

List of TCP and UDP port numbers

This is a **list of TCP and UDP port numbers** used by protocols for operation of network applications. The Transmission Control Protocol (TCP) and the User Datagram Protocol (UDP) only need one port for bidirectional traffic. TCP usually uses port numbers that match the services of the corresponding UDP implementations, if they exist, and vice versa.

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.

Table legend

Legend of TCP and UDP table cells for port numbers

Cell	Description
Yes	Described protocol <i>is</i> assigned by IANA for this port, and <i>is</i> : standardized, specified, or widely used for such.
Unofficial	Described protocol <i>is not</i> assigned by IANA for this port, but <i>is</i> : standardized, specified, or widely used for such.
Assigned	Described protocol <i>is</i> assigned by IANA for this port, $\boxed{[2]}$ but <i>is not</i> : standardized, specified, or widely used for such.
No	Described protocol <i>is not</i> assigned by IANA for this port, standardized, specified, or widely used for such.
Reserved	Port is reserved by IANA, $[2]$ generally to prevent collision having its previous use removed. $[3][4]$ The port number may be available for assignment upon request to IANA. $[3]$

Well-known ports

The port numbers in the range from 0 to 1023 (0 to 2¹⁰ - 1) are the *well-known ports* or *system ports*. [3] 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. [5]

Well-known ports

Port	ТСР	UDP	SCTP	DCCP	Description
0	Reserved				In programming APIs (not in communication between hosts), requests a system-allocated (dynamic) port ^[6]
1	Yes	Assigned			TCP Port Service Multiplexer (TCPMUX). Historic. Both TCP and UDP have been assigned to TCPMUX by IANA, [2] but by design only TCP is specified. [7]
2	Assi	gned			compressnet (Management Utility)[3]
3	Assi	gned			compressnet (Compression Process)[3]
5	Assi	Assigned			Remote Job Entry ^[8] was historically using socket 5 in its old socket form, while MIB PIM has identified it as TCP/5 ^[9] and IANA has assigned both TCP and UDP 5 to it.
7	Y	es			Echo Protocol ^{[10][11]}
0	Y	es	Yes ^[12]	Assigned	Discard Protocol ^[13]
9	No	Unofficial			Wake-on-LAN ^[14]
11	Y	es			Active Users (systat service)[15][16]
13	Y	es			Daytime Protocol ^[17]
15	Unofficial	No			Previously netstat service ^{[2][15]}
17	Y	es			Quote of the Day (QOTD)[18]
18	Y	es			Message Send Protocol ^{[19][20]}
19	Y	es			Character Generator Protocol (CHARGEN)[21]
20	Yes	Assigned	Yes ^[12]		File Transfer Protocol (FTP) data transfer[11]
21	Yes	Assigned	Yes[12]		File Transfer Protocol (FTP) control (command)[11][12] [22][23]
22	Yes	Assigned	Yes ^[12]		Secure Shell (SSH),[11] secure logins, file transfers (scp, sftp) and port forwarding
23	Yes	Assigned			Telnet protocol—unencrypted text communications[11] [24]
25	Yes	Assigned			Simple Mail Transfer Protocol (SMTP),[11][25] used for email routing between mail servers
27	Assi	gned			nsw-fe (NSW User System FE)[3][26]

Port	ТСР	UDP	SCTP	DCCP	Description
28	Unofficial				Palo Alto Networks' Panorama High Availability (HA) sync encrypted port. ^[27]
29	Assi	gned			msg-icp (MSG ICP)[3]
31	Assi	gned			msg-auth (MSG Authentication) ^[3]
33	Assi	gned			dsp (Display Support Protocol) ^[3]
37	Ye	es			Time Protocol ^[28]
38	Assi	gned			rap (Route Access Protocol)[3]
39	Assi	gned			rlp (Resource Location Protocol)[3]
41	Assi	gned			graphics (Graphics)[3]
42	Assigned	Yes			Host Name Server Protocol ^[29]
43	Yes	Assigned			WHOIS protocol ^{[30][31][32]}
44	Assi	gned			mpm-flags (MPM FLAGS Protocol)[3]
45	Assi	gned			mpm (Message Processing Module [recv])[3]
46	Assi	gned			mpm-snd (MPM [default send])[3]
47	Rese	erved			
48	Assi	gned			auditd (Digital Audit Daemon) ^[3]
49	Ye	es			TACACS Login Host protocol. [33] TACACS+, still in draft which is an improved but distinct version of TACACS, only uses TCP 49. [34]
50	Assi	gned			re-mail-ck (Remote Mail Checking Protocol) ^[3]
51	Rese	Reserved			Historically used for Interface Message Processor logical address management, entry has been removed by IANA on 2013-05-25
52	Assigned				Xerox Network Systems (XNS) Time Protocol. Despite this port being assigned by IANA, the service is meant to work on SPP (ancestor of IPX/SPX), instead of TCP/IP.[36]
53	Ye	Yes			Domain Name System (DNS)[37][11]
54	Assi	gned			Xerox Network Systems (XNS) Clearinghouse (Name Server). Despite this port being assigned by IANA, the service is meant to work on SPP (ancestor of IPX/

