft-gc-ssl, Microsoft Global Catalog over <u>SSL</u> (similar to port 3268, <u>LDAP</u> over <u>SSL</u>)	Official
3283	TCP	UDP	<i>Net Assistant</i> , ^[9] a predecessor to <i>Apple Remote Desktop</i>	Official
3283	TCP	UDP	<u>Apple Remote Desktop</u> 2.0 or later ^[9]	Unofficial
3290		UDP	<u>Virtual Air Traffic Simulation</u> (VATSIM) network voice communication	Unofficial
3305	TCP	UDP	<u>Odette File Transfer Protocol</u> (OFTP)	Official
3306	TCP	Assigned	<u>MySQL</u> database system ^[9]	Official
3313	TCP		<u>Verisys</u> file integrity monitoring software	Unofficial
3316	TCP		<u>AzimuthVMS</u> database port for the CCTV recording software <u>AzimuthVMS</u>	Unofficial
3323	TCP	UDP	<u>DECE</u> GEODI Server	Unofficial
3332		UDP	Thundercloud DataPath Overlay Control	Unofficial
3333	TCP		<u>Eggdrop</u> , an IRC bot default port ^[153]	Unofficial
3333	TCP		<u>Network Caller ID</u> server	Unofficial
3333	TCP		<u>CruiseControl.rb</u> ^[154]	Unofficial
3351	?	?	<u>Pervasive PSQL</u> ^[117]	Unofficial
3386	TCP	UDP	<u>GTP'</u> <u>3GPP</u> <u>GSM/UMTS</u> CDR logging protocol	Official
3389	TCP	UDP	Microsoft Terminal Server (<u>RDP</u>) officially registered as Windows Based Terminal (WBT) ^[155]	Official
3396	TCP	UDP	<u>Novell</u> NDPS Printer Agent	Official
3412	TCP	UDP	xmlBlaster	Official
3455	TCP	UDP	<u>Resource Reservation Protocol</u> (RSVP)	Official
3423	TCP		Xware xTrm Communication Protocol	Official
3424	TCP		Xware xTrm Communication Protocol over SSL	Official
3478	TCP	UDP	<u>STUN</u> , a protocol for NAT traversal ^[156]	Official
3478	TCP	UDP	<u>TURN</u> , a protocol for NAT traversal ^[157] (extension to STUN)	Official
3478	TCP	UDP	STUN Behavior Discovery. ^[158] See also port 5349.	Official
3479	TCP	UDP	<u>PlayStation Network</u> ^[159]	Unofficial
3480	TCP	UDP	<u>PlayStation Network</u> ^[159]	Unofficial
3483		UDP	<u>Slim Devices</u> discovery protocol	Official

Port	TCP	UDP	Description	IANA status ^[1]
3483	TCP		<u>Slim Devices SlimProto</u> protocol	Official
3493	TCP	UDP	<u>Network UPS Tools (NUT)</u>	Official
3516	TCP	UDP	Smartcard Port	Official
3527		UDP	<u>Microsoft Message Queuing</u>	Official
3535	TCP		<u>SMTP alternate</u> ^[160]	Unofficial
3544		UDP	<u>Teredo tunneling</u>	Official
3632	TCP	Assigned	<u>Distcc</u> , distributed compiler ^[9]	Official
3645	TCP	UDP	<u>Cyc</u>	Official
3659	TCP	UDP	Apple <u>SASL</u> , used by <u>Mac OS X Server Password Server</u> ^[9]	Official
3659		UDP	Battlefield 4	Unofficial
3667	TCP	UDP	Information Exchange	Official
3689	TCP	Assigned	<u>Digital Audio Access Protocol (DAAP)</u> , used by <u>Apple's iTunes</u> and <u>AirPlay</u> ^[9]	Official
3690	TCP	UDP	<u>Subversion (SVN)</u> ^[9] version control system	Official
3702	TCP	UDP	<u>Web Services Dynamic Discovery (WS-Discovery)</u> , used by various components of <u>Windows Vista</u> and later	Official
3724	TCP	UDP	Some <u>Blizzard</u> games ^[108]	Official
3724	TCP		<u>Club Penguin</u> Disney online game for kids	Unofficial
3725	TCP	UDP	Netia NA-ER Port	Official
3768	TCP	UDP	RBLcheckd server daemon	Official
3784		UDP	Bidirectional Forwarding Detection (BFD)for IPv4 and IPv6 (Single Hop) (RFC 5881)	Official
3785		UDP	VoIP program used by <u>Ventrilo</u>	Unofficial
3799		UDP	<u>RADIUS</u> change of authorization	Official
3804	TCP	UDP	Harman Professional HiQnet protocol	Official
3825	TCP		RedSeal Networks client/server connection	Unofficial
3826	TCP	UDP	<u>WarMUX</u> game server	Official
3826	TCP		RedSeal Networks client/server connection	Unofficial
3835	TCP		RedSeal Networks client/server connection	Unofficial
3830	TCP	UDP	System Management Agent, developed and used by Cerner to monitor and manage solutions	Official
3856	TCP	UDP	ERP Server Application used by F10 Software	Unofficial
3880	TCP	UDP	IGRS	Official
3868	TCP	<u>SCTP</u>	<u>Diameter</u> base protocol (RFC 3588)	Official
3872	TCP		<u>Oracle Enterprise Manager Remote Agent</u>	Official
3900	TCP		udt_os, <u>IBM UniData</u> UDT OS ^[161]	Official
3960		UDP	<u>Warframe</u> online interaction	Unofficial

Port	TCP	UDP	Description	IANA status ^[1]
3962		UDP	<i>Warframe</i> online interaction	Unofficial
3978	TCP	UDP	<i>OpenTTD</i> game (masterserver and content service)	Unofficial
3979	TCP	UDP	<i>OpenTTD</i> game	Unofficial
3999	TCP	UDP	Norman distributed scanning service	Official
4000	TCP	UDP	<i>Diablo II</i> game	Unofficial
4001	TCP		<i>Microsoft Ants</i> game	Unofficial
4001	TCP		CoreOS <i>etcd</i> client communication	Unofficial
4018	TCP	UDP	Protocol information and warnings	Official
4035	TCP		IBM Rational Developer for System z Remote System Explorer Daemon	Unofficial
4045	TCP	UDP	Solaris <i>lockd</i> NFS lock daemon/manager	Unofficial
4050	TCP		Mud Master Chat protocol (MMCP) - Peer-to-peer communications between <i>MUD</i> clients. ^[162]	Unofficial
4069		UDP	Minger Email Address Verification Protocol ^[163]	Official
4089	TCP	UDP	OpenCORE Remote Control Service	Official
4090	TCP	UDP	<i>Kerio</i>	Official
4093	TCP	UDP	PxPlus Client server interface <i>ProvideX</i>	Official
4096	TCP	UDP	Ascom Timeplex Bridge Relay Element (BRE)	Official
4105	TCP	UDP	Shofar (ShofarNexus)	Official
4111	TCP	Assigned	<i>Xgrid</i> ^[9]	Official
4116	TCP	UDP	Smartcard-TLS	Official
4125	TCP		Microsoft Remote Web Workplace administration	Unofficial
4172	TCP	UDP	Teradici <i>PCoIP</i>	Official
4190	TCP		ManageSieve ^[164]	Official
4198	TCP	UDP	Couch Potato Android app ^[165]	Unofficial
4201	TCP		<i>TinyMUD</i> and various derivatives	Unofficial
4222	TCP		NATS server default port ^[166]	Unofficial
4226	TCP	UDP	<i>Aleph One</i> , a computer game	Unofficial
4242	TCP		<i>Orthanc</i> – <i>DICOM</i> server ^[167]	Unofficial
4242	TCP		<i>Quassel</i> distributed IRC client	Unofficial
4243	TCP		<i>Docker</i> implementations, redistributions, and setups default ^[168]	Unofficial
4243	TCP		<i>CrashPlan</i>	Unofficial
4244	TCP	UDP	<i>Viber</i> ^[169]	Unofficial
4303	TCP	UDP	Simple Railroad Command Protocol (SRCP)	Official
4307	TCP		<i>TrueConf</i> Client - TrueConf Server media data exchange ^[170]	Official
4321	TCP		Referral Whois (RWhois) Protocol ^[171]	Official

Port	TCP	UDP	Description	IANA status ^[1]
4352	TCP		PJLink, by JBMIA for controlling projectors via LAN connections	Official
4444	TCP	UDP	Oracle WebCenter Content: Content Server—Intradoc Socket port. (formerly known as Oracle <u>Universal Content Management</u>).	Unofficial
4444	?	?	<u>Metasploit's</u> default listener port	Unofficial
4444	TCP	UDP	<u>Xvfb</u> X server virtual frame buffer service	Unofficial
4444–4445	TCP		<u>I2P</u> HTTP/S proxy	Unofficial
4486	TCP	UDP	Integrated Client Message Service (ICMS)	Official
4488	TCP	Assigned	Apple Wide Area Connectivity Service, used by <u>Back to My Mac</u> ^[9]	Official
4500	Assigned	UDP	<u>IPSec NAT Traversal</u> ^[9] (RFC 3947, RFC 4306)	Official
4502–4534	TCP		Microsoft Silverlight connectable ports under non-elevated trust	Official
4505–4506	TCP		<u>Salt</u> master	Unofficial
4534		UDP	<u>Armagetron Advanced</u> server default	Unofficial
4560	TCP		default <u>Log4j</u> socketappender port	Unofficial
4567	TCP		<u>Sinatra</u> default server port in development mode (HTTP)	Unofficial
4569		UDP	<u>Inter-Asterisk eXchange</u> (IAX2)	Official
4604	TCP		<u>Identity Registration Protocol</u>	Official
4605	TCP		<u>Direct End to End Secure Chat Protocol</u>	Official
4610–4640	TCP		<u>QualiSystems</u> TestShell Suite Services	Unofficial
4662	TCP	UDP	OrbitNet Message Service	Official
4662	TCP		Default for older versions of <u>eMule</u> ^[172]	Unofficial
4664	TCP		<u>Google Desktop Search</u>	Unofficial
4672		UDP	Default for older versions of <u>eMule</u> ^[172]	Unofficial
4711	TCP		<u>eMule</u> optional web interface ^[172]	Unofficial
4713	TCP		<u>PulseAudio</u> sound server	Unofficial
4728	TCP		Computer Associates Desktop and Server Management (DMP)/Port Multiplexer ^[173]	Official
4730	TCP	UDP	<u>Gearman's</u> job server	Official
4739	TCP	UDP	<u>IP Flow Information Export</u>	Official
4747	TCP		<u>Apprentice</u>	Unofficial
4750	TCP		<u>BladeLogic</u> Agent	Unofficial
4753	TCP	UDP	SIMON (service and discovery)	Official
4789		UDP	Virtual eXtensible Local Area Network (VXLAN) ^[174]	Official
4840	TCP	UDP	OPC UA Connection Protocol (TCP) and OPC UA Multicast Datagram Protocol (UDP) for <u>OPC Unified Architecture</u> from <u>OPC Foundation</u>	Official

Port	TCP	UDP	Description	IANA status ^[1]
4843	TCP	UDP	OPC UA TCP Protocol over TLS/SSL for <u>OPC Unified Architecture</u> from <u>OPC Foundation</u>	Official
4847	TCP	UDP	Web Fresh Communication, Quadtrion Software & Odorless Entertainment	Official
4848	TCP		Java, Glassfish Application Server administration default	Unofficial
4894	TCP	UDP	<u>LysKOM</u> Protocol A	Official
4949	TCP		Munin Resource Monitoring Tool	Official
4950	TCP	UDP	Cylon Controls UC32 Communications Port	Official
5000	TCP		<u>UPnP</u> —Windows network device interoperability	Unofficial
5000	TCP	UDP	<u>VTun</u> , <u>VPN</u> Software	Unofficial
5000		UDP	<u>FlightGear</u> multiplayer ^[175]	Unofficial
5000	TCP		<u>Synology Inc.</u> Management Console, File Station, Audio Station	Unofficial
5000	TCP		<u>Flask</u> Development Webserver	Unofficial
5000	TCP		<u>Heroku</u> console access	Official
5000	TCP		AT&T U-verse public, educational, and government access (PEG) streaming over <u>HTTP</u> ^[176]	Unofficial
5000–5500	No	Yes	<i>League of Legends</i> , a <u>multiplayer online battle arena</u> video game ^[177]	Unofficial
5001	TCP		<u>Slingbox</u> and Slingplayer	Unofficial
5001	TCP	UDP	<u>Iperf</u> (Tool for measuring TCP and UDP bandwidth performance)	Unofficial
5001	TCP		<u>Synology Inc.</u> Secured Management Console, File Station, Audio Station	Unofficial
5002	TCP		ASSA ARX access control system ^[178]	Unofficial
5003	TCP	Assigned	<u>FileMaker</u> – name binding and transport ^[9]	Official
5004	TCP <u>DCCP</u>	UDP	<u>Real-time Transport Protocol</u> media data (RTP) (<u>RFC 3551</u> , <u>RFC 4571</u>)	Official
5005	TCP <u>DCCP</u>	UDP	Real-time Transport Protocol control protocol (RTCP) (<u>RFC 3551</u> , <u>RFC 4571</u>)	Official
5010	TCP	UDP	Registered to: TelePath (the IBM FlowMark <u>workflow-management system</u> messaging platform) ^[179] The TCP port is now used for: IBM <u>WebSphere MQ</u> Workflow	Official
5011	TCP	UDP	TelePath (the IBM FlowMark <u>workflow-management system</u> messaging platform) ^[179]	Official
5031	TCP	UDP	AVM CAPI-over-TCP (ISDN over <u>Ethernet</u> tunneling)	Unofficial
5037	TCP		Android ADB server	Unofficial
5048	TCP		Texai Message Service	Official
5050	TCP		<u>Yahoo! Messenger</u>	Unofficial
5051	TCP		ita-agent <u>Symantec</u> Intruder Alert ^[180]	Official
5060	TCP	UDP	<u>Session Initiation Protocol</u> (SIP) ^[9]	Official

Port	TCP	UDP	Description	IANA status ^[1]
5061	TCP		<u>Session Initiation Protocol</u> (SIP) over <u>TLS</u>	Official
5062	TCP	UDP	Localisation access	Official
5064	Yes	Yes	<u>EPICS Channel Access server</u> ^[181]	Official
5065	Assigned	Yes	<u>EPICS Channel Access repeater beacon</u> ^[181]	Official
5070	Yes	No	<u>Binary Floor Control Protocol</u> (BFCP) ^[182]	Unofficial
5084	TCP	UDP	<u>EPCglobal Low Level Reader Protocol</u> (LLRP)	Official
5085	TCP	UDP	<u>EPCglobal Low Level Reader Protocol</u> (LLRP) over <u>TLS</u>	Official
5093		UDP	<u>SafeNet, Inc Sentinel LM, Sentinel RMS, License Manager, client-to-server</u>	Official
5099	TCP	UDP	<u>SafeNet, Inc Sentinel LM, Sentinel RMS, License Manager, server-to-server</u>	Official
5104	TCP		<u>IBM Tivoli Framework NetCOOL/Impact</u> ^[183] <u>HTTP Service</u>	Unofficial
5121	TCP		<u>Neverwinter Nights</u>	Unofficial
5124	TCP	UDP	<u>TorgaNET (Micronational Darknet)</u>	Unofficial
5125	TCP	UDP	<u>TorgaNET (Micronational Intelligence Darknet)</u>	Unofficial
5150	TCP	UDP	<u>ATMP Ascend Tunnel Management Protocol</u> ^[184]	Official
5151	TCP		<u>ESRI SDE Instance</u>	Official
5151		UDP	<u>ESRI SDE Remote Start</u>	Official
5154	TCP	UDP	<u>BZFlag</u>	Official
5172	TCP		<u>PC over IP Endpoint Management</u> ^[185]	Official
5190	Yes	Yes	<u>AOL Instant Messenger protocol</u> . ^[9] The chat app is defunct as of 15 December 2017. ^[186]	Official
5198		UDP	<u>EchoLink VoIP Amateur Radio Software (Voice)</u>	Unofficial
5199		UDP	<u>EchoLink VoIP Amateur Radio Software (Voice)</u>	Unofficial
5200	TCP		<u>EchoLink VoIP Amateur Radio Software (Information)</u>	Unofficial
5201	TCP	UDP	<u>Iperf3</u> (Tool for measuring TCP and UDP bandwidth performance)	Unofficial
5222	TCP	Reserved	<u>Extensible Messaging and Presence Protocol</u> (XMPP) client connection ^{[9][187][188]}	Official
5223	TCP		<u>Apple Push Notification Service</u> ^{[9][133]}	Unofficial
5223	TCP		<u>Extensible Messaging and Presence Protocol</u> (XMPP) client connection over <u>SSL</u>	Unofficial
5228	TCP		<u>HP Virtual Room Service</u>	Official
5228	TCP		<u>Google Play, Android Cloud to Device Messaging Service, Google Cloud Messaging</u>	Unofficial
5242	TCP	UDP	<u>Viber</u> ^[169]	Unofficial
5243	TCP	UDP	<u>Viber</u> ^[169]	Unofficial
5246		UDP	<u>Control And Provisioning of Wireless Access Points</u> (CAPWAP) CAPWAP control ^[189]	Official

Port	TCP	UDP	Description	IANA status ^[1]
5247		UDP	Control And Provisioning of Wireless Access Points (CAPWAP) CAPWAP data ^[189]	Official
5269	TCP		Extensible Messaging and Presence Protocol (XMPP) server-to-server connection ^{[9][187][188]}	Official
5280	TCP		Extensible Messaging and Presence Protocol (XMPP) ^[190]	Official
5281	TCP		Undo License Manager	Official
5281	TCP		Extensible Messaging and Presence Protocol (XMPP) ^[191]	Unofficial
5298	TCP	UDP	Extensible Messaging and Presence Protocol (XMPP) ^[192]	Official
5310	TCP	UDP	<u>Outlaws (1997 video game)</u> . Both UDP and TCP are reserved, but only UDP is used	Official
5349	Yes/No	Yes/No	<u>STUN</u> over <u>TLS/DTLS</u> , a protocol for <u>NAT traversal</u> ^[156]	Official
5349	Yes/No	Yes/No	<u>TURN</u> over <u>TLS/DTLS</u> , a protocol for <u>NAT traversal</u> ^[157]	Official
5349	TCP	Reserved	STUN Behavior Discovery over TLS. ^[158] See also port 3478.	Official
5351	Reserved	UDP	<u>NAT Port Mapping Protocol</u> and <u>Port Control Protocol</u> —client-requested configuration for connections through <u>network address translators</u> and <u>firewalls</u>	Official
5353	Assigned	UDP	<u>Multicast DNS</u> (mDNS) ^[9]	Official
5355	TCP	UDP	<u>Link-Local Multicast Name Resolution</u> (LLMNR), allows hosts to perform name resolution for hosts on the same <u>local link</u> (only provided by <u>Windows Vista</u> and <u>Server 2008</u>)	Official
5357	TCP	UDP	<u>Web Services for Devices</u> (WSDAPI) (only provided by <u>Windows Vista</u> , <u>Windows 7</u> and <u>Server 2008</u>)	Unofficial
5358	TCP	UDP	<u>WSDAPI Applications to Use a Secure Channel</u> (only provided by <u>Windows Vista</u> , <u>Windows 7</u> and <u>Server 2008</u>)	Unofficial
5394		UDP	Kega Fusion, a Sega multi-console emulator ^{[193][194]}	Unofficial
5402	TCP	UDP	<u>Multicast File Transfer Protocol</u> (MFTP) ^[195]	Official
5405	TCP	UDP	<u>NetSupport Manager</u>	Official
5412	TCP	UDP	<u>IBM Rational Synergy</u> (<u>Telelogic Synergy</u>) (<u>Continuus CM</u>) <u>Message Router</u>	Official
5413	TCP	UDP	<u>Wonderware SuiteLink</u> service	Official
5417	TCP	UDP	<u>SNS Agent</u>	Official
5421	TCP	UDP	<u>NetSupport Manager</u>	Official
5432	TCP	Assigned	<u>PostgreSQL</u> ^[9] database system	Official
5433	TCP		<u>Bouwssoft file/webserver</u> ^[196]	Unofficial
5445		UDP	<u>Cisco Unified Video Advantage</u>	Unofficial
5480	TCP		<u>VMware VAMI</u> (<u>Virtual Appliance Management Infrastructure</u>)—used for initial setup of various administration settings on <u>Virtual Appliances</u> designed using the <u>VAMI architecture</u> .	Unofficial
5481	TCP		<u>Schneider Electric's ClearSCADA</u> (<u>SCADA implementation for Windows</u>) — used for client-to-server communication. ^[197]	Unofficial

Port	TCP	UDP	Description	IANA status ^[1]
5495	TCP		<u>IBM Cognos TM1 Admin server</u>	Unofficial
5498	TCP		<u>Hotline</u> tracker server connection	Unofficial
5499		UDP	Hotline tracker server discovery	Unofficial
5500	TCP		Hotline control connection	Unofficial
5500	TCP		<u>VNC Remote Frame Buffer RFB protocol</u> —for incoming listening viewer	Unofficial
5501	TCP		Hotline file transfer connection	Unofficial
5517	TCP		<u>Setiqueue</u> Proxy server client for <u>SETI@Home</u> project	Unofficial
5550	TCP		<u>Hewlett-Packard Data Protector</u>	Unofficial
5554	TCP	UDP	<u>Fastboot</u> default wireless port	Unofficial
5555	TCP	UDP	Oracle WebCenter Content: Inbound Refinery—Intradoc Socket port. (formerly known as Oracle Universal Content Management). Port though often changed during installation	Unofficial
5555	TCP		Freeciv versions up to 2.0, Hewlett-Packard Data Protector, McAfee EndPoint Encryption Database Server, SAP, Default for Microsoft Dynamics CRM 4.0, Softether VPN default port	Unofficial
5556	TCP	UDP	<u>Freeciv</u> , Oracle WebLogic Server Node Manager ^[198]	Official
5568	TCP	UDP	Session Data Transport (SDT), a part of <u>Architecture for Control Networks</u> (ACN) ^[199]	Official
5601	TCP		<u>Kibana</u>	Unofficial
5631	TCP		pcANYWHEREdata, Symantec pcAnywhere (version 7.52 and later ^[200]) ^[201] data	Official
5632		UDP	pcANYWHEREstat, Symantec pcAnywhere (version 7.52 and later) status	Official
5656	TCP		<u>IBM Lotus Sametime</u> p2p file transfer	Unofficial
5666	TCP		<u>NRPE</u> (Nagios)	Unofficial
5667	TCP		<u>NSCA</u> (Nagios)	Unofficial
5670	TCP		<u>FILEMQ</u> ZeroMQ File Message Queuing Protocol	Official
5670		UDP	<u>ZRE-DISC</u> ZeroMQ Realtime Exchange Protocol (Discovery)	Official
5672	TCP		<u>AMQP</u> ^[202]	Official
5678		UDP	<u>Mikrotik RouterOS</u> Neighbor Discovery Protocol (MNDP)	Unofficial
5683		UDP	Constrained Application Protocol (CoAP)	Official
5701	TCP		<u>Hazelcast</u> default communication port ^[203]	Unofficial
5722	TCP	UDP	Microsoft RPC, DFSR (SYSVOL) Replication Service	Official
5718	TCP		Microsoft DPM Data Channel (with the agent coordinator)	Unofficial
5719	TCP		Microsoft DPM Data Channel (with the protection agent)	Unofficial
5723	TCP		<u>System Center Operations Manager</u> ^[204]	Unofficial
5724	TCP		Operations Manager Console	Unofficial

Port	TCP	UDP	Description	IANA status ^[1]
5741	TCP	UDP	IDA Discover Port 1	Official
5742	TCP	UDP	IDA Discover Port 2	Official
5800	TCP		<u>VNC Remote Frame Buffer RFB protocol</u> over <u>HTTP</u>	Unofficial
5800	TCP		<u>ProjectWise Server</u> ^[205]	Unofficial
5900	TCP	UDP	<u>Remote Frame Buffer protocol</u> (RFB)	Official
5900	TCP		<u>Virtual Network Computing (VNC) Remote Frame Buffer RFB protocol</u> ^{[9][206]}	Unofficial
5931	TCP	UDP	<u>AMMY admin Remote Control</u>	Official
5938	TCP	UDP	<u>TeamViewer remote desktop protocol</u> ^[207]	Unofficial
5984	TCP	UDP	<u>CouchDB database server</u>	Official
5985	TCP		<u>Windows PowerShell Default psSession Port</u> ^[208]	Official
5986	TCP		<u>Windows PowerShell Default psSession Port</u> ^[208]	Official
5988–5989	TCP		<u>CIM-XML (DMTF Protocol)</u> ^[209]	Official
6000–6063	TCP	UDP	<u>X11</u> —used between an X client and server over the network	Official
6005	TCP		Default for <u>BMC Software Control-M/Server</u> —Socket used for communication between Control-M processes—though often changed during installation	Unofficial
6005	TCP		Default for <u>Camfrog chat & cam client</u>	Unofficial
6009	TCP		<u>JD Edwards EnterpriseOne ERP system JDENet messaging client listener</u>	Unofficial
6050	TCP		<u>Arcserve backup</u>	Unofficial
6051	TCP		<u>Arcserve backup</u>	Unofficial
6086	TCP		<u>Peer Distributed Transfer Protocol (PDTP)</u> , FTP like file server in a P2P network	Official
6100	TCP		<u>Vizrt System</u>	Unofficial
6100	TCP		<u>Ventrilo authentication for version 3</u>	Unofficial
6101	TCP		<u>Backup Exec Agent Browser</u>	Unofficial
6110	TCP	UDP	softcm, <u>HP Softbench CM</u>	Official
6111	TCP	UDP	spc, <u>HP Softbench Sub-Process Control</u>	Official
6112	TCP	UDP	dtspcd, execute commands and launch applications remotely	Official
6112	TCP	UDP	<u>Blizzard's Battle.net gaming service</u> and some games, ^[108] <u>ArenaNet gaming service</u> , <u>Relic gaming service</u>	Unofficial
6112	TCP		<u>Club Penguin Disney online game for kids</u>	Unofficial
6113	TCP		<u>Club Penguin Disney online game for kids</u> , Used by some <u>Blizzard games</u> ^[108]	Unofficial
6136	TCP		<u>ObjectDB database server</u> ^[210]	Unofficial
6159	TCP		<u>ARINC 840 EFB Application Control Interface</u>	Official

Port	TCP	UDP	Description	IANA status ^[1]
6200	TCP		<u>Oracle WebCenter Content Portable: Content Server (With Native UI) and Inbound Refinery</u>	Unofficial
6201	TCP		<u>Oracle WebCenter Content Portable: Admin</u>	Unofficial
6225	TCP		<u>Oracle WebCenter Content Portable: Content Server Web UI</u>	Unofficial
6227	TCP		<u>Oracle WebCenter Content Portable: JavaDB</u>	Unofficial
6240	TCP		<u>Oracle WebCenter Content Portable: Capture</u>	Unofficial
6244	TCP	UDP	<u>Oracle WebCenter Content Portable: Content Server—Intradoc Socket port</u>	Unofficial
6255	TCP	UDP	<u>Oracle WebCenter Content Portable: Inbound Refinery—Intradoc Socket port</u>	Unofficial
6257		UDP	<u>WinMX</u> (see also 6699)	Unofficial
6260	TCP	UDP	<u>planet M.U.L.E.</u>	Unofficial
6262	TCP		<u>Sybase Advantage Database Server</u>	Unofficial
6343		UDP	<u>SFlow</u> , sFlow traffic monitoring	Official
6346	TCP	UDP	<u>gnutella-svc</u> , gnutella (<u>FrostWire</u> , <u>Limewire</u> , <u>Shareaza</u> , etc.)	Official
6347	TCP	UDP	<u>gnutella-rtr</u> , Gnutella alternate	Official
6350	TCP	UDP	<u>App Discovery and Access Protocol</u>	Official
6379	TCP		<u>Redis</u> key-value data store	Official
6389	TCP		<u>EMC CLARiiON</u>	Unofficial
6432	TCP		<u>PgBouncer</u> —A connection pooler for PostgreSQL	Official
6436	TCP		<u>Leap Motion Websocket Server TLS</u>	Unofficial
6437	TCP		<u>Leap Motion Websocket Server</u>	Unofficial
6444	TCP	UDP	<u>Sun Grid Engine Qmaster Service</u>	Official
6445	TCP	UDP	<u>Sun Grid Engine Execution Service</u>	Official
6463–6472	TCP		<u>Discord</u> RPC ^[211]	Unofficial
6502	TCP	UDP	<u>Netop Remote Control</u>	Unofficial
6513	TCP		<u>NETCONF</u> over <u>TLS</u>	Official
6514	TCP		<u>Syslog</u> over <u>TLS</u> ^[212]	Official
6515	TCP	UDP	<u>Elipse</u> RPC Protocol (REC)	Official
6543	TCP		<u>Pylons project</u> <u>#Pyramid</u> Default Pylons Pyramid web service port	Unofficial
6556	TCP		<u>Check MK Agent</u>	Unofficial
6566	TCP		<u>SANE</u> (Scanner Access Now Easy)—SANE network scanner daemon ^[213]	Official
6560–6561	TCP		<u>Speech-Dispatcher</u> daemon	Unofficial
6571			<u>Windows Live FolderShare</u> client	Unofficial
6600	TCP		Microsoft <u>Hyper-V</u> Live	Official

Port	TCP	UDP	Description	IANA status ^[1]
6600	TCP		Music Player Daemon (MPD)	Unofficial
6601	TCP		Microsoft Forefront Threat Management Gateway	Official
6602	TCP		Microsoft Windows WSS Communication	Official
6619	TCP	UDP	odette-fts , Odette File Transfer Protocol (OFTP) over TLS/SSL	Official
6622	TCP	UDP	Multicast FTP	Official
6653	Yes	Assigned	OpenFlow	Official
6660–6664	TCP		Internet Relay Chat (IRC)	Unofficial
6665–6669	TCP		Internet Relay Chat (IRC)	Official
6679	TCP	UDP	Osorno Automation Protocol (OSAUT)	Official
6679	TCP		IRC SSL (Secure Internet Relay Chat)—often used	Unofficial
6690	TCP		Synology Cloud station	Unofficial
6697	TCP		IRC SSL (Secure Internet Relay Chat)—often used	Official
6699	TCP		WinMX (see also 6257)	Unofficial
6715	TCP		AberMUD and derivatives default port	Unofficial
6771		UDP	BitTorrent Local Peer Discovery	Unofficial
6783–6785	TCP		Splashtop Remote server broadcast	Unofficial
6789	TCP		Campbell Scientific Loggernet Software ^[214]	Unofficial
6789	TCP		Bucky's Instant Messaging Program	Unofficial
6869	TCP		Derandom default server	Unofficial
6881–6887	TCP	UDP	BitTorrent part of full range of ports used most often	Unofficial
6888	TCP	UDP	MUSE	Official
6888	TCP	UDP	BitTorrent part of full range of ports used most often	Unofficial
6889–6890	TCP	UDP	BitTorrent part of full range of ports used most often	Unofficial
6891–6900	TCP	UDP	BitTorrent part of full range of ports used most often	Unofficial
6891–6900	TCP	UDP	Windows Live Messenger (File transfer)	Unofficial
6901	TCP	UDP	Windows Live Messenger (Voice)	Unofficial
6901	TCP	UDP	BitTorrent part of full range of ports used most often	Unofficial
6902–6968	TCP	UDP	BitTorrent part of full range of ports used most often	Unofficial
6969	TCP	UDP	acmsoda	Official
6969	TCP		BitTorrent tracker	Unofficial

Port	TCP	UDP	Description	IANA status ^[1]
6970–6999	TCP	UDP	BitTorrent part of full range of ports used most often	Unofficial
6970–9999		UDP	<u>QuickTime Streaming Server</u> ^[9]	Unofficial
7000	TCP		Default for Vuze's built in <u>HTTPS Bittorrent Tracker</u>	Unofficial
7000	TCP		<u>Avira Server Management Console</u>	Unofficial
7001	TCP		<u>Avira Server Management Console</u>	Unofficial
7001	TCP		Default for BEA <u>WebLogic Server's HTTP</u> server, though often changed during installation	Unofficial
7002	TCP		Default for BEA <u>WebLogic Server's HTTPS</u> server, though often changed during installation	Unofficial
7005	TCP		Default for BMC Software Control-M/Server and Control-M/Agent for Agent-to-Server, though often changed during installation	Unofficial
7006	TCP		Default for BMC Software Control-M/Server and Control-M/Agent for Server-to-Agent, though often changed during installation	Unofficial
7010	TCP		Default for Cisco AON AMC (AON Management Console) ^[215]	Unofficial
7022	TCP		Database mirroring endpoints ^[216]	Unofficial
7023		UDP	Bryan Wilcutt T2-NMCS Protocol for SatCom Modems	Official
7025	TCP		Zimbra <u>LMTP</u> [mailbox]—local mail delivery	Unofficial
7047	TCP		Zimbra conversion server	Unofficial
7070	Yes	Yes/No	<u>Real Time Streaming Protocol (RTSP)</u> , used by <u>QuickTime Streaming Server</u> . TCP is used by default, UDP is used as an alternate. ^[9]	Unofficial
7133	TCP		<u>Enemy Territory: Quake Wars</u>	Unofficial
7144	TCP		Peercast	Unofficial
7145	TCP		Peercast	Unofficial
7171	TCP		<u>Tibia</u>	Unofficial
7262	TCP	UDP	CNAP (Calypso Network Access Protocol)	Official
7272	TCP	UDP	WatchMe - WatchMe Monitoring	Official
7306	TCP		Zimbra mysql [mailbox]	Unofficial
7307	TCP		Zimbra mysql [logger]	Unofficial
7312		UDP	<u>Sibelius</u> License Server	Unofficial
7396	TCP		Web control interface for <u>Folding@home v7.3.6</u> and later ^[217]	Unofficial
7400	TCP	UDP	RTPS (Real Time Publish Subscribe) <u>DDS</u> Discovery	Official
7401	TCP	UDP	RTPS (Real Time Publish Subscribe) <u>DDS</u> User-Traffic	Official
7402	TCP	UDP	RTPS (Real Time Publish Subscribe) <u>DDS</u> Meta-Traffic	Official
7471	TCP		Stateless Transport Tunneling (STT)	Unofficial
7473	TCP		<u>Rise: The Vieneo Province</u>	Official
7474	TCP		Neo4J Server webadmin ^[218]	Official

Port	TCP	UDP	Description	IANA status ^[1]
7478	TCP		Default port used by <u>Open iT Server</u> . ^[219]	Official
7542	TCP	UDP	<i>Saratoga</i> file transfer protocol ^{[220][221]}	Official
7547	TCP	UDP	CPE WAN Management Protocol (CWMP) <u>Technical Report 069</u>	Official
7575		UDP	<u>Populous: The Beginning</u> server	Unofficial
7624	TCP	UDP	<u>Instrument Neutral Distributed Interface</u>	Official
7631	TCP		ERLPhase	Official
7634	TCP		hddtemp—Utility to monitor hard drive temperature	Unofficial
7652–7654	TCP		<u>I2P</u> anonymizing overlay network	Unofficial
7655		UDP	I2P SAM Bridge Socket API	Unofficial
7656–7660	TCP		I2P anonymizing overlay network	Unofficial
7670	TCP		<u>BrettspielWelt</u> BSW Boardgame Portal	Unofficial
7687	TCP		<u>Bolt</u> database connection	Official
7707–7708		UDP	<i>Killing Floor</i>	Unofficial
7717		UDP	<i>Killing Floor</i>	Unofficial
7777	TCP		iChat server file transfer proxy ^[9]	Unofficial
7777	TCP		Oracle Cluster File System 2	Unofficial
7777	TCP		Windows backdoor program tini.exe default	Unofficial
7777	TCP		<i>Just Cause 2: Multiplayer Mod</i> Server	Unofficial
7777	TCP		<i>Terraria</i> default server	Unofficial
7777		UDP	<i>San Andreas Multiplayer</i> (SA-MP) default port server	Unofficial
7777–7788	TCP	UDP	<i>Unreal Tournament</i> series default server	Unofficial
7831	TCP		Default used by Smartlaunch Internet Cafe Administration ^[222] software	Unofficial
7880	TCP	UDP	PowerSchool Gradebook Server	Unofficial
7890	TCP		Default that will be used by the iControl Internet Cafe Suite Administration software	Unofficial
7915	TCP		Default for YSFlight server ^[223]	Unofficial
7935	TCP		Fixed port used for Adobe Flash Debug Player to communicate with a debugger (Flash IDE, Flex Builder or fdb). ^[224]	Unofficial
7946	Yes	Yes	Docker Swarm communication among nodes ^[138]	Unofficial
7990	TCP		Atlassian <u>Bitbucket</u> (default port)	Unofficial
8000	TCP		Commonly used for Internet radio streams such as <u>SHOUTcast</u> , <u>Icecast</u> and <u>iTunes Radio</u> ^[9]	Unofficial
8000	?	?	<u>DynamoDB Local</u> ^[225]	Unofficial

Port	TCP	UDP	Description	IANA status ^[1]
8000	?	?	<u>Django</u> Development Webserver ^[226]	Unofficial
8005	TCP		<u>Tomcat</u> remote shutdown ^[9]	Unofficial
8006	TCP		<u>Quest AppAssure 5 API</u> ^[227]	Unofficial
8007	TCP		<u>Quest AppAssure 5 Engine</u> ^[227]	Unofficial
8008	TCP	UDP	Alternative port for <u>HTTP</u> . See also ports 80 and 8080.	Official
8008	TCP		<u>IBM HTTP Server</u> administration default	Unofficial
8008	TCP		<u>iCal</u> , a calendar application by <u>Apple</u> ^[9]	Unofficial
8009	TCP		<u>Apache JServ Protocol</u> (ajp13)	Unofficial
8042	?	?	<u>Orthanc</u> – REST API over HTTP ^[167]	Unofficial
8069	TCP		<u>OpenERP 5.0 XML-RPC</u> protocol ^[228]	Unofficial
8070	TCP		<u>OpenERP 5.0 NET-RPC</u> protocol ^[228]	Unofficial
8074	TCP	UDP	<u>Gadu-Gadu</u>	Official
8075	TCP		<i>Killing Floor</i> web administration interface	Unofficial
8080	TCP	UDP	Alternative port for <u>HTTP</u> . See also ports 80 and 8008.	Official
8080	TCP		<u>Apache Tomcat</u>	Unofficial
8080	TCP		<u>Atlassian JIRA</u> applications ^[229]	Unofficial
8088	TCP		<u>Asterisk</u> management access via HTTP	Unofficial
8089	Yes	No	<u>Splunk</u> daemon management ^[230]	Unofficial
8089	TCP		<u>Fritz!Box</u> automatic <u>TR-069</u> configuration ^[231]	Unofficial
8090	?	?	<u>Atlassian Confluence</u> ^[232]	Unofficial
8090	TCP		<u>Coral Content Distribution Network</u> (legacy; 80 and 8080 now supported) ^[233]	Unofficial
8091	?	?	<u>CouchBase</u> web administration ^[234]	Unofficial
8092	?	?	<u>CouchBase API</u> ^[234]	Unofficial
8111	TCP		<u>JOSM</u> Remote Control	Unofficial
8112	TCP		PAC Pacifica Coin	Unofficial
8116		UDP	<u>Check Point Cluster Control Protocol</u>	Unofficial
8118	TCP		<u>Privoxy</u> —advertisement-filtering Web proxy	Official
8123	TCP		<u>Polipo</u> Web proxy	Official
8139	TCP		<u>Puppet</u> (software) Client agent	Unofficial
8140	TCP		<u>Puppet</u> (software) Master server	Official
8172	TCP		<u>Microsoft Remote Administration for IIS Manager</u> ^[235]	Unofficial
8184	TCP		<u>NCSA Brown Dog</u> Data Access Proxy	Unofficial
8194–8195	?	?	<u>Bloomberg Terminal</u> ^[236]	Official

Port	TCP	UDP	Description	IANA status ^[1]
8200	TCP		GoToMyPC	Unofficial
8200	TCP		MiniDLNA media server Web Interface	
8222	?	?	VMware VI Web Access via HTTP ^[237]	Unofficial
8243	TCP	UDP	HTTPS listener for Apache Synapse ^[238]	Official
8245	TCP		Dynamic DNS for at least No-IP and DyDNS ^[239]	Unofficial
8280	TCP	UDP	HTTP listener for Apache Synapse ^[238]	Official
8281	TCP		HTTP Listener for Gatecraft Plugin	Unofficial
8291	TCP		Winbox—Default on a MikroTik RouterOS for a Windows application used to administer MikroTik RouterOS ^[240]	Unofficial
8303		UDP	Teeworlds Server	Unofficial
8332	TCP		Bitcoin JSON-RPC server ^[241]	Unofficial
8333	TCP		Bitcoin ^[242]	Unofficial
8333	?	?	VMware VI Web Access via HTTPS ^[237]	Unofficial
8337	TCP		VisualSVN Distributed File System Service (VDFS) ^[243]	Unofficial
8384	TCP		Syncthing web GUI	Unofficial
8388	TCP		Shadowsocks proxy server	Unofficial
8443	TCP		SW Soft Plesk Control Panel	Unofficial
8443	TCP		Apache Tomcat SSL	Unofficial
8443	TCP		Promise WebPAM SSL	Unofficial
8443	TCP		iCal over SSL ^[9]	Unofficial
8444	TCP		Bitmessage	Unofficial
8484	TCP		MapleStory Login Server	Unofficial
8500	TCP		Adobe ColdFusion built-in web server ^[244]	Unofficial
8530	?	?	Windows Server Update Services over HTTP ^{[245][246]}	Unofficial
8531	?	?	Windows Server Update Services over HTTPS ^{[246][245]}	Unofficial
8580	?	?	Freemove , an Internet anonymizer and proxy tool ^[247]	Unofficial
8629	TCP		Tibero database	Unofficial
8642	TCP		Lotus Notes Traveler auto synchronization for Windows Mobile and Nokia devices ^[248]	Unofficial
8691	TCP		Ultra Fractal , a fractal generation and rendering software application – distributed calculations over networked computers ^{[249][250]}	Unofficial
8767		UDP	Voice channel of TeamSpeak 2 , ^[251] a proprietary Voice over IP protocol targeted at gamers	Unofficial
8834	?	?	Nessus , a vulnerability scanner – remote XML-RPC web server ^[252]	Unofficial
8840	?	?	Opera Unite , an extensible framework for web applications ^{[253][254]}	Unofficial

Port	TCP	UDP	Description	IANA status ^[1]
8880	TCP		Alternate port of <u>CDDDB</u> (Compact Disc Database) protocol, used to look up audio CD (<u>compact disc</u>) information over the <u>Internet</u> . ^[255] See also port 888.	Official
8880	?	?	<u>IBM WebSphere Application Server SOAP connector</u> ^[256]	Unofficial
8883	TCP	UDP	Secure <u>MQTT</u> (MQTT over TLS) ^{[257][258]}	Official
8887	?	?	<u>HyperVM</u> over HTTP	Unofficial
8888	?	?	<u>HyperVM</u> over <u>HTTPS</u>	Unofficial
8888	?	UDP	<u>Freenet</u> web UI (localhost only)	Unofficial
8888	?	?	Default for <u>IPython</u> ^[259] / <u>Jupyter</u> ^[260] notebook dashboards	Unofficial
8888	?	?	<u>MAMP</u> ^[261]	Unofficial
8889	?	?	<u>MAMP</u> ^[261]	Unofficial
8983	?	?	<u>Apache Solr</u> ^[262]	Unofficial
8997	?	?	Alternate port for <u>I2P Monotone Proxy</u> ^[147]	Unofficial
8998	?	?	<u>I2P Monotone Proxy</u> ^[147]	Unofficial
8999	?	?	Alternate port for <u>I2P Monotone Proxy</u> ^[147]	Unofficial
9000	TCP		<u>SonarQube Web Server</u> ^[263]	Unofficial
9000	TCP		<u>DBGp</u>	Unofficial
9000	TCP		<u>SqueezeCenter</u> web server & streaming	Unofficial
9000		UDP	<u>UDPCast</u>	Unofficial
9000	TCP		<u>Play! Framework</u> web server ^[264]	Unofficial
9000	TCP		<u>Hadoop NameNode</u> default port	Unofficial
9000	TCP		<u>PHP-FPM</u> default port	Unofficial
9000	TCP		<u>QBittorrent</u> 's embedded torrent tracker default port ^[265]	Unofficial
9001	TCP	UDP	<u>ETL Service Manager</u> ^[266]	Official
9001			<u>Microsoft SharePoint</u> authoring environment	Unofficial
9001			cisco-xremote router configuration	Unofficial
9001			<u>Tor</u> network default	Unofficial
9001	TCP		<u>DBGp Proxy</u>	Unofficial
9001	TCP		<u>HSQLDB</u> default port	Unofficial
9002			<u>Newforma Server</u> comms	Unofficial
9006			De-Commissioned Port	Official
9006	TCP		<u>Tomcat</u> in standalone mode ^[9]	Unofficial
9030	TCP		<u>Tor</u> often used	Unofficial
9042	TCP		<u>Apache Cassandra</u> native protocol clients	Unofficial
9043	TCP		<u>WebSphere Application Server Administration Console</u> secure	Unofficial

Port	TCP	UDP	Description	IANA status ^[1]
9050–9051	TCP		<u>Tor</u>	Unofficial
9060	TCP		<u>WebSphere Application Server Administration Console</u>	Unofficial
9080	TCP	UDP	glrpc, <u>Groove Collaboration software</u> GLRPC	Official
9080	TCP		<u>WebSphere Application Server HTTP</u> Transport (port 1) <u>default</u>	Unofficial
9080	TCP		Remote Potato by FatAttitude, Windows Media Center addon	Unofficial
9080	TCP		ServerWMC, Windows Media Center addon	Unofficial
9090	TCP		<u>Openfire Administration Console</u>	Unofficial
9090	TCP		<u>SqueezeCenter</u> control (CLI)	Unofficial
9090	TCP		<u>Cherokee Admin Panel</u>	Unofficial
9091	TCP		<u>Openfire Administration Console (SSL Secured)</u>	Unofficial
9091	TCP		<u>Transmission (BitTorrent client) Web Interface</u>	Unofficial
9092	TCP		<u>H2 (DBMS) Database Server</u>	Unofficial
9092	TCP		<u>Apache Kafka A Distributed Streaming Platform</u> ^[267]	Unofficial
9100	TCP	Assigned	<u>PDL Data Stream</u> , used for printing to certain network printers ^[9]	Official
9101	TCP	UDP	<u>Bacula Director</u>	Official
9102	TCP	UDP	<u>Bacula File Daemon</u>	Official
9103	TCP	UDP	<u>Bacula Storage Daemon</u>	Official
9119	TCP	UDP	<u>MXit Instant Messenger</u>	Official
9150	TCP		<u>Tor</u>	Unofficial
9191	TCP		Sierra Wireless Airlink	Unofficial
9199	TCP		Avtex LLC—qStats	Unofficial
9200	TCP		Elasticsearch ^[268] —default Elasticsearch port	Unofficial
9217	TCP		iPass Platform Service	Unofficial
9293	TCP		Sony PlayStation RemotePlay ^[269]	Unofficial
9300	TCP		<u>IBM Cognos BI</u>	Unofficial
9303		UDP	<u>D-Link Shareport</u> Share storage and MFP printers	Unofficial
9306	TCP		<u>Sphinx Native API</u>	Official
9309	TCP	UDP	Sony PlayStation Vita Host Collaboration WiFi Data Transfer ^[270]	Unofficial
9312	TCP		<u>Sphinx SphinxQL</u>	Official
9332	TCP		<u>Litecoin JSON-RPC</u> server	Unofficial
9333	TCP		<u>Litecoin</u>	Unofficial
9339	TCP		<u>Clash of Clans</u> , a mobile freemium strategy video game	Unofficial
9389	TCP	UDP	adws, <u>Microsoft AD DS Web Services</u> , <u>Powershell</u> uses this port	Official
9418	TCP	UDP	git, <u>Git</u> pack transfer service	Official
9419	TCP		<u>MooseFS distributed file system</u> – master control port ^[271]	Unofficial