Port	ТСР	UDP	SCTP	DCCP	Description
					SPX), instead of TCP/IP.[36]
55	Assi	gned			isi-gl (ISI Graphics Language) ^[3]
56	Assi	gned			Xerox Network Systems (XNS) Authentication Protocol. Despite this port being assigned by IANA, the service is meant to work on SPP (ancestor of IPX/ SPX), instead of TCP/IP.[36]
58	Assi	gned			Xerox Network Systems (XNS) Mail. Despite this port being assigned by IANA, the service is meant to work on SPP (ancestor of IPX/SPX), instead of TCP/IP. [36]
61	Rese	erved			Historically assigned to the NIFTP-Based Mail protocol, [38] but was never documented in the related IEN. [39] The port number entry was removed from IANA's registry on 2017-05-18. [2]
62	Assi	gned			acas (ACA Services)[3]
63	Assi	gned			whoispp (whois++) ^[3]
64	Assi	gned			covia (Communications Integrator (CI))[3]
65	Assi	gned			tacacs-ds (TACACS-Database Service)[3]
66	Assi	gned			sql-net (Oracle SQL*NET)[3]
67	Assigned	Yes			Bootstrap Protocol (BOOTP) server;[11] also used by Dynamic Host Configuration Protocol (DHCP)
68	Assigned	Yes			Bootstrap Protocol (BOOTP) client;[11] also used by Dynamic Host Configuration Protocol (DHCP)
69	Assigned	Yes			Trivial File Transfer Protocol (TFTP)[11][40][41][42]
70	Yes	Assigned			Gopher protocol[43]
71–74	Ye	es			NETRJS protocol[44][45][46]
76	Assigned				deos (Distributed External Object Store)[3]
78	Assigned				vettcp (vettcp)[3]
79	Yes	Assigned			Finger protocol ^{[11][47][48]}
80	Yes		Yes[12]		Hypertext Transfer Protocol (HTTP) ^{[49][50]} uses TCP in versions 1.x and 2. HTTP/3 uses QUIC, ^[51] a transport protocol on top of UDP.
81	Unofficial				TorPark onion routing[52]

Port	ТСР	UDP	SCTP	DCCP	Description
82	Assi	gned			xfer (XFER Utility)[3]
82		Unofficial			TorPark control ^[53]
83	Assi	gned			mit-ml-dev (MIT ML Device)[3]
84	Assi	gned			ctf (Common Trace Facility) ^[3]
85	Assi	gned			mit-ml-dev (MIT ML Device)[3]
86	Assi	gned			mfcobol (Micro Focus Cobol)[3]
88	Ye	es			Kerberos ^{[11][54][55]} authentication system
89	Assi	gned			su-mit-tg (SU/MIT Telnet Gateway)[3]
90	Assi	gned			dnsix (DNSIX Security Attribute Token Map)[3]
90	Unof	ficial			PointCast (dotcom)[2]
91	Assi	gned			mit-dov (MIT Dover Spooler)[3]
92	Assi	gned			npp (Network Printing Protocol)[3]
93	Assi	gned			dcp (Device Control Protocol)[3]
94	Assi	gned			objcall (Tivoli Object Dispatcher) ^[3]
95	Yes	Assigned			SUPDUP, terminal-independent remote login ^[56]
96	Assi	gned			dixie (DIXIE Protocol Specification)[3]
97	Assi	gned			swift-rvf (Swift Remote Virtual File Protocol)[3]
98	Assi	gned			tacnews (TAC News)[3]
99	Assi	gned			metagram (Metagram Relay) ^[3]
101	Yes	Assigned			NIC host name ^[57]
102	Yes	Assigned			ISO Transport Service Access Point (TSAP) Class 0 protocol;[58][59]
104	Yes				Digital Imaging and Communications in Medicine (DICOM; also port 11112)
105	Ye	Yes			CCSO Nameserver ^[60]
106	Unofficial	No			macOS Server, (macOS) password server ^[11]
107	Ye	es			Remote User Telnet Service (RTelnet) ^[61]