Port	TCP	UDP	Description	IANA status ^[1]
9420	TCP		MooseFS distributed file system – master command port ^[271]	Unofficial
9421	TCP		MooseFS distributed file system – master client port ^[271]	Unofficial
9422	TCP		MooseFS distributed file system – Chunkservers ^[271]	Unofficial
9425	TCP		MooseFS distributed file system – CGI server ^[271]	Unofficial
9443	TCP		VMware Websense Triton console (HTTPS port used for accessing and administering a vCenter Server via the Web Management Interface)	Unofficial
9443	TCP		NCSA Brown Dog Data Tilling Service	Unofficial
9535	TCP	UDP	mngsuite, <u>LANDesk</u> Management Suite Remote Control	Official
9536	TCP	UDP	laes-bf, <u>IP Fabrics</u> Surveillance buffering function	Official
9600	No	Yes	<u>Factory Interface Network Service</u> (FINS), a network protocol used by <u>Omron</u> programmable logic controllers	Unofficial
9675	TCP	UDP	<u>Spiceworks</u> Desktop, IT Helpdesk Software	Unofficial
9676	TCP	UDP	<u>Spiceworks</u> Desktop, IT Helpdesk Software	Unofficial
9695	?	?	<u>Content centric networking</u> (CCN, CCNx)	Official
9785	TCP	UDP	<u>Viber</u> ^[169]	Unofficial
9800	TCP	UDP	<u>WebDAV</u> Source	Official
9800			<u>WebCT</u> e-learning portal	Unofficial
9875	TCP		<u>Club Penguin</u> Disney online game for kids	Unofficial
9898	TCP		<u>Tripwire</u> —File Integrity Monitoring Software ^[272]	Unofficial
9899		UDP	SCTP tunneling (port number used in SCTP packets encapsulated in UDP, <u>RFC 6951</u>)	Official
9981	TCP		<u>TVHeadend</u> HTTP server (web interface) ^[273]	Unofficial
9982	TCP		<u>TVHeadend</u> HTSP server (Streaming protocol) ^[273]	Unofficial
9987		UDP	<u>TeamSpeak 3</u> server default (voice) port (for the conflicting service see the IANA list)	Unofficial
9993		UDP	<u>ZeroTier</u> Default port for ZeroTier	Unofficial
9997	TCP		<u>Splunk</u> port for communication between the forwarders and indexers	Unofficial
9999			<u>Urchin</u> Web Analytics	Unofficial
10000	TCP	UDP	Network Data Management Protocol	Official
10000			<u>BackupExec</u>	Unofficial
10000			<u>Webmin</u> , Web-based Unix/Linux system administration tool (default port)	Unofficial
10000–20000	No	Yes	Used on <u>VoIP</u> networks for receiving and transmitting voice telephony traffic which includes <u>Google Voice</u> via the <u>OBiTalk</u> ATA devices as well as on the <u>MagicJack</u> and <u>Vonage</u> ATA network devices. ^[274]	Unofficial
10001		UDP	Ubiquiti UniFi access points broadcast to 255.255.255.255:10001 (UDP) to locate the controller(s)	Unofficial
10009	TCP	UDP	<u>CrossFire</u> , a multiplayer online First Person Shooter	Unofficial

Port	TCP	UDP	Description	IANA status ^[1]
10010	TCP		<u>Open Object Rexx (ooRexx) rxapi daemon</u>	Official
10024	TCP		Zimbra smtp [mta]—to amavis from postfix	Unofficial
10025	TCP		Zimbra smtp [mta]—back to postfix from amavis	Unofficial
10042	TCP		<u>Mathoid</u> server	Unofficial
10050	TCP	UDP	Zabbix agent	Official
10051	TCP	UDP	<u>Zabbix</u> trapper	Official
10080	TCP		Touhou fight games (Immaterial and Missing Power, Scarlet Weather Rhapsody, Hisoutensoku, Hopeless Masquerade and Urban Legend in Limbo)	Unofficial
10110	TCP	UDP	NMEA 0183 Navigational Data. Transport of NMEA 0183 sentences over TCP or UDP	Official
10172	TCP		Intuit <u>Quickbooks</u> client	Unofficial
10200	TCP		FRISK Software International's <i>fpscand</i> virus scanning daemon for Unix platforms ^[275]	Unofficial
10200	TCP		FRISK Software International's <i>f-protd</i> virus scanning daemon for Unix platforms ^[276]	Unofficial
10201–10204	TCP		FRISK Software International's <i>f-protd</i> virus scanning daemon for Unix platforms ^[276]	Unofficial
10212	TCP		GE Intelligent Platforms Proficy HMI/SCADA – CIMPLICITY WebView ^[277]	Official
10308	?	?	<i><u>Lock On: Modern Air Combat</u></i>	Unofficial
10480	?	?	<i><u>SWAT 4</u></i> Dedicated Server	Unofficial
10505		UDP	BlueStacks (android simulator) broadcast ^[278]	Unofficial
10514	TCP	UDP	TLS-enabled Rsyslog (default by convention)	Unofficial
10823		UDP	<i><u>Farming Simulator 2011</u></i>	Unofficial
10891	TCP		Jungle Disk (this port is opened by the Jungle Disk Monitor service on the localhost)	Unofficial
10933	TCP		Listen port used by the Octopus Deploy Tentacle deployment agent ^{[279][280]}	Official
11001	TCP	UDP	metasys (Johnson Controls Metasys java AC control environment)	Official
11111	TCP		RiCcl, Remote Configuration Interface (Redhat Linux)	Unofficial
11112	TCP	UDP	ACR/NEMA <u>Digital Imaging and Communications in Medicine</u> (DICOM)	Official
11211	TCP	UDP	<u>memcached</u> ^[9]	Unofficial
11214	TCP	UDP	memcached incoming SSL proxy	Unofficial
11215	TCP	UDP	memcached internal outgoing SSL proxy	Unofficial
11235			<i><u>Savage: Battle for Newerth</u></i>	Unofficial
11311	TCP	UDP	<u>Robot Operating System</u> master	Unofficial
11371	TCP	UDP	<u>OpenPGP</u> HTTP <u>key server</u>	Official

Port	TCP	UDP	Description	IANA status ^[1]
11753	TCP		<u>OpenRCT2</u> multiplayer ^[281]	Unofficial
12012		UDP	<u>Audition Online Dance Battle</u> , Korea Server—Status/Version Check	Unofficial
12013	TCP	UDP	<u>Audition Online Dance Battle</u> , Korea Server	Unofficial
12035		UDP	<u>Second Life</u> , used for server UDP in-bound ^[282]	Unofficial
12043	TCP		<u>Second Life</u> , used for LSL HTTPS in-bound ^[283]	Unofficial
12046	TCP		<u>Second Life</u> , used for LSL HTTP in-bound ^[283]	Unofficial
12201	Yes	Yes	Graylog Extended Log Format (GELF) ^[284]	Unofficial
12222		UDP	Light Weight Access Point Protocol (LWAPP) LWAPP data (<u>RFC 5412</u>)	Official
12223		UDP	Light Weight Access Point Protocol (LWAPP) LWAPP control (<u>RFC 5412</u>)	Official
12345	TCP	UDP	<u>Cube World</u> ^[285]	Unofficial
12345	TCP		<u>Little Fighter 2</u>	Unofficial
12345			NetBus remote administration tool (often <u>Trojan horse</u>).	Unofficial
12443	TCP		IBM HMC web browser management access over <u>HTTPS</u> instead of default port 443 ^[286]	Unofficial
12489	TCP		NSClient/NSClient++/NC_Net (Nagios)	Unofficial
12975	TCP		<u>LogMeIn Hamachi</u> (VPN tunnel software; also port 32976)—used to connect to Mediation Server (bibi.hamachi.cc); will attempt to use <u>SSL</u> (TCP port 443) if both 12975 & 32976 fail to connect	Unofficial
13000–13050		UDP	<u>Second Life</u> , used for server UDP in-bound ^[282]	Unofficial
13008	TCP	UDP	<u>CrossFire</u> , a multiplayer online First Person Shooter	Unofficial
13075	TCP		Default ^[287] for BMC Software Control-M/Enterprise Manager Corba communication, though often changed during installation	Official
13720	TCP	UDP	Symantec NetBackup—bprd (formerly VERITAS)	Official
13721	TCP	UDP	Symantec NetBackup—bpdbm (formerly VERITAS)	Official
13724	TCP	UDP	Symantec Network Utility—vnetd (formerly VERITAS)	Official
13782	TCP	UDP	Symantec NetBackup—bpcd (formerly VERITAS)	Official
13783	TCP	UDP	Symantec VOPIED protocol (formerly VERITAS)	Official
13785	TCP	UDP	Symantec NetBackup Database—nbdb (formerly VERITAS)	Official
13786	TCP	UDP	Symantec nomdb (formerly VERITAS)	Official
14550		UDP	<u>MAVLink</u>	Unofficial
14567		UDP	<u>Battlefield 1942</u> and mods	Unofficial
15000	TCP		<u>psyBNC</u>	Unofficial
15000	TCP		<u>Wesnoth</u>	Unofficial
15000	TCP		Kaspersky Network Agent	Unofficial
15441	?	?	<u>ZeroNet</u> fileserver	Unofficial

Port	TCP	UDP	Description	IANA status ^[1]
15567		UDP	<i>Battlefield Vietnam</i> and mods	Unofficial
15345	TCP	UDP	<i>XPilot</i> Contact	Official
15672	Yes	No	RabbitMQ management plugin ^[288]	Unofficial
16000	TCP		Oracle WebCenter Content: Imaging (formerly known as Oracle Universal Content Management). Port though often changed during installation	Unofficial
16000	TCP		shroudBNC	Unofficial
16080	TCP		Mac OS X Server Web (HTTP) service with performance cache ^[289]	Unofficial
16200	TCP		Oracle WebCenter Content: Content Server (formerly known as Oracle Universal Content Management). Port though often changed during installation	Unofficial
16225	TCP		Oracle WebCenter Content: Content Server Web UI. Port though often changed during installation	Unofficial
16250	TCP		Oracle WebCenter Content: Inbound Refinery (formerly known as Oracle Universal Content Management). Port though often changed during installation	Unofficial
16261	TCP	UDP	<i>Project Zomboid</i> multiplayer. Additional sequential ports used for each player connecting to server.	Unofficial
16300	TCP		Oracle WebCenter Content: Records Management (formerly known as Oracle Universal Records Management). Port though often changed during installation	Unofficial
16384		UDP	CISCO Default RTP MIN	Unofficial
16384-16387		UDP	Real-time Transport Protocol (RTP), RTP Control Protocol (RTCP), used by Apple's iChat for audio and video ^[9]	Unofficial
16384-16387		UDP	Real-time Transport Protocol (RTP), RTP Control Protocol (RTCP), used by Apple's FaceTime and Game Center ^[9]	Unofficial
16393-16402		UDP	Real-time Transport Protocol (RTP), RTP Control Protocol (RTCP), used by Apple's FaceTime and Game Center ^[9]	Unofficial
16403-16472		UDP	Real-time Transport Protocol (RTP), RTP Control Protocol (RTCP), used by Apple's Game Center ^[9]	Unofficial
16400	TCP		Oracle WebCenter Content: Capture (formerly known as Oracle Document Capture). Port though often changed during installation	Unofficial
16482			CISCO Default RTP MAX	Official
16567		UDP	<i>Battlefield 2</i> and mods	Unofficial
17011	TCP		<i>Worms</i> multiplayer	Unofficial
17500	TCP	UDP	Dropbox LanSync Protocol (db-lsp); used to synchronize file catalogs between Dropbox clients on a local network.	Official
18091	TCP	UDP	memcached Internal REST HTTPS for SSL	Unofficial
18092	TCP	UDP	memcached Internal CAPI HTTPS for SSL	Unofficial
18104	TCP		RAD PDF Service	Official
18200	TCP	UDP	Audition Online Dance Battle, AsiaSoft Thailand Server status/version check	Unofficial

Port	TCP	UDP	Description	IANA status ^[1]
18201	TCP	UDP	Audition Online Dance Battle, AsiaSoft Thailand Server	Unofficial
18206	TCP	UDP	Audition Online Dance Battle, AsiaSoft Thailand Server FAM database	Unofficial
18300	TCP	UDP	Audition Online Dance Battle, AsiaSoft SEA Server status/version check	Unofficial
18301	TCP	UDP	Audition Online Dance Battle, AsiaSoft SEA Server	Unofficial
18306	TCP	UDP	Audition Online Dance Battle, AsiaSoft SEA Server FAM database	Unofficial
18333	TCP		<u>Bitcoin testnet</u> ^[242]	Unofficial
18400	TCP	UDP	Audition Online Dance Battle, KAIZEN Brazil Server status/version check	Unofficial
18401	TCP	UDP	Audition Online Dance Battle, KAIZEN Brazil Server	Unofficial
18505	TCP	UDP	Audition Online Dance Battle R4p3 Server, Nexon Server status/version check	Unofficial
18506	TCP	UDP	Audition Online Dance Battle, Nexon Server	Unofficial
18605	TCP	UDP	<u>X-BEAT</u> status/version check	Unofficial
18606	TCP	UDP	<u>X-BEAT</u>	Unofficial
19000	TCP	UDP	Audition Online Dance Battle, G10/alaplaya Server status/version check	Unofficial
19000		UDP	<u>JACK</u> sound server	Unofficial
19001	TCP	UDP	Audition Online Dance Battle, G10/alaplaya Server	Unofficial
19132		UDP	<i>Minecraft: Pocket Edition</i> multiplayer server	Unofficial
19150	TCP	UDP	<u>Gkrellm</u> Server	Unofficial
19226	TCP		<u>Panda Software</u> AdminSecure Communication Agent	Unofficial
19294	TCP		<u>Google Talk</u> Voice and Video connections ^[290]	Unofficial
19295		UDP	Google Talk Voice and Video connections ^[290]	Unofficial
19302		UDP	Google Talk Voice and Video connections ^[290]	Unofficial
19812	Yes	No	4D database SQL Communication ^[291]	Official
19813	TCP	UDP	4D database Client Server Communication ^[291]	Official
19814	TCP		4D database DB4D Communication ^[291]	Official
19999			Distributed Network Protocol—Secure (DNP—Secure), a secure version of the protocol used in <u>SCADA</u> systems between communicating <u>RTU</u> 's and <u>IED</u> 's	Official
20000			Distributed Network Protocol (DNP), a protocol used in <u>SCADA</u> systems between communicating <u>RTU</u> 's and <u>IED</u> 's	Official
20000			<u>Usermin</u> , Web-based Unix/Linux user administration tool (default port)	Unofficial
20000		UDP	Used on VoIP networks for receiving and transmitting voice telephony traffic which includes <u>Google Voice</u> via the <u>OBiTalk</u> <u>ATA</u> devices as well as on the <u>MagicJack</u> and <u>Vonage</u> <u>ATA</u> network devices. ^[274]	Unofficial
20560	TCP	UDP	<i>Killing Floor</i>	Unofficial

Port	TCP	UDP	Description	IANA status ^[1]
20595		UDP	<i>0 A.D. Empires Ascendant</i>	Unofficial
20808		UDP	Ableton Link	Unofficial
21025	TCP		Starbound Server (default), <u>Starbound</u> (http://playstarbound.com/)	Unofficial
22000	TCP		<u>Syncthing</u> (default)	Unofficial
22136	TCP		FLIR Systems (http://www.flir.com/) Camera Resource Protocol	Unofficial
22222	TCP		Davis Instruments, WeatherLink IP (http://davisnet.com/weather/products/weather_product.asp?pnum=06555)	Unofficial
23073			<u>Soldat</u> Dedicated Server	Unofficial
23399			<u>Skype</u> default protocol	Unofficial
23513	?	?	<i>Duke Nukem 3D</i> source ports	Unofficial
24441	TCP	UDP	Pyzor spam detection network	Unofficial
24444			<u>NetBeans</u> integrated development environment	Unofficial
24465	TCP	UDP	Tonido Directory Server for Tonido (http://www.tonido.com/) which is a Personal Web App and P2P platform	Official
24554	TCP	UDP	<u>BINKP</u> , <u>Fidonet</u> mail transfers over <u>TCP/IP</u>	Official
24800			Synergy: keyboard/mouse sharing software	Unofficial
24842			<i>StepMania: Online: Dance Dance Revolution</i> Simulator	Unofficial
25565	TCP		<i>Minecraft</i> multiplayer server ^{[292][293]}	Unofficial
25565		UDP	<i>Minecraft</i> multiplayer server query ^[294]	Unofficial
25575		UDP	<i>Minecraft</i> multiplayer server RCON ^[295]	Unofficial
25826		UDP	<u>collectd</u> default port ^[296]	Unofficial
26000	TCP	UDP	id Software's <i>Quake</i> server	Official
26000	TCP		<i>EVE Online</i>	Unofficial
26000		UDP	<i>Xonotic</i> , an open source arena shooter	Unofficial
26900–26901	TCP		<i>EVE Online</i>	Unofficial
27000–27015	No	Yes	<u>Steam</u> (game client traffic) ^[297]	Unofficial
27000–27006		UDP	id Software's <i>QuakeWorld</i> master server	Unofficial
27000	TCP		<u>PowerBuilder</u> <u>SySAM</u> license server	Unofficial
27000–27009	TCP	UDP	<u>FlexNet Publisher's</u> License server (from the range of default ports)	Official
27015–27030	No	Yes	<u>Steam</u> (matchmaking and HLTV) ^[297]	Unofficial
	Yes	Yes	<u>Steam</u> (downloads) ^[297]	Unofficial
27015	No	Yes	<u>GoldSrc</u> and <u>Source engine</u> dedicated server port ^[297]	Unofficial
		UDP	<i>Unturned</i> , multiplayer survival video game	Unofficial
27016			<i>Magicka</i> server port	Unofficial

Port	TCP	UDP	Description	IANA status ^[1]
27017	Yes	No	MongoDB daemon process (mongod) and routing service (mongos) ^[298]	Unofficial
27031	Ports 27036 & 27037	Yes	Steam (In-Home Streaming) ^[297]	Unofficial
27036	Yes	Yes	Steam (In-Home Streaming) ^[297]	Unofficial
27037	Yes	Ports 27031 & 27036	Steam (In-Home Streaming) ^[297]	Unofficial
27374			Sub7 default.	Unofficial
27500–27900		UDP	id Software's <i>QuakeWorld</i>	Unofficial
27888		UDP	Kaillera server	Unofficial
27901–27910		UDP	id Software's <i>Quake II</i> master server	Unofficial
27950		UDP	<i>OpenArena</i> outgoing	Unofficial
27960–27969		UDP	Activision's <i>Enemy Territory</i> and id Software's <i>Quake III Arena</i> , <i>Quake III</i> and <i>Quake Live</i> and some ioquake3 derived games, such as <i>Urban Terror</i> (<i>OpenArena</i> incoming)	Unofficial
28001			<i>Starsiege: Tribes</i>	Unofficial
28015		UDP	<i>Rust</i> (video game) ^[299]	Unofficial
28770–28771		UDP	<i>AssaultCube Reloaded</i> , a video game based upon a modification of <i>AssaultCube</i>	Unofficial
28785–28786		UDP	<i>Cube 2: Sauerbraten</i> ^[300]	Unofficial
28852	TCP	UDP	<i>Killing Floor</i>	Unofficial
28910	TCP	UDP	Nintendo Wi-Fi Connection ^[301]	Unofficial
28960	TCP	UDP	<i>Call of Duty</i> ; <i>Call of Duty: United Offensive</i> ; <i>Call of Duty 2</i> ; <i>Call of Duty 4: Modern Warfare</i> ; <i>Call of Duty: World at War</i> (PC platform) ^[302]	Unofficial
29000	?	?	<i>Perfect World</i> , an adventure and fantasy MMORPG	Unofficial
29070	TCP	UDP	<i>Jedi Knight: Jedi Academy</i> by Ravensoft	Unofficial
29900–29901	TCP	UDP	Nintendo Wi-Fi Connection ^[301]	Unofficial
29920	TCP	UDP	Nintendo Wi-Fi Connection ^[301]	Unofficial
30564	TCP		Multiplicity: keyboard/mouse/clipboard sharing software	Unofficial
31337	TCP		Back Orifice and Back Orifice 2000 remote administration tools ^{[303][304]}	Unofficial
31416	?	?	BOINC RPC ^[305]	Unofficial
31438	TCP		Rocket U2 ^[306]	Unofficial
31457	TCP		<i>TetriNET</i>	Official
32137	TCP	UDP	Immunet Protect (UDP in version 2.0, ^[307] TCP since version 3.0 ^[308])	Unofficial

Port	TCP	UDP	Description	IANA status ^[1]
32400	TCP		<u>Plex Media Server</u> ^[309]	Official
32764	TCP		A <u>backdoor</u> found on certain Linksys, Netgear and other wireless DSL modems/combo routers ^[310]	Unofficial
32887	TCP		<i><u>Ace of Spades</u></i> , a multiplayer <u>FPS</u> video game	Unofficial
32976	TCP		<u>LogMeIn Hamachi</u> , a <u>VPN</u> application; also TCP port 12975 and <u>SSL</u> (TCP 443). ^[311]	Unofficial
33434	TCP	UDP	<u>traceroute</u>	Official
33848		UDP	<u>Jenkins</u> , a <u>continuous integration</u> (CI) tool ^{[312][313]}	Unofficial
34000		UDP	<i><u>Infestation: Survivor Stories</u></i> (formerly known as <i>The War Z</i>), a multiplayer zombie video game	Unofficial
34197	No	Yes	<i><u>Factorio</u></i> , a multiplayer survival and factory-building game	Unofficial
35357	TCP		<u>OpenStack Identity</u> (Keystone) administration ^[314]	Official
37008		UDP	<u>TZSP</u> intrusion detection	Unofficial
40000	TCP	UDP	<u>SafetyNET</u> p – a real-time <u>Industrial Ethernet</u> protocol	Official
43110	TCP		<u>ZeroNet</u> web UI default port	Unofficial
43594–43595	?	?	<i><u>RuneScape</u></i> ^[315]	Unofficial
44405	TCP		<i><u>Mu Online</u></i> Connect Server	Unofficial
44818	TCP	UDP	<u>EtherNet/IP</u> explicit messaging	Official
47001	TCP		<u>Windows Remote Management Service</u> (WinRM) ^[316]	Official
47808	TCP	UDP	<u>BACnet</u> Building Automation and Control Networks (47808 ₁₀ = BAC0 ₁₆)	Official
49151	TCP	UDP	Reserved ^[1]	Official

Dynamic, private or ephemeral ports

The range 49152–65535 ($2^{15} + 2^{14}$ to $2^{16} - 1$) contains dynamic or private ports that cannot be registered with IANA.^[317] This range is used for private or customized services, for temporary purposes, and for automatic allocation of ephemeral ports.

Dynamic, private or ephemeral ports

Port	TCP	UDP	Description
49152–65535	Yes	No	<u>Certificate Management over CMS</u> ^[318]
60000–61000	Port 22	Yes	Range from which <u>Mosh</u> – a remote-terminal application similar to <u>SSH</u> – typically assigns ports for ongoing sessions between Mosh servers and Mosh clients. ^[319]
64738	Yes	Yes	<u>Mumble</u>

See also

- [Internet protocol suite](#)
- [List of IP protocol numbers](#)
- [Lists of network protocols](#)
- [Comparison of file transfer protocols](#)

References

1. "Service Name and Transport Protocol Port Number Registry" (<https://www.iana.org/assignments/service-names-port-numbers/service-names-port-numbers.txt>). The Internet Assigned Numbers Authority (IANA).
2. Michelle Cotton; Lars Eggert et al. (August 2011). *Internet Assigned Numbers Authority (IANA) Procedures for the Management of the Service Name and Transport Protocol Port Number Registry* (<https://tools.ietf.org/html/rfc6335>). IETF. doi:10.17487/RFC6335 (<http://dx.doi.org/10.17487%2FRFC6335>). BCP 165. RFC 6335. <https://tools.ietf.org/html/rfc6335>. Retrieved 2014-04-01.
3. Touch, Joe (August 2015). *Recommendations on Using Assigned Transport Port Numbers* (<https://tools.ietf.org/html/rfc7605>). IETF. doi:10.17487/RFC7605 (<http://dx.doi.org/10.17487%2FRFC7605>). BCP 165. RFC 7605. <https://tools.ietf.org/html/rfc7605>. Retrieved 2018-04-08.
4. `services(5)` (<https://linux.die.net/man/5/services>) – Linux File Formats Manual. "... Port numbers below 1024 (so-called "low numbered" ports) can only be bound to by root ... Well-known port numbers specified by the IANA are normally located in this root-only space. ..."
5. "Linux/net/ipv4/inet_connection_sock.c" (http://lxr.free-electrons.com/source/net/ipv4/inet_connection_sock.c?v=3.18#L89). LXR. Retrieved 2015-01-17.
6. Lottor, M. (November 1988). *TCP Port Service Multiplexer (TCPMUX)* (<https://tools.ietf.org/html/rfc1078>). IETF. pp. 1–2. doi:10.17487/RFC1078 (<http://dx.doi.org/10.17487%2FRFC1078>). RFC 1078. <https://tools.ietf.org/html/rfc1078>. Retrieved 2016-09-28.
7. Bressler, Rober; Guida, Richard; McKenzie, Alex (16 October 1972). *Remote Job Entry Protocol* (<https://tools.ietf.org/html/rfc407>). IETF. doi:10.17487/RFC0407 (<http://dx.doi.org/10.17487%2FRFC0407>). RFC 407. <https://tools.ietf.org/html/rfc407>. Retrieved 2018-04-08.
8. Postel, J. (May 1983). *Echo Protocol* (<https://tools.ietf.org/html/rfc862#page-1>). IETF. p. 1. doi:10.17487/RFC0862 (<http://dx.doi.org/10.17487%2FRFC0862>). STD 20. RFC 862. <https://tools.ietf.org/html/rfc862#page-1>. Retrieved 2016-09-28.
9. "TCP and UDP ports used by Apple software products" (<https://support.apple.com/en-us/HT202944>). Support. *Apple* (published 2016-02-05). 2014-11-08. Archived (<https://web.archive.org/web/20160913023842/https://support.apple.com/en-us/HT202944>) from the original on 2016-09-13. Retrieved 2016-09-13.
10. Stewart, Randall R., ed. (September 2007). *Stream Control Transmission Protocol* (<https://tools.ietf.org/html/rfc4960>). IETF. pp. 135–136. doi:10.17487/RFC4960 (<http://dx.doi.org/10.17487%2FRFC4960>). RFC 4960. <https://tools.ietf.org/html/rfc4960>. Retrieved 2016-09-27.
11. Postel, J. (May 1983). *Discard Protocol* (<https://tools.ietf.org/html/rfc863#page-1>). IETF. p. 1. doi:10.17487/RFC0863 (<http://dx.doi.org/10.17487%2FRFC0863>). STD 21. RFC 863. <https://tools.ietf.org/html/rfc863#page-1>. Retrieved 2016-10-07.
12. "How to Configure the Ports Used for Wake On LAN" (<https://technet.microsoft.com/en-us/library/bb632665.aspx>). *Microsoft TechNet*. n.d. Archived (<https://web.archive.org/web/20160927201148/https://technet.microsoft.com/en-us/library/bb632665.aspx>) from the original on 2016-09-27. Retrieved 2016-09-27. "... The default port for the wake-up transmission is UDP port 9. ..."
13. "systat and netstat" (<http://etutorials.org/Networking/network+security+assessment/Chapter+5.+Assessing+Remote+Information+Services/5.2+systat+and+netstat>). eTutorials. "... The `ps -ef` and `netstat -a` commands are bound to TCP ports 11 and 15, respectively. ..."
14. Postel, J. (May 1983). *Active Users* (<https://tools.ietf.org/html/rfc866>). IETF. doi:10.17487/RFC0866 (<http://dx.doi.org/10.17487%2FRFC0866>). STD 24. RFC 866. <https://tools.ietf.org/html/rfc866>.

15. Postel, J. (May 1983). *Daytime Protocol* (<https://tools.ietf.org/html/rfc867#page-1>). IETF. p. 1. doi:10.17487/RFC0867 (<http://dx.doi.org/10.17487%2FRFC0867>). STD 25. RFC 867. <https://tools.ietf.org/html/rfc867#page-1>. Retrieved 2016-09-27.
16. Postel, J. (May 1983). *Quote of the Day Protocol* (<https://tools.ietf.org/html/rfc865#page-1>). IETF. p. 1. doi:10.17487/RFC0865 (<http://dx.doi.org/10.17487%2FRFC0865>). STD 23. RFC 865. <https://tools.ietf.org/html/rfc865#page-1>. Retrieved 2016-09-27.
17. Nelson, Russell (June 1990). *Message Send Protocol* (<https://tools.ietf.org/html/rfc1159#page-1>). IETF. p. 1. doi:10.17487/RFC1159 (<http://dx.doi.org/10.17487%2FRFC1159>). RFC 1159. <https://tools.ietf.org/html/rfc1159#page-1>. Retrieved 2016-09-27.
18. Nelson, Russell; Arnold, Geoff (April 1992). *Message Send Protocol 2* (<https://tools.ietf.org/html/rfc1312>). IETF. pp. 3–4. doi:10.17487/RFC1312 (<http://dx.doi.org/10.17487%2FRFC1312>). RFC 1312. <https://tools.ietf.org/html/rfc1312>. Retrieved 2016-09-27.
19. Postel, J. (May 1983). *Character Generator Protocol* (<https://tools.ietf.org/html/rfc864#page-1>). IETF. p. 1. doi:10.17487/RFC0864 (<http://dx.doi.org/10.17487%2FRFC0864>). STD 22. RFC 864. <https://tools.ietf.org/html/rfc864#page-1>. Retrieved 2016-09-27.
20. Postel, J. (June 1980). *File Transfer Protocol specification* (<https://tools.ietf.org/html/rfc765#page-57>). IETF. p. 57. doi:10.17487/RFC0765 (<http://dx.doi.org/10.17487%2FRFC0765>). RFC 765. IEN 149. <https://tools.ietf.org/html/rfc765#page-57>. Retrieved 2016-09-27.
21. Postel, J.; Reynolds, J. (October 1985). *File Transfer Protocol* (<https://tools.ietf.org/html/rfc959#page-59>). IETF. p. 59. doi:10.17487/RFC0959 (<http://dx.doi.org/10.17487%2FRFC0959>). STD 9. RFC 959. <https://tools.ietf.org/html/rfc959#page-59>. Retrieved 2016-09-27.
22. Postel, J.; Reynolds, J. (May 1983). *Telnet Protocol Specification* (<https://tools.ietf.org/html/rfc854#page-15>). IETF. p. 15. doi:10.17487/RFC0854 (<http://dx.doi.org/10.17487%2FRFC0854>). STD 8. RFC 854. <https://tools.ietf.org/html/rfc854#page-15>. Retrieved 2016-09-28.
23. Postel, Jonathan B. (August 1982). *Simple Mail Transfer Protocol* (<https://tools.ietf.org/html/rfc821#page-44>). IETF. p. 44. doi:10.17487/RFC0821 (<http://dx.doi.org/10.17487%2FRFC0821>). STD 10. RFC 821. <https://tools.ietf.org/html/rfc821#page-44>. Retrieved 2016-09-28.
24. Postel, J.; Harrenstien, K. (May 1983). *Time Protocol* (<https://tools.ietf.org/html/rfc868>). IETF. pp. 1–2. doi:10.17487/RFC0868 (<http://dx.doi.org/10.17487%2FRFC0868>). STD 26. RFC 868. <https://tools.ietf.org/html/rfc868>. Retrieved 2016-09-28.
25. Ullmann, Robert (June 1993). "RAP Protocol" (<https://tools.ietf.org/html/rfc1476#section-2>). *RAP: Internet Route Access Protocol* (<https://tools.ietf.org/html/rfc1476>). IETF. p. 4. sec. 2. doi:10.17487/RFC1476 (<http://dx.doi.org/10.17487%2FRFC1476>). RFC 1476. <https://tools.ietf.org/html/rfc1476#section-2>. Retrieved 2016-10-16. "... The RAP protocol operates on TCP port 38, with peers opening a symmetric TCP connection between the RAP ports on each system. ... RAP is also used on UDP port 38, as a peer discovery method. ..."
26. Accetta, M. (December 1983). *Resource Location Protocol* (<https://tools.ietf.org/html/rfc887#appendix-A>). IETF. p. 15. sec. A. doi:10.17487/RFC0887 (<http://dx.doi.org/10.17487%2FRFC0887>). RFC 887. <https://tools.ietf.org/html/rfc887#appendix-A>. Retrieved 2016-09-28. "... The 'well-known' UDP port number for the Resource Location Protocol is 39 (47 octal). ..."
27. Postel, J. (August 1979). *Internet Name Server* (<https://tools.ietf.org/rfcmarkup?url=https://www.ietf.org/rfc/ien/ien116.txt>). IETF. IEN 116. <https://tools.ietf.org/rfcmarkup?url=https://www.ietf.org/rfc/ien/ien116.txt>. Retrieved 2016-09-28.
28. Harrenstien, Ken; White, Vic (1982-03-01). *NICNAME/WHOIS* (<https://tools.ietf.org/html/rfc812#page-1>). IETF. p. 1. doi:10.17487/RFC0812 (<http://dx.doi.org/10.17487%2FRFC0812>). RFC 812. <https://tools.ietf.org/html/rfc812#page-1>. Retrieved 2016-09-28.
29. Harrenstien, K.; Stahl, M.; Feinler, E. (October 1985). *NICNAME/WHOIS* (<https://tools.ietf.org/html/rfc954#page-2>). IETF. p. 2. doi:10.17487/RFC0954 (<http://dx.doi.org/10.17487%2FRFC0954>). RFC 954. <https://tools.ietf.org/html/rfc954#page-2>. Retrieved 2016-09-28.
30. Daigle, Leslie (September 2004). *WHOIS Protocol Specification* (<https://tools.ietf.org/html/rfc3912#page-2>). Ran Atkinson, Ken Harrenstien, Mary Stahl, Elizabeth Feinler. IETF. p. 2. doi:10.17487/RFC3912 (<http://dx.doi.org/10.17487%2FRFC3912>). RFC 3912. <https://tools.ietf.org/html/rfc3912#page-2>. Retrieved 2016-09-28.

31. Finseth, Craig A. (July 1993). *An Access Control Protocol, Sometimes Called TACACS* (<https://tools.ietf.org/html/rfc1492#page-7>). IETF. p. 7. doi:10.17487/RFC1492 (<http://dx.doi.org/10.17487%2FRFC1492>). RFC 1492. <https://tools.ietf.org/html/rfc1492#page-7>. Retrieved 2016-09-28.
32. Dorner, Steve; Resnick, Pete (June 1992). *Remote Mail Checking Protocol* (<https://tools.ietf.org/html/rfc1339>). IETF. pp. 1–2. doi:10.17487/RFC1339 (<http://dx.doi.org/10.17487%2FRFC1339>). RFC 1339. <https://tools.ietf.org/html/rfc1339>. Retrieved 2016-09-28.
33. Sollins, Karen R. (1980-01-29). *The TFTP Protocol* (<https://tools.ietf.org/rfcmarkup?url=https://www.ietf.org/rfc/ien/ien133.txt#page-6>). IETF. p. 6. IEN 133. <https://tools.ietf.org/rfcmarkup?url=https://www.ietf.org/rfc/ien/ien133.txt#page-6>. Retrieved 2016-10-16.
34. Sollins, K.R. (June 1981). *TFTP Protocol (revision 2)* (<https://tools.ietf.org/html/rfc783>). Noel Chiappa, Bob Baldwin, Dave Clark, Steve Szymanski, Larry Allen, Geoff Cooper, Mike Greenwald, Liza Martin, David Reed. IETF. pp. 6, 14, 16. doi:10.17487/RFC0783 (<http://dx.doi.org/10.17487%2FRFC0783>). RFC 783. <https://tools.ietf.org/html/rfc783>. Retrieved 2016-10-16.
35. Sollins, Karen R. (July 1992). *The TFTP Protocol (Revision 2)* (<https://tools.ietf.org/html/rfc1350>). IETF. pp. 4–5, 9, 10. doi:10.17487/RFC1350 (<http://dx.doi.org/10.17487%2FRFC1350>). STD 33. RFC 1350. <https://tools.ietf.org/html/rfc1350>. Retrieved 2016-10-16.
36. Anklesaria [*sic*?], Farhad; McCahill, M.; Lindner, Paul; Johnson, David; Torrey, Daniel; Alberti, Bob (March 1993). *The Internet Gopher Protocol (a distributed document search and retrieval protocol)* (<https://tools.ietf.org/html/rfc1436>). IETF. pp. 1, 4–5, 7, 11–13. doi:10.17487/RFC1436 (<http://dx.doi.org/10.17487%2FRFC1436>). RFC 1436. <https://tools.ietf.org/html/rfc1436>. Retrieved 2016-10-16. "... This protocol assumes a reliable data stream; TCP is assumed. Gopher servers should listen on port 70 (port 70 is assigned to Internet Gopher by IANA). ..."
37. Braden, R. (1971-01-13). *NETRJS: A third level protocol for Remote Job Entry* (<https://tools.ietf.org/html/rfc88>). IETF. doi:10.17487/RFC0088 (<http://dx.doi.org/10.17487%2FRFC0088>). RFC 88. <https://tools.ietf.org/html/rfc88>. Retrieved 2016-10-16.
38. Braden, R. (1977-11-22). *NETRJS Protocol* (<https://tools.ietf.org/html/rfc740#page-3>). IETF. p. 3. doi:10.17487/RFC0740 (<http://dx.doi.org/10.17487%2FRFC0740>). RFC 740. <https://tools.ietf.org/html/rfc740#page-3>. Retrieved 2016-10-16.
39. Postel, Jon; Vernon, J. (January 1983). *Assigned Numbers* (<https://tools.ietf.org/html/rfc820#page-10>). IETF. p. 10. doi:10.17487/RFC0820 (<http://dx.doi.org/10.17487%2FRFC0820>). RFC 820. <https://tools.ietf.org/html/rfc820#page-10>. Retrieved 2016-10-16.
40. Karrenstien, K. (1977-12-30). *NAME/FINGER Protocol* (<https://tools.ietf.org/html/rfc742#page-1>). IETF. p. 1. doi:10.17487/RFC0742 (<http://dx.doi.org/10.17487%2FRFC0742>). RFC 742. <https://tools.ietf.org/html/rfc742#page-1>. Retrieved 2016-10-16.
41. Zimmerman, David Paul (December 1991). "Flow of events" (<https://tools.ietf.org/html/rfc1288#section-2.1>). *The Finger User Information Protocol* (<https://tools.ietf.org/html/rfc1288>). IETF. p. 4. sec. 2.1. doi:10.17487/RFC1288 (<http://dx.doi.org/10.17487%2FRFC1288>). RFC 1288. <https://tools.ietf.org/html/rfc1288#section-2.1>. Retrieved 2016-10-16. "... Finger is based on the Transmission Control Protocol, using TCP port 79 decimal ..."
42. Fielding, Roy T.; Gettys, James; Mogul, Jeffrey C.; Nielsen, Henrik Frystyk; Masinter, Larry; Leach, Paul J.; Berners-Lee, Tim (June 1999). *Hypertext Transfer Protocol -- HTTP/1.1* (<https://tools.ietf.org/html/rfc2616>). IETF. pp. 13, 19–20, 37, 129. doi:10.17487/RFC2616 (<http://dx.doi.org/10.17487%2FRFC2616>). RFC 2616. <https://tools.ietf.org/html/rfc2616>. Retrieved 2016-10-16. "... HTTP communication usually takes place over TCP/IP connections. The default port is TCP 80 ..."
43. Fielding, Roy T.; Reschke, Julian F., eds. (June 2014). *Hypertext Transfer Protocol (HTTP/1.1): Message Syntax and Routing* (<https://tools.ietf.org/html/rfc7230>). IETF. pp. 11, 17, 19, 42–43, 50. doi:10.17487/RFC7230 (<http://dx.doi.org/10.17487%2FRFC7230>). RFC 7230. <https://tools.ietf.org/html/rfc7230>. Retrieved 2016-10-16.
44. Belshe, Mike; Peon, Roberto (May 2015). "Starting HTTP/2" (<https://tools.ietf.org/html/rfc7540#section-3>). In Thomson, Martin. *Hypertext Transfer Protocol Version 2 (HTTP/2)* (<https://tools.ietf.org/html/rfc7540>). IETF. p. 7. sec. 3. doi:10.17487/RFC7540 (<http://dx.doi.org/10.17487%2FRFC7540>). RFC 7540. <https://tools.ietf.org/html/rfc7540#section-3>. Retrieved 2016-10-16. "... HTTP/2 uses the same "http" and "https" URI schemes used by HTTP/1.1. HTTP/2 shares the same default port numbers: 80 for "http" URIs and 443 for "https" URIs. ..."

45. Kohl, John; Neuman, B. Clifford (September 1993). "IP transport" (<https://tools.ietf.org/html/rfc1510#section-8.2.1>). *The Kerberos Network Authentication Service (V5)* (<https://tools.ietf.org/html/rfc1510>). IETF. pp. 81–82. sec. 8.2.1. doi:10.17487/RFC1510 (<http://dx.doi.org/10.17487%2FRFC1510>). RFC 1510. <https://tools.ietf.org/html/rfc1510#section-8.2.1>. Retrieved 2016-10-16. "... When contacting a Kerberos server (KDC) ... the client shall send a UDP datagram containing only an encoding of the request to port 88 (decimal) at the KDC's IP address ..."
46. Neuman, Clifford; Yu, Tom; Hartman, Sam; Raeburn, Kenneth (July 2005). *The Kerberos Network Authentication Service (V5)* (<https://tools.ietf.org/html/rfc4120>). Acknowledgements to John Kohl et al. in section 11 "Acknowledgements", pages 121–122. IETF. pp. 102–103, 105. doi:10.17487/RFC4120 (<http://dx.doi.org/10.17487%2FRFC4120>). RFC 4120. <https://tools.ietf.org/html/rfc4120>. Retrieved 2016-10-16. "... Kerberos servers (KDCs) supporting IP transports MUST accept TCP ... UDP requests and SHOULD listen for them on port 88 (decimal) ..."
47. Cass, D. E.; Rose, M. T. (April 1986). *ISO Transport Services on Top of the TCP* (<https://tools.ietf.org/html/rfc983>). IETF. pp. 5, 8, 12–13, 23–24. doi:10.17487/RFC0983 (<http://dx.doi.org/10.17487%2FRFC0983>). RFC 983. <https://tools.ietf.org/html/rfc983>. Retrieved 2016-10-17. "... A TSAP server begins by LISTENing on TCP port 102. ..."
48. Rose, Marshall T.; Cass, Dwight E. (May 1987). *ISO Transport Service on top of the TCP Version: 3* (<https://tools.ietf.org/html/rfc1006>). IETF. pp. 1, 13. doi:10.17487/RFC1006 (<http://dx.doi.org/10.17487%2FRFC1006>). STD 35. RFC 1006. <https://tools.ietf.org/html/rfc1006>. Retrieved 2016-10-17. "... TCP port 102 is reserved for hosts which implement this standard. ..."
49. Hedberg, Roland; Pomes, Paul (September 1998). "Basic Operation" (<https://tools.ietf.org/html/rfc2378#section-2>). *The CCSO Nameserver (Ph) Architecture* (<https://tools.ietf.org/html/rfc2378>). IETF. p. 4. sec. 2. doi:10.17487/RFC2378 (<http://dx.doi.org/10.17487%2FRFC2378>). RFC 2378. <https://tools.ietf.org/html/rfc2378#section-2>. Retrieved 2016-10-17. "... Initially, the server host starts the Ph service by listening on TCP port 105. ..."
50. Postel, Jon (November 1982). *The Remote User Telnet Service* (<https://tools.ietf.org/html/rfc818#page-1>). IETF. p. 1. doi:10.17487/RFC0818 (<http://dx.doi.org/10.17487%2FRFC0818>). RFC 818. <https://tools.ietf.org/html/rfc818#page-1>. Retrieved 2016-10-17. "... the specific service of User Telnet may be accessed (on hosts that choose to provide it) by opening a connection to port 107 (153 octal). ..."
51. Butler, M.; Postel, J.; Chase, D.; Goldberger, J.; Reynolds, J. K. (February 1985). *Post Office Protocol: Version 2* (<https://tools.ietf.org/html/rfc937#page-1>). IETF. p. 1. doi:10.17487/RFC0937 (<http://dx.doi.org/10.17487%2FRFC0937>). RFC 937. <https://tools.ietf.org/html/rfc937#page-1>. Retrieved 2016-10-17. "... This protocol assumes a reliable data stream such as provided by TCP or any similar protocol. When TCP is used, the POP2 server listens on port 109 ..."
52. Rose, Marshall (November 1988). *Post Office Protocol: Version 3* (<https://tools.ietf.org/html/rfc1081>). IETF. pp. 2, 13. doi:10.17487/RFC1081 (<http://dx.doi.org/10.17487%2FRFC1081>). RFC 1081. <https://tools.ietf.org/html/rfc1081>. Retrieved 2016-10-17. "... the server host starts the POP3 service by listening on TCP port 110. ..."
53. Myers, John G.; Rose, Marshall T. (May 1996). *Post Office Protocol - Version 3* (<https://tools.ietf.org/html/rfc1939>). IETF. pp. 3, 19. doi:10.17487/RFC1939 (<http://dx.doi.org/10.17487%2FRFC1939>). STD 53. RFC 1939. <https://tools.ietf.org/html/rfc1939>. Retrieved 2016-10-17. "... the server host starts the POP3 service by listening on TCP port 110. ..."
54. St. Johns, Michael C. (February 1993). "Overview" (<https://tools.ietf.org/html/rfc1413#section-2>). *Identification Protocol* (<https://tools.ietf.org/html/rfc1413>). Acknowledgement is given to Dan Bernstein in section 7, "Acknowledgements", page 8. IETF. p. 113. sec. 2. doi:10.17487/RFC1413 (<http://dx.doi.org/10.17487%2FRFC1413>). RFC 1413. <https://tools.ietf.org/html/rfc1413#section-2>. Retrieved 2016-10-17. "... The Identification Protocol (a.k.a., "ident", a.k.a., "the Ident Protocol") ... listens for TCP connections on TCP port 113 (decimal). ..."
55. St. Johns, Michael C. (January 1985). *Authentication Server* (<https://tools.ietf.org/html/rfc931#page-1>). IETF. p. 1. doi:10.17487/RFC0931 (<http://dx.doi.org/10.17487%2FRFC0931>). RFC 931. <https://tools.ietf.org/html/rfc931#page-1>. Retrieved 2016-10-17. "... The Authentication Server Protocol provides a means to determine the identity of a user of a particular TCP connection. ... A server listens for TCP connections on TCP port 113 (decimal). ..."
56. Lottor, Mark K. (September 1984). Postel, Jon. ed. *Simple File Transfer Protocol* (<https://tools.ietf.org/html/rfc913#page-1>). IETF. p. 1. doi:10.17487/RFC0931 (<http://dx.doi.org/10.17487%2FRFC0931>). RFC 913. <https://tools.ietf.org/html/rfc913#page-1>. Retrieved 2016-10-17. "... SFTP is used by opening a TCP connection to the remote hosts' SFTP port (115 decimal). ..."

57. Kantor, Brian; Lapsley, Phil (February 1986). *Network News Transfer Protocol* (<https://tools.ietf.org/html/rfc977>). IETF. pp. 5, 20–23. doi:10.17487/RFC0977 (<http://dx.doi.org/10.17487%2FRFC0977>). RFC 977. <https://tools.ietf.org/html/rfc977>. Retrieved 2016-10-17. "... NNTP specifies a protocol for the distribution, inquiry, retrieval, and posting of news articles ... When used via Internet TCP, the contact port assigned for this service is 119. ..."
58. Feather, Clive D.W. (October 2006). "Reading and Transit Servers" (<https://tools.ietf.org/html/rfc3977#section-3.4.1>). *Network News Transfer Protocol (NNTP)* (<https://tools.ietf.org/html/rfc3977>). Acknowledgements to NNTP Working Group (Russ Allbery, Ned Freed), Brian Kantor, Phil Lapsley et al.) in section 13, "Acknowledgements", pages 107–109. IETF. p. 21. sec. 3.4.1. doi:10.17487/RFC3977 (<http://dx.doi.org/10.17487%2FRFC3977>). RFC 3977. <https://tools.ietf.org/html/rfc3977#section-3.4.1>. Retrieved 2016-10-17. "... Network News Transfer Protocol (NNTP) ... is used for the distribution, inquiry, retrieval, and posting of Netnews articles using a reliable stream-based mechanism. ... The official TCP port for the NNTP service is 119. ..."
59. "COM Fundamentals - Guide - COM Clients and Servers - Inter-Object Communications - Microsoft RPC" ([http://msdn2.microsoft.com/en-us/library/ms691207\(VS.85\).aspx](http://msdn2.microsoft.com/en-us/library/ms691207(VS.85).aspx)). microsoft.com. Retrieved 2014-05-27.
60. NetBIOS Working Group (March 1987). *Protocol standard for a NetBIOS service on a TCP/UDP transport: Concepts and methods* (<https://tools.ietf.org/html/rfc1001>). Acknowledgements to Internet Activities Board's End-to-End Services Task Force et al. in section 2, "Acknowledgements", page 6.. IETF. doi:10.17487/RFC1001 (<http://dx.doi.org/10.17487%2FRFC1001>). STD 19. RFC 1001. <https://tools.ietf.org/html/rfc1001>. Retrieved 2016-10-17.
61. NetBIOS Working Group (March 1987). *Protocol standard for a NetBIOS service on a TCP/UDP transport: Detailed specifications* (<https://tools.ietf.org/html/rfc1002>). Acknowledgements to Internet Activities Board in section 2, "Acknowledgements", page 4. IETF. doi:10.17487/RFC1002 (<http://dx.doi.org/10.17487%2FRFC1002>). STD 19. RFC 1002. <https://tools.ietf.org/html/rfc1002>. Retrieved 2016-10-17.
62. Crispin, Mark R. (March 2003). *INTERNET MESSAGE ACCESS PROTOCOL - VERSION 4rev1* (<https://tools.ietf.org/html/rfc3501>). IETF. doi:10.17487/RFC3501 (<http://dx.doi.org/10.17487%2FRFC3501>). RFC 3501. <https://tools.ietf.org/html/rfc3501>. Retrieved 2016-10-17. "... The Internet Message Access Protocol ... allows a client to access and manipulate electronic mail messages on a server. ... The IMAP4rev1 protocol assumes a reliable data stream such as that provided by TCP. When TCP is used, an IMAP4rev1 server listens on port 143. ..."
63. DeSchon, A.; Braden, R. (August 1988). *Background File Transfer Program (BFTP)* (<https://tools.ietf.org/html/rfc1068>). IETF. pp. 4, 14, 20, 24. doi:10.17487/RFC1068 (<http://dx.doi.org/10.17487%2FRFC1068>). RFC 1068. <https://tools.ietf.org/html/rfc1068>. Retrieved 2016-10-17. "... The BFTP program ... can be executed as a remotely-accessible service that can be reached via a Telnet connection to the BFTP well-known port (152). ..."
64. Davin, J.; Case, J.; Fedor, M.; Schoffstall, M. (November 1987). "The Authentication Protocol" (<https://tools.ietf.org/html/rfc1028#section-4>). *Simple Gateway Monitoring Protocol* (<https://tools.ietf.org/html/rfc1028>). IETF. p. 10. sec. 4. doi:10.17487/RFC1028 (<http://dx.doi.org/10.17487%2FRFC1028>). RFC 1028. <https://tools.ietf.org/html/rfc1028#section-4>. Retrieved 2016-10-17. "... This memo defines a simple application-layer protocol by which management information for a gateway may be inspected or altered by logically remote users. ... An authentication protocol entity responds to protocol messages received at UDP port 153 on the host with which it is associated. ..."
65. Lambert, M. (June 1988). *PCMAIL: A distributed mail system for personal computers* (<https://tools.ietf.org/html/rfc1056#page-8>). IETF. p. 8. doi:10.17487/RFC1056 (<http://dx.doi.org/10.17487%2FRFC1056>). RFC 1056. <https://tools.ietf.org/html/rfc1056#page-8>. Retrieved 2016-10-17. "... Pcmail is a distributed mail system providing mail service to an arbitrary number of users ... The TCP contact port for DMSP has been designated 158. ..."
66. Case, J.; Fedor, M.; Schoffstall, M.; Davin, C. (May 1990). "Protocol Specification" (<https://tools.ietf.org/html/rfc1157#section-4>). *Simple Network Management Protocol (SNMP)* (<https://tools.ietf.org/html/rfc1157>). Acknowledgements to IETF SNMP Extensions working group in section 6, "Acknowledgements", page 33. IETF. p. 15. sec. 4. doi:10.17487/RFC1157 (<http://dx.doi.org/10.17487%2FRFC1157>). RFC 1157. <https://tools.ietf.org/html/rfc1157#section-4>. Retrieved 2016-10-17. "... A protocol entity receives messages at UDP port 161 on the host ... Messages which report traps should be received on UDP port 162 for further processing. ..."

67. "Understanding Simple Network Management Protocol (SNMP) Traps" (<http://www.cisco.com/c/en/us/support/docs/ip/simple-network-management-protocol-snmp/7244-snmp-trap.html>). Support. *Cisco* (published 2006-10-10). n.d. Archived (<https://web.archive.org/web/20161017190214/https://www.cisco.com/c/en/us/support/docs/ip/simple-network-management-protocol-snmp/7244-snmp-trap.html>) from the original on 2016-10-17. Retrieved 2016-10-17.
68. Packard, Keith (2004). *X Display Manager Control Protocol* (<https://www.x.org/releases/X11R7.6/doc/libXdmcp/xdmcp.html>) (Version 1.1 ed.). The Open Group. Archived (<https://web.archive.org/web/20160109051239/http://www.x.org/releases/X11R7.6/doc/libXdmcp/xdmcp.html>) from the original on 2016-01-09. Retrieved 2016-10-17. "... The purpose of the X Display Manager Control Protocol (XDMCP) is to provide a uniform mechanism for an autonomous display to request login service from a remote host. ... When XDMCP is implemented on top of the Internet User Datagram Protocol (UDP), port number 177 is to be used. ..."
69. Rekhter, Yakov; Li, Tony; Hares, Susan, eds. (January 2006). *A Border Gateway Protocol 4 (BGP-4)* (<https://tools.ietf.org/html/rfc4271>). Acknowledgements to Kirk Lougheed et al. in section 2, "Acknowledgements", pages 6–7. IETF. pp. 8, 47–48, 51–52. doi:10.17487/RFC4271 (<http://dx.doi.org/10.17487%2FRFC4271>). RFC 4271. <https://tools.ietf.org/html/rfc4271>. Retrieved 2016-10-17. "... BGP listens on TCP port 179. ..."
70. Hartmann, Hartmann (August 2014). *Default Port for Internet Relay Chat (IRC) via TLS/SSL* (<https://tools.ietf.org/html/rfc7194#page-2>). IETF. p. 2. doi:10.17487/RFC7194 (<http://dx.doi.org/10.17487%2FRFC7194>). RFC 7194. <https://tools.ietf.org/html/rfc7194#page-2>. Retrieved 2016-10-06. "... Although system port assignments exist for IRC traffic that is plain text (TCP/UDP port 194) or TLS/SSL encrypted (TCP/UDP port 994), it is common practice amongst IRC networks not to use them for reasons of convenience and general availability on systems where no root access is granted or desired. ..."
71. Rose, Marshall T. (May 1991). "Mapping onto the TCP" (<https://tools.ietf.org/html/rfc1227#section-3.3.1>). *SNMP MUX Protocol and MIB* (<https://tools.ietf.org/html/rfc1227>). Acknowledgements to Jeffrey S. Case et al. in section 5 "Acknowledgements", page 12. IETF. p. 8. sec. 3.3.1. doi:10.17487/RFC1227 (<http://dx.doi.org/10.17487%2FRFC1227>). RFC 1227. <https://tools.ietf.org/html/rfc1227#section-3.3.1>. Retrieved 2016-10-27. "... When using the TCP to provide the transport-backing for the SMUX protocol, the SNMP agent listens on TCP port 199. ..."
72. "README.smux" (<http://www.net-snmp.org/docs/README.smux.html>). *Net-SNMP* (published 2011-05-26). n.d. Archived (<https://web.archive.org/web/20161027014740/http://www.net-snmp.org/docs/README.smux.html>) from the original on 2016-10-27. Retrieved 2016-10-27. "... SMUX is the snmp multiplexing protocol (RFC 1227). It can be used by an snmp agent to query variables maintained by another user-level process. ..."
73. Bernstein, Daniel B. "Quick Mail Transfer Protocol (QMTTP)" (<https://cr.yp.to/proto/qmtt.txt>). Retrieved 2018-04-18. "... A QMTTP client connects to a QMTTP server, as discussed in section 7, over a reliable stream protocol allowing transmission of 8-bit bytes. ... QMTTP may be used on top of TCP. A QMTTP-over-TCP server listens for TCP connections on port 209. ..."
74. "Virus Alerts -- SecureCastFAQ" (https://web.archive.org/web/20000303111811/http://www.nai.com/asp_set/anti_virus/alerts/faq.asp). *nai.com*. Santa Clara, CA, USA: Network Associates, Inc., now McAfee. 2000. Archived from the original (http://www.nai.com/asp_set/anti_virus/alerts/faq.asp) on 2000-03-03. Retrieved 2013-10-26.
75. "RFC 1504 - Appletalk Update-Based Routing Protocol: Enhanced App" (<http://www.faqs.org/rfcs/rfc1504.html>). *faqs.org*. Retrieved 16 March 2015.
76. "Active Directory and Active Directory Domain Services Port Requirements" ([https://technet.microsoft.com/en-us/library/dd772723\(v=ws.10\).aspx](https://technet.microsoft.com/en-us/library/dd772723(v=ws.10).aspx)). *Microsoft TechNet* (published 2014-03-28). n.d. Archived (<https://web.archive.org/web/20170802065207/https://technet.microsoft.com/en-us/library/dd772723%28v%3Dws.10%29.aspx>) from the original on 2017-08-02. Retrieved 2017-08-02.
77. Chirgwin, Richard (2018-02-01). "Who can save us? It's 2018 and some email is still sent as cleartext" (https://www.theregister.co.uk/2018/02/01/ietf_attacks_cleartext_email/). *The Register*. Situation Publishing. Archived (https://web.archive.org/web/20180201081823/https://www.theregister.co.uk/2018/02/01/ietf_attacks_cleartext_email/) from the original on 2018-02-01. Retrieved 2018-04-18.
78. "RFC 1340, Assigned Numbers" (<http://www.ietf.org/rfc/rfc1340.txt>). IETF. Retrieved 2014-05-27.

79. Zwicky, Elizabeth D.; Cooper, Simon; Chapman, D. Brent (June 2000) [1st pub. 1995]. "Internet Message Access Protocol (IMAP)" (http://docstore.mik.ua/oreilly/networking_2ndEd/fire/ch16_07.htm). *Building Internet Firewalls* (http://docstore.mik.ua/oreilly/networking_2ndEd/fire/) (Second ed.). O'Reilly. 16.7. ISBN 1-56592-871-7. Archived (https://web.archive.org/web/20161027024428/http://docstore.mik.ua/oreilly/networking_2ndEd/fire/ch16_07.htm) from the original on 2016-10-27. Retrieved 2016-10-27. "... IMAP over SSL currently uses port 993, but an earlier convention uses port 585. ..."
80. "RFC 4409, "Message Submission for Mail"" (<http://www.ietf.org/rfc/rfc4409.txt>). IETF. Retrieved 2014-05-27.
81. "RFC 3620, The TUNNEL Profile" (<http://www.ietf.org/rfc/rfc3620.txt>). IETF. Retrieved 2014-05-27.
82. INTERNET DRAFT, DHCP Failover Protocol (<http://www.ietf.org/proceedings/04mar/I-D/draft-ietf-dhc-failover-12.txt>) (expired: September 2003)
83. "RFC 3632, VeriSign Registry Registrar Protocol (RRP) Version 2.0.0" (<http://tools.ietf.org/rfc/rfc3632.txt>). IETF. Retrieved 2014-05-27.
84. "IEEE Standard (1244.3-2000) for Media Management System (MMS) Media Management Protocol (MMP)" (http://standards.ieee.org/reading/ieee/std_public/new_desc/storage/1244.3-2000.html). IEEE. 2001-04-26. Retrieved 2014-05-27.
85. "Integrated Virtualization Manager on IBM System p5" (<http://www.redbooks.ibm.com/redpapers/pdfs/redp4061.pdf>) (PDF). IBM. Retrieved 2014-05-27.
86. "IEEE Standard (1244.2-2000) for Media Management Systems (MMS) Session Security, Authentication, Initialization Protocol (SSAIP)" (http://standards.ieee.org/reading/ieee/std_public/new_desc/storage/1244.2-2000.html). IEEE. 2000-12-07. Retrieved 2014-05-27.
87. "RFC 4204, Link Management Protocol" (<http://www.ietf.org/rfc/rfc4204.txt>). IETF. Retrieved 2014-05-27.
88. "RFC 3981, IRIS: The Internet Registry Information Service (IRIS) Core Protocol" (<http://tools.ietf.org/rfc/rfc3981.txt>). IETF. Retrieved 2014-05-27.
89. Internet Registry Information Service (IRIS) (http://www.verisign.com/research/Internet_Registry_Information_Service/index.html) Archived (https://web.archive.org/web/20090201065757/http://www.verisign.com/research/Internet_Registry_Information_Service/index.html) February 1, 2009, at the Wayback Machine.
90. "Internet-Draft, Using the Internet Registry Information Service (IRIS) over the Blocks Extensible Exchange Protocol (BEEP)" (<http://www.ietf.org/proceedings/02nov/I-D/draft-ietf-crisp-iris-beep-00.txt>). IETF. Retrieved 2014-05-27.
91. "Tag Distribution Protocol Internet-Draft" (<http://tools.ietf.org/html/draft-doolan-tdp-spec-00>). IETF. 1997-05-27. Retrieved 2014-05-27.
92. "United States Patent 7286529, Discovery and tag space identifiers in a tag distribution protocol (TDP)" (<https://archive.is/20120919085146/http://www.patentstorm.us/patents/7286529-claims.html>). Patentstorm.us. Archived from the original (<http://www.patentstorm.us/patents/7286529-claims.html>) on 2012-09-19. Retrieved 2014-05-27.
93. Cisco IOS Software Release 11.1CT New Features (http://www.cisco.com/en/US/products/sw/iosswrel/ps1820/prod_bulletin09186a0080091d01.html) Archived (https://web.archive.org/web/20120118075409/http://www.cisco.com/en/US/products/sw/iosswrel/ps1820/prod_bulletin09186a0080091d01.html) January 18, 2012, at the Wayback Machine.
94. Cisco IOS Software Releases 12.0 S, MPLS Label Distribution Protocol (LDP) (http://www.ciscosystems.ch/en/US/docs/ios/12_0s/feature/guide/fslp22.html#wp1517250)
95. "ARRANGEMENT IN A ROUTER OF A MOBILE NETWORK FOR OPTIMIZING USE OF MESSAGES CARRYING REVERSE ROUTING HEADERS" (<https://patentscope.wipo.int/search/en/detail.jsf?docId=WO2004056056>). WIPO (published 2004-07-01). 2003-12-11. Archived (<https://archive.fo/20170519181328/https://patentscope.wipo.int/search/en/detail.jsf?docId=WO2004056056>) from the original on 2017-05-19. Retrieved 2017-05-19.
96. Adams, Carlisle; Farrell, Stephen; Kause, Tomi; Mononen, Tero (September 2005). *Internet X.509 Public Key Infrastructure Certificate Management Protocol (CMP)* (<https://tools.ietf.org/html/rfc4210>). IETF. doi:10.17487/RFC4210 (<http://dx.doi.org/10.17487%2FRFC4210>). RFC 4210. <https://tools.ietf.org/html/rfc4210>. Retrieved 2017-11-10.
97. "Setting up a socket policy file server" (https://www.adobe.com/devnet/flashplayer/articles/socket_policy_files.html). Adobe.com. 2008-04-14. Retrieved 2014-05-27.

98. "vCenter Server 4.1 network port requirements" (<https://kb.vmware.com/kb/1022256>). *VMware Knowledge Base*. 2014-07-29. Archived (<https://web.archive.org/web/20161006035518/https://kb.vmware.com/kb/1022256>) from the original on 2016-10-06. Retrieved 2016-10-06.
99. "Required ports for configuring an external firewall to allow ESX/ESXi and vCenter Server traffic" (<https://kb.vmware.com/kb/1005189>). *VMware Knowledge Base*. 2014-08-01. Archived (<https://web.archive.org/web/20161006035808/https://kb.vmware.com/kb/1005189>) from the original on 2016-10-06. Retrieved 2016-10-06.
100. "Using rndc" (https://www.centos.org/docs/5/html/Deployment_Guide-en-US/s1-bind-rndc.html). *Red Hat Enterprise Linux Deployment Guide* (https://www.centos.org/docs/5/html/Deployment_Guide-en-US/) (5.0.0-19 ed.). Red Hat (published 2007-01-23). 2006. 16.4. Archived (https://web.archive.org/web/20161006041539/https://www.centos.org/docs/5/html/Deployment_Guide-en-US/s1-bind-rndc.html) from the original on 2016-10-06. Retrieved 2016-10-06. "... default TCP port 953 ... allow rndc commands ..."
101. `rndc(8)` (<https://linux.die.net/man/8/rndc>) – *Linux Administration and Privileged Commands Manual*. "... TCP port ... BIND 9's default control channel port, 953. ..."
102. "NG FAQ - Ports used by Check Point VPN-1/FireWall-1 Next Generation" (<http://www.fw-1.de/aerasesec/ng/ports-ng.html>). *FW-1.de* (published 2007-01-02). n.d. Archived (<http://www.fw-1.de/aerasesec/ng/ports-ng.html>) from the original on 2016-10-06. Retrieved 2016-10-06. "... 981 /tcp ... remote administration from external using HTTPS ..."
103. "Managing Windows Small Business Server 2008 Remote Web Workplace" ([https://technet.microsoft.com/en-us/library/cc527519\(v=ws.10\).aspx](https://technet.microsoft.com/en-us/library/cc527519(v=ws.10).aspx)). *Microsoft TechNet* (published 2009-10-08). n.d. Archived (<https://web.archive.org/web/20170705023650/https://technet.microsoft.com/en-us/library/cc527519%28v%3Dws.10%29.aspx>) from the original on 2017-07-05. Retrieved 2017-07-05. "...
 - "Windows SBS 2008 must allow connections through TCP ports 80, 443, 987, and 3389."
 - "The computer used to connect to Remote Web Workplace must allow connections through TCP ports 80, 443, 987, and 3389."
 - "Routers on Windows SBS 2008 must be configured to forward Internet traffic to TCP ports 80, 443, 987, and 3389."
 "...
104. RFC 4707
105. "Appendix A. TCP Ports Used by ThinLinc" (<https://www.cendio.com/resources/docs/tag/tcp-ports.html>). *ThinLinc Administrator's Guide for ThinLinc 4.6.0* (<https://www.cendio.com/resources/docs/tag/>). Cendio AB (published 2016). n.d. Archived (<https://web.archive.org/web/20161006052247/https://www.cendio.com/resources/docs/tag/tcp-ports.html>) from the original on 2016-10-06. Retrieved 2016-10-06. "... By default, ThinLinc's web-based administration interface is available on TCP port 1010. ..."
106. "Setting up reserved (privileged) ports". *z/OS Network File System Guide and Reference* ([https://www-304.ibm.com/servers/resourcelink/svc00100.nsf/pages/zosv2r3sc236883/\\$file/idan400_v2r3.pdf](https://www-304.ibm.com/servers/resourcelink/svc00100.nsf/pages/zosv2r3sc236883/$file/idan400_v2r3.pdf)) (PDF) (Version 2 Release 3 ed.). IBM. p. 178. Archived ([https://web.archive.org/web/20180420000427/https://www-304.ibm.com/servers/resourcelink/svc00100.nsf/pages/zosv2r3sc236883/\\$file/idan400_v2r3.pdf](https://web.archive.org/web/20180420000427/https://www-304.ibm.com/servers/resourcelink/svc00100.nsf/pages/zosv2r3sc236883/$file/idan400_v2r3.pdf)) (PDF) from the original on 2018-04-20. Retrieved 2018-04-20. "... The z/OS client attempts to use reserved port 1023 and if that port is not available, the z/OS client will subtract one from 1023 until a reserve [*sic*?] port is available. ... When specifying secure(udp) or proto(udp), the z/OS client uses the privileged UDP ports to communicate with the NFS servers. When specifying proto(tcp) the z/OS client uses the privileged TCP ports to communicate the MOUNT RPC or UNMOUNT RPC with the NFS server. However, the z/OS client uses the ephemeral TCP ports to communicate NFS RPC with the NFS server. ..."
107. Carpenter, Brian; Dan, Wing; Jiang, Sheng Jiang (October 2012). Despres, Remi. ed. *Native IPv6 behind IPv4-to-IPv4 NAT Customer Premises Equipment (6a44)* (<https://tools.ietf.org/html/rfc6751>). IETF. doi:10.17487/RFC6751 (<http://dx.doi.org/10.17487%2FRFC6751>). ISSN 2070-1721 (<https://www.worldcat.org/issn/2070-1721>). RFC 6751. <https://tools.ietf.org/html/rfc6751>. Retrieved 2016-08-28.
108. "Firewall, Proxy, Router and Port Configuration for Blizzard Games" (<https://web.archive.org/web/20120808071221/http://us.battle.net/support/en/article/firewall-configuration-for-blizzard-games#4>). Blizzard Entertainment. 2012-12-07. Archived from the original (<https://us.battle.net/support/en/article/firewall-configuration-for-blizzard-games#4>) on 2012-08-08. Retrieved 2013-04-02.
109. "Dell OpenManage Version 8.0.1 Port Information Guide" (http://topics-cdn.dell.com/pdf/dell-opnmang-srvr-admin-v8.0.1_Setup%20Guide_en-us.pdf) (PDF). *Dell*. 2014. p. 15. Retrieved 2016-08-27.

110. "Basic command line options" (http://www.cstr.ed.ac.uk/projects/festival/manual/festival_7.html#SEC19). *The Festival Speech Synthesis System – System documentation* (<http://www.cstr.ed.ac.uk/projects/festival/manual/>). *The Centre for Speech Technology Research* (1.4 ed.). University of Edinburgh (published 1999-06-19). 1999-06-17. 7.1. Archived (https://web.archive.org/web/20160828142032/http://www.cstr.ed.ac.uk/projects/festival/manual/festival_7.html) from the original on 2016-08-28. Retrieved 2016-10-27. "... Festival waits for clients on a known port (the value of server_port, default is 1314). ..."
111. Muir, Jeff. "Two Port ICA" (<https://web.archive.org/web/20120615184554/http://citrixblogger.org/2008/03/14/two-port-ica>). p. 1. Archived from the original (<http://citrixblogger.org/2008/03/14/two-port-ica/>) on 15 June 2012. Retrieved 2008-03-14.
112. "Open communication ports required by IBM Tivoli Storage Manager for Virtual Environments 6.4" (<https://www-01.ibm.com/support/docview.wss?uid=swg21625297>). Support. *IBM*. IBM. 2016-05-09. Archived (<https://web.archive.org/web/20160827134317/https://www-01.ibm.com/support/docview.wss?uid=swg21625297>) from the original on 2016-08-27. Retrieved 2016-08-27.
113. "Network ports and URLs that are used by Windows Live Messenger" (<https://support.microsoft.com/kb/927847>). *Support*. Microsoft.
114. "Recommended Port Numbers" (https://docs.oracle.com/cd/B19306_01/network.102/b14213/protocoladd.htm#i470539). Oracle. Retrieved 2015-11-27.
115. Hilker, Steve (2013-03-13). "Oracle Default Port Numbers" (<http://www.toadworld.com/platforms/oracle/w/wiki/1635.oracle-default-port-numbers>). *Oracle Wiki*. Toad World. Archived (<https://web.archive.org/web/20160827141242/http://www.toadworld.com/platforms/oracle/w/wiki/1635.oracle-default-port-numbers>) from the original on 2016-08-27. Retrieved 2016-08-27.
116. "Start Network Server" (https://db.apache.org/derby/papers/DerbyTut/ns_intro.html). *The Apache DB Project*. Derby Tutorial. Apache Software Foundation (published 2016-03-23). 2008-04-30. Archived (https://web.archive.org/web/20160827142602/https://db.apache.org/derby/papers/DerbyTut/ns_intro.html) from the original on 2016-08-27. Retrieved 2016-08-27. "Start the Network server by executing the startNetworkServer.bat (Windows) or startNetworkServer (UNIX) script. This will start the Network Server up on port 1527 ..."
117. "Pervasive PSQL Vx Server 11 SP3 Release Notes" (http://www.pervasive.com/Portals/55/documents/psqlVx/PSQLVx_SP3_readme.htm). *Pervasive PSQL*. 2013. Retrieved 2016-08-27. "... Pervasive PSQL Vx Server 11 SP3 communicates via the following ones: 3351 for the transactional interface, 1583 for the relational interface, and 139 for named pipes. ..."
118. "FAQ: Frequently Asked Questions" (<http://www.isketch.net/instructions/help.shtml>). *iSketch*. n.d. Connection problems. Archived (<https://web.archive.org/web/20160827152128/http://www.isketch.net/instructions/help.shtml>) from the original on 2016-08-27. Retrieved 2016-08-27. "... allow TCP/IP connections on port 1626 & 1627 (1627 only needed for sending sketches.)"
119. "RADIUS Overview" (http://www.juniper.net/techpubs/software/aaa_802/sbrs/sbrs70/sw-sbrs-admin/html/Concepts2.html). *juniper.net*. Retrieved 16 March 2015.
120. DeKok, Alan (May 2012). "Assigned Ports for RADIUS/TCP" (<https://tools.ietf.org/html/rfc6613#page-7>). *RADIUS over TCP* (<https://tools.ietf.org/html/rfc6613>). IETF. p. 7. doi:10.17487/RFC6613 (<http://dx.doi.org/10.17487%2FRFC6613>). ISSN 2070-1721 (<https://www.worldcat.org/issn/2070-1721>). RFC 6613. <https://tools.ietf.org/html/rfc6613#page-7>.
121. "P4PORT" (<https://www.perforce.com/perforce/r12.1/manuals/cmdref/env.P4PORT.html>). *Perforce*. 2012. Archived (<https://web.archive.org/web/20160827155413/https://www.perforce.com/perforce/r12.1/manuals/cmdref/env.P4PORT.html>) from the original on 2016-08-27. Retrieved 2016-08-27. "... Valid communications protocols are tcp (plaintext over TCP/IP) or ssl (SSL over TCP/IP)."
122. "How to troubleshoot the Key Management Service (KMS)" (<https://technet.microsoft.com/en-us/library/ee939272.aspx>). *TechNet*. Microsoft. n.d. Archived (<https://web.archive.org/web/20160325190150/https://technet.microsoft.com/en-us/library/ee939272.aspx>) from the original on 2016-03-25. Retrieved 2016-08-27. "... 1688 is the default TCP port used by the clients to connect to the KMS host. ..."
123. Patel, Baiju V.; Aboda, Bernard; Dixon, William; Zorn, Glen; Booth, Skip (November 2001). *Securing L2TP using IPsec* (<https://tools.ietf.org/html/rfc3193>). Thanks to Gurdeep Singh Pall, David Eitelbach, Peter Ford, Sanjay Anand, John Richardson, Rob Adams. IETF. pp. 8–14, 23–26. doi:10.17487/RFC3193 (<http://dx.doi.org/10.17487%2FRFC3193>). RFC 3193. <https://tools.ietf.org/html/rfc3193>. Retrieved 2016-08-28.

124. Jleeke; Tickner, Patrick (2006-10-04). "Linux Server" (http://manual.americasarmy.com/index.php/Linux_Server). *AAManual (America's Army Game Manual)*. Retrieved 2016-08-27. "... The port the server will listen on. The default port is 1716."
125. "Ports used by some ZENworks products" (<https://www.novell.com/support/kb/doc.php?id=3880659>). *Novell Support Knowledgebase*. Micro Focus (published 2007-04-18). 2012-04-30. Archived (<https://web.archive.org/web/20160827170337/https://www.novell.com/support/kb/doc.php?id=3880659>) from the original on 2016-08-27. Retrieved 2016-08-27.
126. "TCP and UDP Ports Used by ZENworks Primary Servers" (https://www.novell.com/documentation/zenworks114/zen11_sys_servers/data/b18151xi.html?view=print). *ZENworks 11 SP4 Primary Server and Satellite Reference*. Novell (published 2016-05-31). 2016-06-16. Archived (https://web.archive.org/web/20160827165833/https://www.novell.com/documentation/zenworks114/zen11_sys_servers/data/b18151xi.html?view=print) from the original on 2016-08-27. Retrieved 2016-08-07.
127. "Configuration" (<http://nodered.org/docs/configuration>). *Node-RED Documentation* (<http://nodered.org/docs/>). IBM Emerging Technologies. n.d. Archived (<https://web.archive.org/web/20160909034037/http://nodered.org/docs/configuration>) from the original on 2016-09-09. Retrieved 2016-09-09.
128. "Ports and firewalls" (<https://helpx.adobe.com/adobe-media-server/kb/ports-firewalls-flash-media-server.html>). Support. *Adobe* (published 2015-12-14). 2015-02-10. Archived (<https://web.archive.org/web/20160827175802/https://helpx.adobe.com/adobe-media-server/kb/ports-firewalls-flash-media-server.html>) from the original on 2016-08-27. Retrieved 2016-08-27. "... Flash Media Server listens for RTMP/E requests on port 1935/TCP. ... Flash Media Server listens for RTMFP requests on port 1935/UDP. ..."
129. "Hot Standby Router Protocol (HSRP): Frequently Asked Questions" (<https://www.cisco.com/c/en/us/support/docs/ip/hot-standby-router-protocol-hsrp/9281-3.html>). *Cisco Support*. Cisco Systems (published 2017-10-19). 2014-09-19. Archived (<https://web.archive.org/web/20140223191104/https://www.cisco.com/c/en/us/support/docs/ip/hot-standby-router-protocol-hsrp/9281-3.html#q17>) from the original on 2014-02-23. Retrieved 2018-04-27. "..."
"Are HSRP messages TCP or UDP?"
 "UDP, since HSRP runs on UDP port 1985."
 "..."
130. Doyle, Michael; Substelny, Mike. *Artemis Spaceship Bridge Simulator – Terran Star Naval Academy Tactical Manual 1.70* (http://www.eochu.com/dl/Artemis_Manual_latest.pdf) (PDF) (Windows ed.). p. 8. Archived (https://web.archive.org/web/20170630044822/http://www.eochu.com/dl/Artemis_Manual_latest.pdf) (PDF) from the original on 2017-06-30. Retrieved 2017-06-30. "... This screen allows the Bridge Crew to connect to the Artemis Simulator. ... The network must also be configured to forward port 2010 to the server machine's local address. ..."
131. "Which ports are required to play Civilization 4 online?" (<http://support.2k.com/hc/en-us/articles/201333253-Which-ports-are-required-to-play-Civilization-4-online->). Support. 2K. 2016-07-17. Archived (<https://web.archive.org/web/20160827185725/http://support.2k.com/hc/en-us/articles/201333253-Which-ports-are-required-to-play-Civilization-4-online->) from the original on 2016-08-27. Retrieved 2016-08-27.
132. "How to Log in to Your Server or Account" (<https://documentation.cpanel.net/display/CKB/How%2Bto%2BLog%2Bin%2Bto%2BYour%2BServer%2Bor%2BAccount>). *cPanel Knowledge Base* (published 2016-08-22). 2014-06-24. Archived (<https://web.archive.org/web/20160827190806/https://documentation.cpanel.net/display/CKB/How%2Bto%2BLog%2Bin%2Bto%2BYour%2BServer%2Bor%2BAccount>) from the original on 2016-08-27. Retrieved 2016-08-27.
133. "If you're not getting Apple push notifications" (<https://support.apple.com/en-us/HT203609>). Support. *Apple* (published 2016-04-15). 2014-11-08. Archived (<https://web.archive.org/web/20160827195033/https://support.apple.com/en-us/HT203609>) from the original on 2016-08-27. Retrieved 2016-08-27.
134. "Installation manual and user guide Remote administrator 5" (http://download.eset.com/manuals/eset_era_5.2_userguide_enu.pdf) (PDF). ESET, spol. s r.o. Retrieved 29 January 2015.
135. "What ports do I need to open in my firewall?" (<https://help.directadmin.com/item.php?id=71>). *DirectAdmin Knowledge Base*. JBMC Software (published 2011-05-29). n.d. Archived (<https://web.archive.org/web/20160827202214/https://help.directadmin.com/item.php?id=71>) from the original on 2016-08-27. Retrieved 2016-08-27.
136. "Known multiplayer issues in Halo: Combat Evolved" (<https://support.microsoft.com/kb/829469>). *Support*. Microsoft.

137. Balderston, David; Boutté, Andy (2016-02-03). "Ghost config.js - Broken Down" (<https://www.ghostforbeginners.com/ghost-config-js-broken-down/>). *Ghost for Beginners* (<https://www.ghostforbeginners.com/>). Retrieved 2016-08-28. "... This is the port that Ghost is listening on. By default 2368 is used ..."
138. "Getting started with swarm mode" (<https://docs.docker.com/engine/swarm/swarm-tutorial/#open-protocols-and-ports-between-the-hosts>). *Docker Documentation*. Retrieved 2018-05-08.
139. "KGS: Set Preferences" (<https://www.gokgs.com/help/setPrefsWin.html>). *KGS Go Server*. Archived (<https://web.archive.org/web/20160827120651/https://www.gokgs.com/help/setPrefsWin.html>) from the original on 2016-08-27. Retrieved 2016-08-27. "The TCP/IP port of the KGS server. The default is 2379 ..."
140. Garulli, Luca; Dyer, Kenneth P.J.; Franchini, Roberto (2015-05-13). "OrientDB Server" (<http://orientdb.com/docs/2.1/DB-Server.html>). *OrientDB Manual – version 2.1.x* (<http://orientdb.com/docs/2.1/>) (published 2016-05-18). Archived (<https://web.archive.org/web/20160828104748/http://orientdb.com/docs/2.1/DB-Server.html>) from the original on 2016-08-28. Retrieved 2016-08-28. "... Upon startup, the server runs on port 2424 for the binary protocol and 2480 for the http one. If a port is busy the next free one will be used. The default range is 2424-2430 (binary) and 2480-2490 (http). ..."
141. Hanna, Stephen R.; Patel, Baiju V.; Shah, Munil (December 1999). "Protocol Description" (<https://tools.ietf.org/html/rfc2730#section-2.0>). *Multicast Address Dynamic Client Allocation Protocol* (<https://tools.ietf.org/html/rfc2730>). Thanks to Rajeev Byrissetty, Steve Deering, Peter Ford, Mark Handley, Van Jacobson, David Oran, Thomas Pfenning, Dave Thaler, Ramesh Vyaghrapuri and the participants of the IETF. IETF. p. 6. sec. 2.0. doi:10.17487/RFC2730 (<http://dx.doi.org/10.17487%2FRFC2730>). RFC 2730. <https://tools.ietf.org/html/rfc2730#section-2.0>. Retrieved 2016-08-28. "... A reserved port number dedicated for MADCAP is used on the server (port number 2535, as assigned by IANA). Any port number may be used on client machines. ..."
142. Hanna, Stephen R.; Patel, Baiju V.; Shah, Munil (December 1999). "Protocol Overview" (<https://tools.ietf.org/html/rfc2730#section-1.5>). *Multicast Address Dynamic Client Allocation Protocol* (<https://tools.ietf.org/html/rfc2730>). Thanks to Rajeev Byrissetty, Steve Deering, Peter Ford, Mark Handley, Van Jacobson, David Oran, Thomas Pfenning, Dave Thaler, Ramesh Vyaghrapuri and the participants of the IETF. IETF. p. 3. sec. 1.5. doi:10.17487/RFC2730 (<http://dx.doi.org/10.17487%2FRFC2730>). RFC 2730. <https://tools.ietf.org/html/rfc2730#section-1.5>. Retrieved 2016-08-28. "... All messages are UDP datagrams. ..."
143. "DocCommentXchange" (<http://dcx.sybase.com/index.html#sa160/en/dbadmin/serverport-network-conparm.html>). *sybase.com*. Retrieved 27 February 2017.
144. "Service Name and Transport Protocol Port Number Registry" (<https://www.iana.org/assignments/service-names-port-numbers/service-names-port-numbers.xhtml?search=2638>). *Iana.org*. Retrieved 2013-10-26.
145. "Overview" (<http://xbtt.sourceforge.net/tracker/>). *XBT Tracker*. SourceForge. n.d. Archived (<https://web.archive.org/web/20160828134448/http://xbtt.sourceforge.net/tracker/>) from the original on 2016-08-28. Retrieved 2016-08-28. "... XBT Tracker listens on port 2710. ..."
146. "Overview" (<http://xbtt.sourceforge.net/tracker/>). *XBT Tracker*. SourceForge. n.d. Archived (<https://web.archive.org/web/20160828134448/http://xbtt.sourceforge.net/tracker/>) from the original on 2016-08-28. Retrieved 2016-08-28. "... An experimental UDP tracker extension is also supported via announce URL `udp://...:2710`. ..."
147. "Ports Used by I2P" (<https://geti2p.net/en/docs/ports>). *I2P*. December 2015. Archived (<https://web.archive.org/web/20160828135818/https://geti2p.net/en/docs/ports>) from the original on 2016-08-28. Retrieved 2016-08-28.
148. "Getting Started with Rails" (http://guides.rubyonrails.org/getting_started.html#starting-up-the-web-server). *Ruby on Rails*. 2012-03-21. Retrieved 2014-05-27.
149. "Documentation - Meteor" (<http://docs.meteor.com/#quickstart>). *meteor.com*. Retrieved 16 March 2015.
150. "What Ports And Protocols Are Used By Sync?" (<https://help.getsync.com/hc/en-us/articles/204754759-What-ports-and-protocols-are-used-by-Sync->). *Sync Help Center*. Resilio. 2016-08-28. Archived (<https://web.archive.org/web/20160828145924/https://help.getsync.com/hc/en-us/articles/204754759-What-ports-and-protocols-are-used-by-Sync->) from the original on 2016-08-28. Retrieved 2016-08-28. "... Connecting to the tracker server for automatic peer discovery: TCP and UDP, port 3000 ..."

151. "Firewall and connection requirements for the BlackBerry Enterprise Server, BlackBerry Device Service, and Universal Device Service" (<http://support.blackberry.com/kb/articleDetail?ArticleNumber=000003735>). *Blackberry Knowledge Base* (published 2016-05-19). 2015-08-15. Archived (<https://archive.is/20160828181427/http://support.blackberry.com/kb/articleDetail?ArticleNumber=000003735>) from the original on 2016-08-28. Retrieved 2016-08-28. "... On the firewall, verify that port 3101 is open for outbound initiated, bi-directional Transmission Control Protocol (TCP) traffic. ..."
152. "Squid configuration directive http_port" (http://www.squid-cache.org/Doc/config/http_port/). *Squid Documentation* (published 2013-05-09). n.d. Archived (https://web.archive.org/web/20160828182735/http://www.squid-cache.org/Doc/config/http_port/) from the original on 2016-08-28. Retrieved 2016-08-28. "... Squid normally listens to port 3128 ..."
153. "Eggdrop.conf" (<http://eggwiki.org/Eggdrop.conf#Botnet.2FDCC.2FTelnet>). *Eggdrop Wiki*. Retrieved 2014-02-20.
154. "CruiseControl.rb – Getting Started" (http://cruisecontrolrb.thoughtworks.com/documentation/getting_started). thoughtworks.com. Retrieved 2014-05-27.
155. "How to change the listening port for Remote Desktop" (<http://support.microsoft.com/kb/306759>). Microsoft. 2011-05-04. Retrieved 2014-05-27.
156. "RFC 5389: Session Traversal Utilities for NAT (STUN)" (<http://tools.ietf.org/html/rfc5389>). IETF. Retrieved 2014-05-27.
157. "RFC 5766 - Traversal Using Relays around NAT (TURN): Relay Extensions to Session Traversal Utilities for NAT (STUN)" (<http://tools.ietf.org/html/rfc5766>). *ietf.org*. Retrieved 16 March 2015.
158. MacDonald, Derek C.; Lowekamp, Bruce B. (May 2010). "Port Numbers and SRV Registry" (<https://tools.ietf.org/html/rfc5780#section-9.2>). *NAT Behavior Discovery Using Session Traversal Utilities for NAT (STUN)* (<https://tools.ietf.org/html/rfc5780>). Thanks to Dan Wing, Cullen Jennings, and Magnus Westerlund for detailed comments.. IETF. p. 25. sec. 9.2. doi:10.17487/RFC5780 (<http://dx.doi.org/10.17487%2FRFC5780>). RFC 5780. <https://tools.ietf.org/html/rfc5780#section-9.2>. Retrieved 2017-07-28. "... By default, the STUN NAT Behavior Discovery usage runs on the same ports as STUN: 3478 over UDP and TCP, and 5349 for TCP over TLS. ..."
159. "Test Internet Connection" (http://manuals.playstation.net/document/en/ps4/settings/nw_test.html). *PlayStation®4 User's Guide* (<http://manuals.playstation.net/document/en/ps4/>). n.d. Archived (https://web.archive.org/web/20170409093602/http://manuals.playstation.net/document/en/ps4/settings/nw_test.html) from the original on 2017-04-09. Retrieved 2017-04-09. "... refer to the port numbers listed below, which are used when you connect your PS4™ system to a PlayStation™Network server."
 - "TCP: 80, 443, 3478, 3479, 3480"
 - "UDP: 3478, 3479"
 " ..."
160. 3 min expected wait time (2013-09-18). "Using Microsoft Outlook Express with Your Email | Go Daddy Help | Go Daddy Support" (<http://help.godaddy.com/article/355>). Help.godaddy.com. Retrieved 2013-10-08.
161. "IBM U2 product family" (<https://web.archive.org/web/20080612215654/http://www-306.ibm.com/software/data/u2/>). IBM. 2009-10-01. Archived from the original (<http://www-306.ibm.com/software/data/u2/>) on June 12, 2008. Retrieved 2014-05-27.
162. "TinTin++ Mud Client Manual - Chat Protocol" (<http://tintin.sourceforge.net/manual/chat.php>).
163. "IETF Draft of the Minger Email Address Verification Protocol" (http://tools.ietf.org/html/draft-hath****-minger-06#section-2). IETF. Retrieved 2014-05-27.
164. "Service Name and Transport Protocol Port Number Registry" (<http://www.iana.org/assignments/service-names-port-numbers/service-names-port-numbers.xhtml?search=4190>). Iana.org. Retrieved 2013-10-08.
165. "Couch-Potato-Server/Network.java at master · rarcher/Couch-Potato-Server" (<https://github.com/rarcher/Couch-Potato-Server/blob/master/Communications%20Protocol/src/codes/soloware/couchpotato/settings/Network.java>).
166. "Install and Run NATS Server" (<http://nats.io/documentation/tutorials/gnatsd-install/>).

167. "Configuration of Orthanc" (<http://book.orthanc-server.com/users/configuration.html>). *Orthanc Book* (<http://book.orthanc-server.com/>). 2017 [First published 2015]. Archived (<https://web.archive.org/web/20170212134127/http://book.orthanc-server.com/users/configuration.html>) from the original on 2017-02-12. Retrieved 2017-02-12. "... The default configuration file would:"
 - "Create a DICOM server with the DICOM AET (Application Entity Title) ORTHANC that listens on the port 4242."
 - "Create a HTTP server for the REST API that listens on the port 8042."
 "...
168. "First steps with Docker" (<https://web.archive.org/web/20140219001537/http://docs.docker.io/en/latest/use/basics/>). Archived from the original (<http://docs.docker.io/en/latest/use/basics/>) on 2014-02-19.
169. "Opening ports for Viber Desktop" (<https://support.viber.com/customer/portal/articles/1506350-opening-ports-for-viber-desktop>). *Viber*. Viber Media S.à r.l. Retrieved 13 June 2016.
170. "Service Name and Transport Protocol Port Number Registry" (<http://www.iana.org/assignments/service-names-port-numbers/service-names-port-numbers.xhtml?search=4307>). *www.iana.org*. Retrieved 2016-03-28.
171. "RFC 2167, Referral Whois (RWhois) Protocol" (<http://tools.ietf.org/html/rfc2167>). IETF. Retrieved 2014-05-27.
172. "eMule Ports" (http://www.emule-project.net/home/perl/help.cgi?l=1&topic_id=122&rm=show_topic). Emule-project.net. 2007-05-16. Retrieved 2014-05-27.
173. "Port Details - Port 4728" (<http://isc.sans.edu/port.html?port=4728>). SANS.
174. "Service Name and Transport Protocol Port Number Registry" (<http://www.iana.org/assignments/service-names-port-numbers/service-names-port-numbers.xhtml?search=4789>). *www.iana.org*. Retrieved 2015-12-04.
175. "FlightGear Howto: Multiplayer" (http://wiki.flightgear.org/Howto:_Multiplayer). flightgear.org. Retrieved 2014-05-27.
176. "PEG Specifications" (https://web.archive.org/web/20170608235717/https://www.mitn.info/xfer/PublicSolicitation_Docs/SDIR%7E142085/2%2DATT%20U%2Dverse%20Encoder%20Requirements.pdf) (PDF). *Michigan Inter-governmental Trade Network*. Jan 2015. Archived from the original (https://www.mitn.info/xfer/PublicSolicitation_Docs/SDIR~142085/2-ATT%20U-verse%20Encoder%20Requirements.pdf) (PDF) on 2017-06-08. Retrieved 8 June 2017. "... TCP port 5000 shall be configured and open inbound through firewalls to the encoder. ..."
177. Picture of Horse (2017-07-18). "Troubleshooting Connection Issues" (<https://support.riotgames.com/hc/en-us/articles/201752664-Troubleshooting-Connection-Issues>). *Riot Games Support*. Riot Games. Port forwarding. Archived (<https://web.archive.org/web/20170810112436/https://support.riotgames.com/hc/en-us/articles/201752664-Troubleshooting-Connection-Issues>) from the original on 2017-08-10. Retrieved 2017-08-10. "... Now you must create an entry for each of the port ranges listed on the previous page. ... 5000 - 5500 UDP (League of Legends Game Client) ..."
178. ARX Passersystem, Användarmanual (<http://www.assa.se/Other/ASSA/Products/Broschyrer%20Svenska/Passersystem/ARX-Passersystem.pdf>) Archived (<https://web.archive.org/web/20100821032559/http://www.assa.se/Other/ASSA/Products/Broschyrer%20Svenska/Passersystem/ARX-Passersystem.pdf>) August 21, 2010, at the *Wayback Machine*.
179. Hill, Graham; Spiro, Jason, eds. (3 April 2012). "Nmap indicates that "telepathstart" and "telepathattack" are listening on ports 5010 and 5011 of my Linux box. What are these?" (<http://security.stackexchange.com/a/13425/11180>). *IT Security Stack Exchange*. Stack Exchange, Inc. Answer by Graham Hill. Retrieved 2012-07-13.
180. "Symantec Intruder Alert product support" (https://support.symantec.com/en_US/endpoint-protection.51971.html). Symantec. Retrieved 2014-05-27.
181. <http://www.aps.anl.gov/epics/base/R3-14/12-docs/CAref.html#port>
182. Camarillo, Gonzalo; Ott, Joerg; Drage, Keith (November 2006). *The Binary Floor Control Protocol (BFCP)* (<https://tools.ietf.org/html/rfc4582>). IETF. doi:10.17487/RFC4582 (<http://dx.doi.org/10.17487%2FRFC4582>). RFC 4582. <https://tools.ietf.org/html/rfc4582>. Retrieved 2017-12-13.
183. "IBM Tivoli Netcool/Impact" (<https://web.archive.org/web/20080616122132/http://www-306.ibm.com/software/tivoli/products/netcool-impact/>). IBM. Archived from the original (<http://www-306.ibm.com/software/tivoli/products/netcool-impact/>) on June 16, 2008. Retrieved 2014-05-27.
184. "RFC 2107, Ascend Tunnel Management Protocol" (<http://tools.ietf.org/html/rfc2167>). IETF. Retrieved 2014-05-27.
185. "Port 5172 (tcp/udp)" (<http://www.speedguide.net/port.php?port=5172>). Retrieved 2016-07-25.

186. Donaghey, River (2017-12-15). "Rest in Peace, AIM" (https://www.vice.com/en_us/article/8xm5w5/rip-aim-vgtrn). *Vice*. Vice Media. Archived (https://web.archive.org/web/20180108151524/https://www.vice.com/en_us/article/8xm5w5/rip-aim-vgtrn) from the original on 2018-01-08. Retrieved 2018-04-19. "... Beloved online chat app AOL Instant Messenger died on Friday, *USA Today* reports. It was 20 years old. ..."
187. "RFC 3920, Extensible Messaging and Presence Protocol (XMPP): Core" (<http://tools.ietf.org/html/rfc3920>). Tools.ietf.org. Retrieved 2014-05-27.
188. "RFC 6120, Extensible Messaging and Presence Protocol (XMPP): Core" (<http://tools.ietf.org/html/rfc6120>). IETF. 2003-12-13. Retrieved 2014-05-27.
189. "RFC 5415, Control And Provisioning of Wireless Access Points (CAPWAP) Protocol Specification" (<http://tools.ietf.org/html/rfc5415>). IETF. 2008-11-10. Retrieved 2014-05-27.
190. XEP-0124: Bidirectional-streams Over Synchronous HTTP (BOSH) (<http://xmpp.org/extensions/xep-0124.html>)
191. "XEP-0124: Bidirectional-streams Over Synchronous HTTP (BOSH) with SSL" (<http://xmpp.org/extensions/xep-0124.html>). Xmpp.org. Retrieved 2014-05-27.
192. "XEP-0174: Serverless Messaging" (<http://xmpp.org/extensions/xep-0174.html>). Xmpp.org. Retrieved 2014-05-27.
193. "Kega Fusion Mini-Manual" (<https://web.archive.org/web/20131029205026/http://www.arcadezone.org/emulation/genesis/Readme.txt>). *arcadezone.org*. Niobium's Arcade Zone. 2010-01-16. Archived from the original (<http://www.arcadezone.org/emulation/genesis/Readme.txt>) on October 29, 2013. Retrieved 2013-10-26.
194. "Kega Fusion Mini-Manual" (https://web.archive.org/web/20131029201029/http://gamingpwnage.webs.com/PC/archive/fusion_manual.txt). *gamingpwnage.webs.com*. GamingPwnage. Archived from the original (http://gamingpwnage.webs.com/PC/archive/fusion_manual.txt) on October 29, 2013. Retrieved 2013-10-26.
195. Miller, Kenneth; Robertson, Kary; Tweedly, Alex; White, Marc (April 1998). "MFTP Architecture" (<https://tools.ietf.org/html/draft-miller-mftp-spec-03#section-3>). *StarBurst Multicast File Transfer Protocol (MFTP) Specification* (<https://tools.ietf.org/html/draft-miller-mftp-spec-03>). Acknowledgements to Scott Bradner, Ken Cates, and Tony Speakman. IETF. p. 10. sec. 3. I-D draft-miller-mftp-spec-03. <https://tools.ietf.org/html/draft-miller-mftp-spec-03#section-3>. Retrieved 2017-05-19. "... IANA has assigned UDP port 5402 for MFTP. Certain MFTP messages must be sent to this port because it will be the only port number known both to the sender (Server) and the receivers (Clients). ..."
196. "Use IT Group - Bouwsoft - Groensoft" (<http://www.bouwsoft.be>). Bouwsoft.be. Retrieved 2013-10-08.
197. "Firewall Configuration to Allow Client - Server Comms" (<http://resourcecenter.controlmicrosystems.com/display/public/CS/Firewall+Configuration+to+Allow+Client+-+Server+Comms;jsessionid=A820B5CA962E638AD0EEA6B3152346CB>). *Schneider Electric Resource Center*. Retrieved 26 November 2015.
198. "Port Numbers" (http://docs.oracle.com/cd/E14571_01/core.1111/e10105/portnums.htm). Docs.oracle.com. Retrieved 2013-10-26.
199. ANSI E1.17-2010
200. pcAnywhere IP port usage (https://support.symantec.com/en_US/article.TECH106675.html)
201. How to change the IP ports that pcAnywhere uses (https://support.symantec.com/en_US/article.TECH107578.html)
202. "AMQP URI Specification" (<http://www.rabbitmq.com/uri-spec.html>). *www.rabbitmq.com*. GoPivotal, Inc. 2013.
203. "Hazelcast 3.9 Reference Manual" (<http://docs.hazelcast.org/docs/3.9/manual/html-single/index.html#port>). *docs.hazelcast.org*. Retrieved 2017-11-27.
204. "Technet: Using a Firewall with Operations Manager 2007" (<https://technet.microsoft.com/en-us/library/cc540431.aspx>). Microsoft.
205. "Troubleshooting ProjectWise Gateway or Connection Server [TN] - Content Management Wiki - Content Management - Bentley Communities" (https://communities.bentley.com/products/projectwise/content_management/wiki/5620/troubleshooting-projectwise-gateway-or-connection-server-tn). Retrieved 2017-09-20.
206. "VNC Frequently Asked Questions (FAQ): Q53 Which TCP/IP ports does VNC use?" (http://www.hep.phy.cam.ac.uk/vnc_docs/faq.html#q53). AT&T Laboratories Cambridge. 1999.
207. "TeamViewer 8 Manual Remote Control" (<http://www.teamviewer.com/en/res/pdf/TeamViewer8-Manual-RemoteControl-en.pdf>) (PDF). *www.teamviewer.com*. TeamViewer GmbH. 2012. p. 68. Retrieved 2013-08-30.
208. "Enter-PSSession" (<https://technet.microsoft.com/en-us/library/hh849707.aspx>). *www.technet.com*. Microsoft TechNet. 2013. Retrieved 2013-10-31.

209. "vSphere Documentation Center" (https://pubs.vmware.com/vsphere-50/index.jsp?topic=%2Fcom.vmware.vsphere.security.doc_50%2FGUID-ECEA77F5-D38E-4339-9B06-FF9B78E94B68.html). *vmware.com*. Retrieved 16 March 2015.
210. "Server Configuration" (<http://www.objectdb.com/java/jpa/setting/server>). *ObjectDB 2.6 Developer's Guide* (<http://www.objectdb.com/java/jpa>). n.d. Chapter 6. Archived (<https://web.archive.org/web/20161121054616/http://www.objectdb.com/java/jpa/setting/server>) from the original on 2016-11-21. Retrieved 2016-11-21. "... The port attribute specifies a TPC [*sic*] port on which the server is listening for new connections. Usually the default port 6136 should be specified. ..."
211. "Discord API Docs for Bots and Developers" (<https://discordapp.com/developers/docs/topics/rpc#rpc-server-ports>). *Discord*. Retrieved 2017-12-23.
212. "RFC 5424" (<http://tools.ietf.org/html/rfc5425>). IETF. 2008-11-10. Retrieved 2014-05-27.
213. Mosberger, David (20 Apr 2009). "SANE Unix man page" (<http://www.sane-project.org/man/saned.8.html>). *SANE - Scanner Access Now Easy*.
214. "Datalogger Support Software" (<http://www.campbellsci.com/datalogger-software>). *Campbellsci.com*. Retrieved 2014-05-27.
215. Worldwide. "Application-Oriented Networking – Cisco Systems" (http://www.cisco.com/en/US/products/ps6692/Products_Sub_Category_Home.html). *Cisco.com*. Retrieved 2014-05-27.
216. "Database Mirroring Endpoint" ([https://technet.microsoft.com/en-us/library/ms179511\(v=sql.105\).aspx](https://technet.microsoft.com/en-us/library/ms179511(v=sql.105).aspx)). *SQL Server 2008 R2*. Microsoft. Retrieved 2014-05-27.
217. "WebClientAuthenticatedSessionIDs - FAHClient" (<https://fah.stanford.edu/projects/FAHClient/wiki/WebClientAuthenticatedSessionIDs>). *stanford.edu*. Retrieved 2014-05-27.
218. "The Neo4J Manual Chapter 27. Web Interface" (<http://docs.neo4j.org/chunked/stable/tools-webadmin.html>). Retrieved 2014-06-12.
219. "Open iT FAQs: What are the default port server of Open iT?" (<https://openit.com/faqs/#hrf-content-8578>). Retrieved 2017-02-28.
220. Wood, Lloyd; Eddy, Wesley M.; Smith, Charles; Ivancic, Will; Jackson, Chris (November 2016). *Saratoga: A Scalable Data Transfer Protocol* (<https://tools.ietf.org/html/draft-wood-tsvwg-saratoga-20>). Contributions by James H. McKim et al. (section 10 "Acknowledgements", p. 52). IETF. I-D draft-wood-tsvwg-saratoga-20. <https://tools.ietf.org/html/draft-wood-tsvwg-saratoga-20>. Retrieved 2017-03-27. "... Saratoga is a file transfer and content delivery protocol ... IANA has allocated port 7542 (tcp/udp) for use by Saratoga. ..."
221. Wood, Lloyd; Eddy, Wesley M.; Ivancic, Will; McKim, Jim; Jackson, Chris (13–14 September 2007). *Saratoga: a Delay-Tolerant Networking convergence layer with efficient link utilization* (<http://ieeexplore.ieee.org/document/4409410/>). 2007 International Workshop on Space and Satellite Communications. Salzburg: IEEE. pp. 168–172. doi:10.1109/IWSSC.2007.4409410 (<https://doi.org/10.1109%2FIWSSC.2007.4409410>). ISBN 978-1-4244-0938-9. "... Saratoga is a rate-based UDP file transfer protocol capable of transferring large files. Saratoga has been in operational use since 2004 to move mission imaging data from the *Disaster Monitoring Constellation* (DMC) remote-sensing satellites to ground stations. ..."
222. "Smartlaunch 4.1 Cyber Cafe Management Software Product Overview" (https://web.archive.org/web/20130311124123/http://www.smartlaunch.net/Download/Smartlaunch_Product_Overview.pdf) (PDF). Archived from the original (http://www.smartlaunch.net/Download/Smartlaunch_Product_Overview.pdf) (PDF) on 2013-03-11. Retrieved 2014-05-27.
223. "How to create a YSF Server, step by step guide" (<http://forum.ysfhq.com/viewtopic.php?f=144&t=1529>). *forum.ysfhq.com*. YSFlight Headquarters. 2011-08-06. Retrieved 2013-10-26.
224. "Flex 3 – Adobe Flex 3 Help" (http://livedocs.adobe.com/flex/3/html/help.html?content=debugging_02.html). *adobe.com*. Retrieved 2014-05-27.
225. "Running DynamoDB on Your Computer" (<https://docs.aws.amazon.com/amazondynamodb/latest/developerguide/DynamoDBLocal.html>). *Amazon DynamoDB – Developer Guide* (<https://docs.aws.amazon.com/amazondynamodb/latest/developerguide/>) (API Version 2012-08-10 ed.). Amazon Web Services. n.d. Archived (<https://web.archive.org/web/20161024004612/https://docs.aws.amazon.com/amazondynamodb/latest/developerguide/DynamoDBLocal.html>) from the original on 2016-10-24. Retrieved 2016-10-24. "... DynamoDB uses port 8000 by default. ..."

226. "Writing your first Django app" (<https://docs.djangoproject.com/en/1.10/intro/tutorial01/>). *Django documentation* (<https://docs.djangoproject.com/en/1.10/>) (1.10 ed.). Django Software Foundation. 2016. Archived (<https://web.archive.org/web/20161024005546/https://docs.djangoproject.com/en/1.10/intro/tutorial01/>) from the original on 2016-10-24. Retrieved 24 July 2016. "... By default, the runserver command starts the development server on the internal IP at port 8000. ..."
227. "AppAssure 5 Firewall Port Requirements" (<https://web.archive.org/web/20130122023421/http://www.appassure.com/support/KB/appassure-5-firewall-port-requirements/>). AppAssure (Knowledge Base). Dell (published 2012-10-23). 2012-10-01. Archived from the original (<http://www.appassure.com/support/KB/appassure-5-firewall-port-requirements/>) on 2013-01-22. Retrieved 2017-02-12.
228. "OpenERP Web Installation" (<https://doc.odoo.com/5.0/install/linux/web/>). *OpenERP Documentation* (<https://doc.odoo.com/5.0/>) (5.0 ed.) (published 2017-02-12). n.d. Archived (<https://web.archive.org/web/20170212140341/https://doc.odoo.com/5.0/install/linux/web/>) from the original on 2017-02-12. Retrieved 2017-02-12. "... port is the OpenERP server port which is by default 8070 for NET-RPC or 8069 for XML(S)-RPC. The web server itself listens by default on port 8080 ..."
229. "Changing JIRA application TCP ports" (<https://confluence.atlassian.com/adminjiraserver071/changing-jira-application-tcp-ports-802593049.html>). *Administering JIRA applications 7.1* (<https://confluence.atlassian.com/adminjiraserver071/>). n.d. Archived (<https://web.archive.org/web/20170212143908/https://confluence.atlassian.com/adminjiraserver071/changing-jira-application-tcp-ports-802593049.html>) from the original on 2017-02-12. Retrieved 2017-02-12. "... By default, JIRA applications use TCP listening port 8080 and hence, JIRA applications are typically available at <http://<yourserver>:8080>. ..."
230. "web.conf" (<http://docs.splunk.com/Documentation/Splunk/6.6.3/Admin/Webconf>). *Splunk® Enterprise Admin Manual* (<http://docs.splunk.com/Documentation/Splunk/6.6.3/Admin>) (6.6.3 ed.). Splunk. n.d. Archived (<https://web.archive.org/web/20170823063902/http://docs.splunk.com/Documentation/Splunk/6.6.3/Admin/Webconf>) from the original on 2017-08-23. Retrieved 2017-08-23. "... The following are the spec and example files for web.conf. ... Location of splunkd. ... Defaults to 127.0.0.1:8089. ..."
231. "How is the FRITZ!Box protected from attacks against port 8089?" (https://en.avm.de/service/fritzbox/fritzbox-7490/knowledge-base/publication/show/1472_How-is-the-FRITZ-Box-protected-from-attacks-against-port-8089/). AVM. 2016-02-05. Archived (https://web.archive.org/web/20170712053500/https://en.avm.de/service/fritzbox/fritzbox-7490/knowledge-base/publication/show/1472_How-is-the-FRITZ-Box-protected-from-attacks-against-port-8089/) from the original on 2017-07-12. Retrieved 2017-07-06. "... The FRITZ!Box supports the TR-069 protocol ... If necessary, the service provider's Auto Configuration Server (ACS) contacts the FRITZ!Box over TCP port 8089 using a URI (Uniform Resource Identifier) that was previously negotiated. ..."
232. "Change listen port for Confluence" (<https://confluence.atlassian.com/doc/change-listen-port-for-confluence-165823.html>). *Confluence Server documentation* (<https://confluence.atlassian.com/doc/>) (6.0 ed.). n.d. Archived (<https://confluence.atlassian.com/doc/change-listen-port-for-confluence-165823.html>) from the original on 2017-02-12. Retrieved 2017-02-12. "... If you see this error: ... This means you are running other software on Confluence's default port of 8090. ..."
233. "Frequently asked questions" (<http://wiki.coralcdn.org/faq.html>). *Coral Content Distribution Network Wiki*. n.d. Archived (<https://web.archive.org/web/20170212152632/http://wiki.coralcdn.org/faq.html>) from the original on 2017-02-12. Retrieved 2017-02-12. "... you can now access CoralCDN through ports 80, 8080, and 8090. ..."
234. "Network Configuration" (<https://developer.couchbase.com/documentation/server/current/install/install-ports.html>). *CouchBase Developer Portal*. 2017. Archived (<https://web.archive.org/web/20170212153626/https://developer.couchbase.com/documentation/server/current/install/install-ports.html>) from the original on 2017-02-12. Retrieved 2017-02-12.
235. "Remote Administration for IIS Manager" (<http://www.iis.net/learn/manage/remote-administration/remote-administration-for-iis-manager#02>). *iis.net*. Retrieved 16 March 2015.
236. "Bloomberg Transport and Security Specification" (https://web.archive.org/web/20160324140955/https://www.bloomberg.com/professional/content/uploads/sites/4/Transport_Security_Specification_60.pdf) (PDF). 3 March 2016. Archived from the original (https://www.bloomberg.com/professional/content/uploads/sites/4/Transport_Security_Specification_60.pdf) (PDF) on 24 March 2016. Retrieved 17 March 2016.

237. "VMware Server 2.0 RC 2 Release Notes" (https://www.vmware.com/products/beta/vmware_server/releasenotes_vmserver2.html). *VMWare Documentation*. VMWare (published 2008-08-26). 2008-08-19. Archived (https://web.archive.org/web/20170906040259/https://www.vmware.com/products/beta/vmware_server/releasenotes_vmserver2.html) from the original on 2017-09-06. Retrieved 2017-09-04. "... The default VI Web Access HTTP connection port is 8222 and the default HTTPS port is 8333. ..."
238. "Apache Synapse" (<http://synapse.apache.org>). apache.org. 2012-01-06. Retrieved 2014-05-27.
239. "Remote Access Update API - CheckIP Tool FAQ" (<https://help.dyn.com/remote-access-api/checkip-tool/>). dyn.com. Retrieved 2015-08-21.
240. "MikroTik Wiki "IP/Services" page" (<https://web.archive.org/web/20140628220318/http://wiki.mikrotik.com/wiki/Manual:IP/Services>). MikroTik. 2014-01-02. Archived from the original (<http://wiki.mikrotik.com/wiki/Manual:IP/Services>) on 2014-06-28. Retrieved 2014-06-23.
241. Bitcoin Forum: Command Line and JSON-RPC (<http://www.bitcoin.org/smf/index.php?topic=63.msg452#msg452>)
242. "FAQ - Bitcoin" (https://en.bitcoin.it/wiki/FAQ#Do_I_need_to_configure_my_firewall_to_run_Bitcoin.3F). En.bitcoin.it. 2014-12-12. Retrieved 2015-01-01.
243. "Enabling the inbound firewall rule for a master VDFS service - VisualSVN Help Center" (<http://www.visualsvn.com/suport/topic/00073/>). *visualsvn.com*. Retrieved 16 March 2015.
244. *Configuring and Administering Adobe ColdFusion 10* (http://help.adobe.com/en_US/ColdFusion/10.0/Admin/coldfusion_10_admin.pdf) (PDF). Adobe (published 2012-09-07). n.d. pp. 2, 5, 29, 95, 150–151. Archived (https://wayback.archive-it.org/all/20130202175437/http://help.adobe.com/en_US/ColdFusion/10.0/Admin/coldfusion_10_admin.pdf) (PDF) from the original on 2013-02-02. Retrieved 2016-10-24. "... The ColdFusion server configuration is built on top of Tomcat, also called the built-in web server. ... By default in the server configuration, the built-in web server listens on port 8500. ..."
245. "How to Configure a Firewall for Software Updates" (<https://technet.microsoft.com/en-us/library/bb693717.aspx>). *Microsoft TechNet*. n.d. Archived (<https://web.archive.org/web/20161024231138/https://technet.microsoft.com/en-us/library/bb693717.aspx>) from the original on 2016-10-24. Retrieved 2016-10-24. "... By default, a WSUS server that is configured for the default Web site uses port 80 for HTTP and port 443 for HTTPS. By default, the WSUS server uses port 8530 for HTTP and port 8531 for HTTPS if it is using the WSUS custom Web site. ..."
246. "Step 3: Configure WSUS" (<https://technet.microsoft.com/en-us/library/hh852346.aspx>). *Deploy Windows Server Update Services in Your Organization* (<https://technet.microsoft.com/en-us/library/hh852340.aspx>). *Microsoft TechNet*. n.d. Archived (<https://web.archive.org/web/20161024231054/https://technet.microsoft.com/en-us/library/hh852346.aspx>) from the original on 2016-10-24. Retrieved 2016-10-24. "... WSUS upstream and downstream servers will synchronize on the port configured by the WSUS Administrator. By default, these ports are configured as follows:"
 - "On WSUS 3.2 and earlier, port 80 for HTTP and 443 for HTTPS"
 - "On WSUS 6.2 and later (at least Windows Server 2012), port 8530 for HTTP and 8531 for HTTPS"

" ..."
247. Ohling, Freerk; Varley Jamieson, Helen; Rastapopoulos, Roberto; Schoen, Seth; booki; et al. (2011). "Freegate" (http://flossmanuals.net/bypassing-censorship/ch022_freegate/). *How to Bypass Internet Censorship* (<https://flossmanuals.net/bypassing-censorship/>). FLOSS Manuals. 22. Archived (https://archive.is/20161024235132/https://flossmanuals.net/bypassing-censorship/ch022_freegate/) from the original on 2016-10-24. Retrieved 2016-10-24. "... Freegate is a proxy tool ... If you want to use another application with Freegate ... you will have to configure them to use Freegate as a proxy server. ... the port is 8580. ..."
248. "Planning your network topology" (https://www.ibm.com/support/knowledgecenter/SSYRPW_8.5.1/com.ibm.help.Int851.doc/Plan_network_configuration.html). *Lotus Notes Traveler 8.5.1 documentation* (https://www.ibm.com/support/knowledgecenter/SSYRPW_8.5.1). IBM (published 2010-07-01). n.d. Retrieved 2016-10-25.
249. "Network calculations" (<http://www.ultrafractal.com/help/network/networkcalculations.html>). *Ultra Fractal manual* (<http://www.ultrafractal.com/help/>). Frederik Slijkerman. n.d. Archived (<https://archive.is/20161025005802/http://www.ultrafractal.com/help/index.html?/help/network/networkcalculations.html>) from the original on 2016-10-25. Retrieved 2016-10-25. "... Ultra Fractal enables you to distribute calculations over multiple computers connected with a network. ... Ultra Fractal uses the TCP/IP protocol for network calculations, ..."

250. "Network servers" (<http://www.ultrafractal.com/help/network/networkservers.html>). *Ultra Fractal manual* (<http://www.ultrafractal.com/help/>). Frederik Slijkerman. n.d. Archived (<https://archive.is/20161025005452/http://www.ultrafractal.com/help/index.html?/help/network/networkservers.html>) from the original on 2016-10-25. Retrieved 2016-10-25. "... To be able to connect to a remote computer, Ultra Fractal must be running in server mode ... By default, the server listens on port 8691 for connections ..."
251. "Which ports does the TeamSpeak 2 server use?" (<https://web.archive.org/web/20161025011723/https://support.teamSpeakUSA.com/index.php?%2FKnowledgebase%2FArticle%2FView%2F79%2F19%2Fwhich-ports-does-the-teamspeak-2-server-use>). Support. *TeamSpeak*. n.d. Archived from the original (<https://support.teamSpeakUSA.com/index.php?%2FKnowledgebase%2FArticle%2FView%2F79%2F19%2Fwhich-ports-does-the-teamspeak-2-server-use>) on 2016-10-25. Retrieved 2016-10-25.
252. *Nessus 6.8 User Guide* (https://docs.tenable.com/nessus/6_8/Content/Resources/PDF/Nessus_6_8.pdf) (PDF). Tenable Network Security (published 2017-06-27). n.d. p. 28. Archived (https://web.archive.org/web/20170706030752/https://docs.tenable.com/nessus/6_8/Content/Resources/PDF/Nessus_6_8.pdf) (PDF) from the original on 2017-07-06. Retrieved 2017-07-06. "... The Nessus UI uses port 8834. ... By default, Nessus is installed and managed using HTTPS and SSL, uses port 8834 ..."
253. Vaughan-Nichols, Steven J. (2009-06-18). "First look: Opera Unite alpha lets you share files -- but is it safe?" (<http://www.computerworld.com/article/2525727/networking/first-look--opera-unite-alpha-lets-you-share-files---but-is-it-safe-.html>). Networking. *Computerworld*. Archived (<https://web.archive.org/web/20161025025341/http://www.computerworld.com/article/2525727/networking/first-look--opera-unite-alpha-lets-you-share-files---but-is-it-safe-.html>) from the original on 2016-10-25. Retrieved 2016-10-25. "... Unite is both a Web browser and a Web server. With the included JavaScript applets, ... To make this happen, your PC and its Internet connection have to have port 8840 open. ..."
254. The How-To Geek (2010-02-15). "How to Share Large Files Over the Internet with Opera Unite" (<http://lifesacker.com/5472050/whats-the-easiest-way-to-share-large-files-and-media-with-friends>). *Lifesacker*. Archived (<https://web.archive.org/web/20161025030322/http://lifesacker.com/5472050/whats-the-easiest-way-to-share-large-files-and-media-with-friends>) from the original on 2016-10-25. Retrieved 2016-10-25. "... Unite automatically hooks into your router using uPNP to dynamically open port 8840, but it can also use a Unite proxy server when you're behind a more restrictive firewall ..."
255. "Use of CDDB service in your software" (<http://www.robots.ox.ac.uk/~spline/cddb-howto.txt>). CDDB Inc. 1998-09-28. Archived (<https://web.archive.org/web/20161025030916/http://www.robots.ox.ac.uk/~spline/cddb-howto.txt>) from the original on 2016-10-25. Retrieved 2016-10-25 – via Department of Engineering Science, University of Oxford. "... CDDB (CD database) is an information database containing artist, disc title, track titles, and other information for digital audio compact discs. ... There are two forms of remote access to CDDB servers, CDDBP and HTTP. All current CDDB servers answer either at IP port 888 or 8880 for CDDBP and port 80 for HTTP access. ..."
256. "Port number settings in WebSphere Application Server versions" (https://www.ibm.com/support/knowledgecenter/SS7JFU_8.0.0/com.ibm.websphere.migration.express.iseries.doc/info/seriesexp/ae/rmig_portnumber.html). *WebSphere Application Server - Express, Version 8.0 documentation* (https://www.ibm.com/support/knowledgecenter/SS7JFU_8.0.0). IBM (published 2016-07-25). n.d. Archived (https://web.archive.org/web/20161025035406/https://www.ibm.com/support/knowledgecenter/SS7JFU_8.0.0/com.ibm.websphere.migration.express.iseries.doc/info/seriesexp/ae/rmig_portnumber.html) from the original on 2016-10-25. Retrieved 2016-10-25.
257. "Frequently Asked Questions" (<http://mqtt.org/faq>). MQTT. n.d. Archived (<https://web.archive.org/web/20161025032638/http://mqtt.org/faq>) from the original on 2016-10-25. Retrieved 2016-10-25. "... TCP/IP port 1883 is reserved with IANA for use with MQTT. TCP/IP port 8883 is also registered, for using MQTT over SSL. ..."
258. Banks, Andrew; Gupta, Guhan, eds. (2015-12-10). "Network Connections" (https://docs.oasis-open.org/mqtt/mqtt/v3.1.1/mqtt-v3.1.1.html#_Network_Connections). *MQTT Version 3.1.1* (<https://docs.oasis-open.org/mqtt/mqtt/v3.1.1/mqtt-v3.1.1.html>) (Plus Errata 01 ed.). OASIS. 4.2. Archived (<https://web.archive.org/web/20161025033743/https://docs.oasis-open.org/mqtt/mqtt/v3.1.1/mqtt-v3.1.1.html>) from the original on 2016-10-25. Retrieved 2016-10-25. "... TCP ports 8883 and 1883 are registered with IANA for MQTT TLS and non TLS communication respectively. ..."
259. Ivanov, Paul; et al. (2015-09-25). "Running a notebook server" (https://ipython.org/ipython-doc/3/notebook/public_server.html). In Baecker, Arnd. *IPython Documentation* (<https://ipython.org/ipython-doc/3/>). *IPython* (3.2.1 ed.). Archived (https://web.archive.org/web/20161025045314/https://ipython.org/ipython-doc/3/notebook/public_server.html) from the original on 2016-10-25. Retrieved 2016-10-25. "... The IPython notebook web-application is based on a server-client structure. ... By default, a notebook server runs on <http://127.0.0.1:8888/> and is accessible only from localhost. ..."

260. "Running the Notebook" (<https://jupyter.readthedocs.io/en/latest/running.html>). *Jupyter Documentation* (<https://jupyter.readthedocs.io/en/latest/>) (Latest ed.). n.d. Archived (<https://web.archive.org/web/20161025050710/https://jupyter.readthedocs.io/en/latest/running.html>) from the original on 2016-10-25. Retrieved 2016-10-25 – via Read the Docs. "... By default, the notebook server starts on port 8888. If port 8888 is unavailable or in use, the notebook server searches the next available port. ..."
261. "Change MAMP to Default Apache and MySQL ports" (<http://osxdaily.com/2010/09/16/change-mamp-to-default-apache-and-mysql-ports/>). *OS X Daily*. 2010-09-16. Retrieved 2018-04-19.
262. "Running Solr" (https://lucene.apache.org/solr/guide/6_6/running-solr.html). *Apache Solr Reference Guide 6.6* (https://lucene.apache.org/solr/guide/6_6/). Apache Software Foundation. c. 2017. Archived (https://web.archive.org/web/20170630040615/https://lucene.apache.org/solr/guide/6_6/running-solr.html) from the original on 2017-06-30. Retrieved 2017-06-30. "... If you didn't start Solr after installing it, you can start it by running bin/solr from the Solr directory. ... This will start Solr in the background, listening on port 8983. ..."
263. Gaudin, Olivier. "SonarQube Installation Instructions" (<https://web.archive.org/web/20140512085743/http://docs.codehaus.org/display/SONAR/Installing>). codehaus.org. Archived from the original (<http://docs.codehaus.org/display/SONAR/Installing#Installing-StartingtheWebServer>) on May 12, 2014. Retrieved 2014-05-27.
264. "Play2 Documentation" (<http://www.playframework.com/documentation/2.2.0/Production>). Playframework.com. Retrieved 2014-05-27.
265. "How to use qBittorrent as a tracker" (<https://github.com/qbittorrent/qBittorrent/wiki/How-to-use-qBittorrent-as-a-tracker>). Retrieved 27 June 2015.
266. ETL Electronics (<http://etlelectronique.com/defaulten.aspx>) Archived (<https://web.archive.org/web/20120104090617/http://etlelectronique.com/defaulten.aspx>) January 4, 2012, at the Wayback Machine.
267. "Kafka 0.11.0 Documentation" (<http://kafka.apache.org/documentation.html#brokerconfigs>). Apache Kafka. Retrieved 2017-09-01.
268. "RESTful API with JSON over HTTP" (http://www.elastic.co/guide/en/elasticsearch/guide/current/_talking_to_elasticsearch.html#_restful_api_with_json_over_http). Elasticsearch. Retrieved 2015-04-04.
269. "PS3™ | Using remote play (via the Internet)" (<http://manuals.playstation.net/document/en/ps3/current/remoteplay/remoteyinternet.html>). Manuals.playstation.net. 2013-09-13. Retrieved 2013-10-08.
270. "Transferring data using Wi-Fi | PlayStation®Vita User's Guide" (http://manuals.playstation.net/document/en/psvita/cm/wifi_pc.html). Manuals.playstation.net. Retrieved 2013-10-08.
271. Konopelko, Piotr Robert (2016-08-04). Kruszona-Zawadzka, Agata, ed. *MooseFS 3.0 User's Manual* (<https://moosefs.com/Content/Downloads/moosefs-3-0-users-manual.pdf>) (PDF) (1.0.4 ed.). pp. 11, 19–23, 58, 62, 74–76. Archived (<https://web.archive.org/web/20160830200130/https://moosefs.com/Content/Downloads/moosefs-3-0-users-manual.pdf>) (PDF) from the original on 2016-08-30. Retrieved 2016-08-30.
272. "Tripwire Enterprise 8" (https://web.archive.org/web/20130923234722/http://nvd.nist.gov/validation_tripwire_enterprise_docs.html). Nvd.nist.gov. Archived from the original (http://nvd.nist.gov/validation_tripwire_enterprise_docs.html) on September 23, 2013. Retrieved 2013-10-08.
273. Bergkvist, Christoffer (2012-08-02). "Install and initial setup" (https://tvheadend.org/projects/tvheadend/wiki/Install_and_initial_setup). *Tvheadend*. Archived (https://web.archive.org/web/20160927174027/https://tvheadend.org/projects/tvheadend/wiki/Install_and_initial_setup) from the original on 2016-09-27. Retrieved 2016-09-27. "... Tvheadend listens to the following TCP ports by default:"
 - "9981 - HTTP server (web interface)"
 - "9982 - HTSP server (Streaming protocol)"

"..."
274. "Port Forwarding" (<https://support.vonage.com/app/articles/answer/Port-Forwarding-690>). *Vonage* (published 2016-12-16). n.d. Retrieved 2017-12-13.
275. "Manual pages - F-PROT Antivirus Support - Unix" (http://www.f-prot.com/support/unix/unix_manpages/fpscand.8.html). F-prot.com. Retrieved 2014-05-27.
276. "Manual pages - F-PROT Antivirus Support - Unix" (http://www.f-prot.com/support/unix/unix_manpages/fprotd.8.html). F-prot.com. Retrieved 2014-05-27.

277. "GE Proficy HMI/SCADA - CIMPLICITY Input Validation Flaws Let Remote Users Upload and Execute Arbitrary Code" (<http://securitytracker.com/id/1029853>). Retrieved 2016-05-10.
278. "network broadcast from bluestacks - Beacon-v1" (https://web.archive.org/web/20140419012604/https://getsatisfaction.com/bstk/topics/network_broadcast_from_bluestacks_beacon_v1). Getsatisfaction.com. Archived from the original (https://getsatisfaction.com/bstk/topics/network_broadcast_from_bluestacks_beacon_v1) on April 19, 2014. Retrieved 2013-10-08.
279. "IANA Service Name and Transport Protocol Port Number Registry" (<http://www.iana.org/assignments/service-names-port-numbers/service-names-port-numbers.xhtml?&page=117>). October 2015.
280. "Octopus Deploy Documentation" (<http://docs.octopusdeploy.com/display/OD/Listening+Tentacles>). October 2015.
281. John, Ted (2015-11-25). "Multiplayer" (<https://docs.openrct2.website/en/latest/playing/multiplayer/index.html>). *OpenRCT2 0.0.2 documentation* (<https://docs.openrct2.website/>). Archived (<https://web.archive.org/web/20170426235410/https://openrct2.readthedocs.io/en/latest/playing/multiplayer/index.html>) from the original on 2017-04-26. Retrieved 2017-04-26. "... enter the hostname or IP address (and optionally a port if the server is not using the default OpenRCT2 port, 11753). ... configure your router to forward TCP connections on your chosen port (default is 11753) ..."
282. "Authentication Flow" (http://wiki.secondlife.com/wiki/Authentication_Flow#Step_4). *Second Life Wiki*. Retrieved 26 July 2017.
283. "LSL_HTTP_server" (http://wiki.secondlife.com/wiki/LSL_HTTP_server#Functions). *Second Life Wiki*. Retrieved 26 July 2017.
284. <http://docs.graylog.org/en/latest/pages/gelf.html>
285. "Server" (<http://www.cubeworldwiki.net/index.php/Server>). Cube World Wiki. 2013-07-17. Retrieved 2013-10-08.
286. "How to Access the Version 7 HMC Remotely" (<http://www-01.ibm.com/support/docview.wss?uid=nas8N1012844>). IBM. 2013-07-17. Retrieved 2014-09-05.
287. Scheduler-Usage. "Forums: ControlM-M Usage Forum Index -> Control-M Enterprise Manager" (<https://web.archive.org/web/20130502061720/http://www.scheduler-usage.com/modules.php?name=Forums&file=viewtopic&t=1229>). Scheduler-Usage. Archived from the original (<http://www.scheduler-usage.com/modules.php?name=Forums&file=viewtopic&t=1229>) on May 2, 2013. Retrieved 2014-05-27.
288. "Management Plugin" (<https://www.rabbitmq.com/management.html>). *RabbitMQ*. Pivotal Software. n.d. Archived (<https://web.archive.org/web/20170923143556/https://www.rabbitmq.com/management.html>) from the original on 2017-09-23. Retrieved 2017-09-23. "... The Web UI is located at: <http://server-name:15672/> ... NB: The port for RabbitMQ versions prior to 3.0 is 55672. ..."
289. ""Mac OS X Server 10: Web service uses ports 80 and 16080 by default"" (<http://docs.info.apple.com/article.html?artnum=106407>). apple.com. Retrieved 2014-05-27.
290. *How do I allow my internal XMPP client or server to connect to the Talk service?* (<https://code.google.com/support/bin/answer.py?hl=en&answer=62464>), Google Code Help, accessed December 15, 2010.
291. ""4D Server and port numbers"" (<http://doc.4d.com/4Dv13/4D/13/Configuration-preferences.300-845386.en.html>). 4d.com. 2013-12-03. Archived (https://web.archive.org/web/20140408220514/http://www.4d.com/4d_docv13/4D/13/Configuration-preferences.300-845386.en.html#68475) from the original on 2014-04-08. Retrieved 2014-05-27.
292. "Tutorials/Setting up a server – Minecraft Wiki" (http://minecraft.gamepedia.com/Setting_up_a_server). *minecraft.gamepedia.com*. Retrieved 2015-12-20.
293. "Protocol - wiki.vg" (<http://wiki.vg/Protocol#Handshaking>). *wiki.vg*. Retrieved 2016-11-07.
294. "Query - wiki.vg" (http://wiki.vg/Query#Server_Config). *wiki.vg*. Retrieved 2017-06-29.
295. "RCON - wiki.vg" (http://wiki.vg/RCON#Server_Config). *wiki.vg*. Retrieved 2017-06-29.
296. "Networking introduction - collectd Wiki" (http://collectd.org/wiki/index.php/Networking_introduction). Collectd.org. 2012-01-25. Retrieved 2013-10-08.
297. "Required Ports for Steam" (https://support.steampowered.com/kb_article.php?ref=8571-GLVN-8711). Support. *Steam*. Archived (https://web.archive.org/web/20180519124635/https://support.steampowered.com/kb_article.php?ref=8571-GLVN-8711) from the original on 2018-05-19. Retrieved 2018-05-19.

298. Kleinman, Sam; et al. "Default MongoDB Port" (<https://docs.mongodb.com/manual/reference/default-mongodb-port/>). *MongoDB 3.4 Manual* (<https://docs.mongodb.com/manual/>). Reference. Archived (<https://web.archive.org/web/20171110140354/https://docs.mongodb.com/manual/reference/default-mongodb-port/>) from the original on 2017-11-10. Retrieved 2017-11-10.
299. "Rust Dedicated Server" (https://developer.valvesoftware.com/wiki/Rust_Dedicated_Server). *Valve Developer Community* (Revision 209464 ed.). Valve Corporation. 2017-06-22. Archived (https://web.archive.org/web/20170629162231/https://developer.valvesoftware.com/wiki/Rust_Dedicated_Server) from the original on 2017-06-29. Retrieved 2017-06-29.
300. "Configuration" (<http://sauerbraten.org/docs/config.html>). *Cube 2: Sauerbraten – Documentation* (<http://sauerbraten.org/README.html#documentation>). Sauerbraten. n.d. Archived (<https://web.archive.org/web/20170629155241/http://sauerbraten.org/docs/config.html>) from the original on 2017-06-29. Retrieved 2017-06-29. "... Servers use the ports 28785 (UDP) and 28786 (UDP). ..."
301. *Nintendo® Wi-Fi Connection Instruction Booklet* (https://www.nintendo.com/consumer/gameslist/manuals/DS_Nintendo_WFC.pdf) (PDF). Nintendo. n.d. p. 24. Archived (https://web.archive.org/web/20170629145629/https://www.nintendo.com/consumer/gameslist/manuals/DS_Nintendo_WFC.pdf) (PDF) from the original on 2017-06-29. "...
 - "TCP: Allow traffic to all destinations on ports: 28910, 29900, 29901, 29920, 80, and 443."
 - "UDP: Allow all traffic to all destinations. (Necessary for peer-to-peer connections and game play)."
 "...
302. "Ports Used for Call of Duty Games" (https://support.activision.com/articles/en_US/FAQ/Ports-Used-for-Call-of-Duty-Games). *Activision Support*. Activision. 2008–2016. Archived (https://web.archive.org/web/20170630052235/https://support.activision.com/articles/en_US/FAQ/Ports-Used-for-Call-of-Duty-Games) from the original on 2017-06-30. Retrieved 2017-06-30.
303. Knudsen, Kent (April 5, 2002). "Tracking the Back Orifice Trojan On a University Network" (<https://pen-testing.sans.org/resources/papers/gcih/tracking-orifice-trojan-university-network-101743>) (PDF). *sans.org*. p. 7. Retrieved April 20, 2018. "The server normally binds to UDP port 31337, but it may be configured to use another port."
304. Syngress (2003). *Configuring Symantec AntiVirus Enterprise Edition* (<https://books.google.com/books?id=nHPzTZ27a5UC&pg=PA6>). Elsevier. p. 6. ISBN 9780080476711. Retrieved April 20, 2018. "BO2K runs over any User Datagram Protocol (UDP) port but will default to using port 31337."
305. *boinc(1)* (<https://linux.die.net/man/1/boinc>) – *Linux User Commands Manual*
306. *Rocket UniVerse Installation Guide (Version 11.2.3)* (http://docs.rocketsoftware.com/nxt/gateway.dll/RKBnew20%2Funiverse%2Fprevious%20versions%2Fv11.2.3%2Funiverse_installguide_v1123.pdf) (PDF) (UNV-113-INST-1 ed.). Rocket Software. April 2014. pp. 3–8, 4–8. "... When you install UniVerse on your system for the first time, you must add the UniRPC daemon's port to the /etc/services file. Add the following line to the /etc/services file: uvrpc 31438/tcp # uvrpc port ..."
307. "Immunet Protect 2.0 Requirements & Compatible Security Package List" (https://web.archive.org/web/20131005204557/http://support.immunet.com/tiki-read_article.php?articleId=4). Support. *Immunet*. 2010-05-12. Archived from the original (http://support.immunet.com/tiki-read_article.php?articleId=4) on 2013-10-05. Retrieved 2016-10-18.
308. Pedersen (2012-03-24). "Manually Configure Ports In Your Firewall" (<http://forum.immunet.com/index.php?/topic/1849-manually-configure-ports-in-your-firewall/>). Forum. *Immunet*. Archived (<https://web.archive.org/web/20161018002338/http://forum.immunet.com/index.php?%2Ftopic%2F1849-manually-configure-ports-in-your-firewall%2F>) from the original on 2016-10-18. Retrieved 2016-10-18.
309. "What network ports do I need to allow through my firewall?" (<https://support.plex.tv/hc/en-us/articles/201543147-What-network-ports-do-I-need-to-allow-through-my-firewall->). Support (FAQ). *Plex*. n.d. Archived (<https://web.archive.org/web/20161018003231/https://support.plex.tv/hc/en-us/articles/201543147-What-network-ports-do-I-need-to-allow-through-my-firewall->) from the original on 2016-10-18. Retrieved 2016-10-18. "... TCP: 32400 (for access to the Plex Media Server) ..."

310. Gallagher, Sean (2014-01-02). "Backdoor in wireless DSL routers lets attacker reset router, get admin" (<https://arstechnica.com/security/2014/01/backdoor-in-wireless-dsl-routers-lets-attacker-reset-router-get-admin/>). *Ars Technica*. Archived (<https://web.archive.org/web/20161109150322/http://arstechnica.com/security/2014/01/backdoor-in-wireless-dsl-routers-lets-attacker-reset-router-get-admin/>) from the original on 2016-11-09. Retrieved 2016-11-09. "... A hacker has found a backdoor to wireless combination router/DSL modems ... The attack, confirmed to work on several Linksys and Netgear DSL modems ... the router responded to messages over an unusual TCP port number: 32764. ... the backdoor might affect wireless routers with DSL modems from SerComm, ..."
311. "Which ports and protocols does LogMeIn Hamachi use?" (http://help.logmein.com/articles/en_US/FAQ/Which-ports-and-protocols-does-LogMeIn-Hamachi2-use-en1). Support. *LogMeIn*. n.d. Archived (https://web.archive.org/web/20161018005545/http://help.logmein.com/articles/en_US/FAQ/Which-ports-and-protocols-does-LogMeIn-Hamachi2-use-en1) from the original on 2016-10-18. Retrieved 2016-10-18. "... "
 - "TCP 12975 (initiator port)"
 - "TCP 32976 (session port)""If the above ports cannot be used to achieve a connection, Hamachi will try again using SSL (TCP 443). ..."
312. Kawaguchi, Kohsuke; et al. (2007-05-06). "Remote access API" (<https://wiki.jenkins-ci.org/display/JENKINS/Remote%2Baccess%2BAPI>). In Scheibe, René. *Jenkins Wiki*. Small contributions from various people. (published 2017-03-15). Archived (<https://web.archive.org/web/20170519193305/https://wiki.jenkins-ci.org/display/JENKINS/Remote%2Baccess%2BAPI>) from the original on 2017-05-19. Retrieved 2017-05-19. "... Jenkins instances listen on UDP port 33848. ..."
313. Kawaguchi, Kohsuke; et al. (2010-05-10). "Auto-discovering Jenkins on the network" (<https://wiki.jenkins-ci.org/display/JENKINS/Auto-discovering%2BJenkins%2Bon%2Bthe%2Bnetwork>). *Jenkins Wiki* (published 2016-02-24). Archived (<https://web.archive.org/web/20161018014454/https://wiki.jenkins-ci.org/display/JENKINS/Auto-discovering%2BJenkins%2Bon%2Bthe%2Bnetwork>) from the original on 2016-10-18. Retrieved 2016-10-18. "... Jenkins listens on UDP port 33848. ..."
314. "Appendix B. Firewalls and default ports" (<http://docs.openstack.org/kilo/config-reference/content/firewalls-default-ports.html>). *OpenStack Configuration Reference* (<http://docs.openstack.org/kilo/config-reference/content/index.html>). OpenStack Foundation. 2016-05-10. Archived (<https://web.archive.org/web/20161018023342/http://docs.openstack.org/kilo/config-reference/content/firewalls-default-ports.html>) from the original on 2016-10-18. Retrieved 2016-10-18.
315. "How do I set up exceptions in my firewall for RuneScape?" (<https://support.runescape.com/hc/en-gb/articles/205845152-How-do-I-set-up-exceptions-in-my-firewall-for-RuneScape->). Support. RuneScape. n.d. Retrieved 2016-09-28. "... open the following ports; 443, 43594 and 43595 ..."
316. "Obtaining Data from the Local Computer (Windows)" (<http://msdn.microsoft.com/en-us/library/aa384424%28VS.85%29.aspx>). Msdn.microsoft.com. 2013-08-23. Retrieved 2013-10-08.
317. *Internet Assigned Numbers Authority (IANA) Procedures for the Management of the Service Name and Transport Protocol Port Number Registry* (<https://tools.ietf.org/html/rfc6335>). IETF. August 2011. doi:10.17487/RFC6335 (<http://dx.doi.org/10.17487%2FRFC6335>). RFC 6335. <https://tools.ietf.org/html/rfc6335>.
318. Schaad, Jim; Myers, Michael (June 2008). "TCP-Based Protocol" (<https://tools.ietf.org/html/rfc5273#section-5>). *Certificate Management over CMS (CMC): Transport Protocols* (<https://tools.ietf.org/html/rfc5273>). IETF. p. 4. sec. 5. doi:10.17487/RFC5273 (<http://dx.doi.org/10.17487%2FRFC5273>). RFC 5273. <https://tools.ietf.org/html/rfc5273#section-5>. Retrieved 2017-11-10. "... When CMC messages are sent over a TCP-based connection ... There is no specific port that is to be used when doing TCP-based transport. Only the Private Ports 49152-65535 may be used in this manner (without registration). The ports in the range of 1-49151 [*sic?*] SHOULD NOT be used. ..."
319. "Mosh" (<https://mosh.org/>). mosh.org. Retrieved 2017-07-10.

Further reading

- Reynolds, Joyce; Postel, Jon (October 1994). *Assigned Numbers* (<https://tools.ietf.org/html/rfc1700>). IETF. doi:10.17487/RFC1700 (<http://dx.doi.org/10.17487%2FRFC1700>). RFC 1700. <https://tools.ietf.org/html/rfc1700>.

External links

- ["Service Name and Transport Protocol Port Number Registry"](https://www.iana.org/assignments/service-names-port-numbers/) (<https://www.iana.org/assignments/service-names-port-numbers/>). *IANA.org*. Internet Assigned Numbers Authority.
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This page was last edited on 24 May 2018, at 15:30.

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