Port	ТСР	UDP	SCTP	DCCP	Description
108	Yes				IBM Systems Network Architecture (SNA) gateway access server
109	Yes	Assigned			Post Office Protocol, version 2 (POP2)[62]
110	Yes	Assigned			Post Office Protocol, version 3 (POP3)[11][63][64]
111	Ye	es			Open Network Computing Remote Procedure Call (ONC RPC, sometimes referred to as Sun RPC)
112	Ye	es			McIDAS Data Transmission Protocol
	Yes	No			Ident, authentication service/identification protocol, [11][65] used by IRC servers to identify users
113	Yes	Assigned			Authentication Service (auth), the predecessor to <i>identification protocol</i> . Used to determine a user's identity of a particular TCP connection. [66]
115	Yes	Assigned			Simple File Transfer Protocol ^[67]
117	Yes				UUCP Mapping Project (path service)[68]
118	Ye	es			Structured Query Language (SQL) Services
119	Yes	Assigned			Network News Transfer Protocol (NNTP),[11] retrieval of newsgroup messages[69][70]
123	Assigned	Yes			Network Time Protocol (NTP), used for time synchronization ^[11]
126	Yes				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
	Ye	es			DCE endpoint resolution
135	Yes				Microsoft EPMAP (End Point Mapper), also known as DCE/RPC Locator service, [71] used to remotely manage services including DHCP server, DNS server and WINS. Also used by DCOM
137	Yes				NetBIOS Name Service, used for name registration and resolution [72][73]
138	Assigned	Yes			NetBIOS Datagram Service ^{[11][72][73]}
139	Yes	Assigned			NetBIOS Session Service ^{[72][73]}

Port	ТСР	UDP	SCTP	DCCP	Description
143	Yes	Assigned			Internet Message Access Protocol (IMAP),[11] management of electronic mail messages on a server[74]
151	Assi	gned			HEMS
152	Y	es			Background File Transfer Program (BFTP)[75]
153	Yo	es			Simple Gateway Monitoring Protocol (SGMP), a protocol for remote inspection and alteration of gateway management information [76]
156	Y	es			Structured Query Language (SQL) Service
158	Y	es			Distributed Mail System Protocol (DMSP, sometimes referred to as Pcmail)[77]
161	Assigned	Yes			Simple Network Management Protocol (SNMP)[68]
162	Y	Yes			Simple Network Management Protocol Trap (SNMPTRAP)[68]
165	Assi	gned			Xerox
169	Assi	gned			SEND
170	Y	es			Network PostScript print server
175	Y	es			VMNET service using NJE
177	Y	es			X Display Manager Control Protocol (XDMCP), used for remote logins to an X Display Manager server ^[78]
179	Yes	Assigned	Yes ^[12]		Border Gateway Protocol (BGP),[79] used to exchange routing and reachability information among autonomous systems (AS) on the Internet
180	Assi	gned			ris
194	Y	es			Internet Relay Chat (IRC)[80]
199	Y	es			SNMP Unix Multiplexer (SMUX)[81]
201	Y	Yes			AppleTalk Routing Maintenance
209	Yes	Assigned			Quick Mail Transfer Protocol ^[82]
210	Y	es			ANSI Z39.50
213	Y	es			Internetwork Packet Exchange (IPX)
218	Y	es			Message posting protocol (MPP)

Port	ТСР	UDP	SCTP	DCCP	Description
220	Y	Yes			Internet Message Access Protocol (IMAP), version 3
225–241	Rese	erved			
249–255	Rese	erved			
259	Y	es			Efficient Short Remote Operations (ESRO)
262	Y	es			Arcisdms
264	Y	es			Border Gateway Multicast Protocol (BGMP)
280	Y	es			http-mgmt
300	Unofficial				ThinLinc Web Access, Spartan protocol [83]
308	Yes				Novastor Online Backup
311	Yes	Assigned			$\frac{\text{macOS Server Admin}^{\underline{[11]}}}{\text{administration}^{\underline{[2]}}} \text{ (officially } \underline{\text{AppleShare }} \text{ IP Web}$
312	Unofficial	No			macOS Xsan administration[11]
318	Y	es			PKIX Time Stamp Protocol (TSP)
319		Yes			Precision Time Protocol (PTP) event messages
320		Yes			Precision Time Protocol (PTP) general messages
323	Yes				Resource Public Key Infrastructure[84]
350	Y	es			Mapping of Airline Traffic over Internet Protocol (MATIP) type A
351	Y	es			MATIP type B
356	Y	es			cloanto-net-1 (used by Cloanto Amiga Explorer and VMs)
366	Y	es			On-Demand Mail Relay (ODMR)
369	Yes				Rpc2portmap
	Yes				codaauth2, Coda authentication server
370		Yes			securecast1, outgoing packets to NAI's SecureCast servers ^[85] As of 2000
371	Yes				ClearCase albd
376	Y	es			Amiga Envoy Network Inquiry Protocol
383	Y	es			HP data alarm manager

Port	ТСР	UDP	SCTP	DCCP	Description
384	Ye	es			A Remote Network Server System
387	Ye	es			AURP (AppleTalk Update-based Routing Protocol)[86]
388	Yes	Assigned			Unidata LDM near real-time data distribution protocol ^{[87][88]}
389	Yes	Assigned			Lightweight Directory Access Protocol (LDAP)[11]
399	Ye	es			Digital Equipment Corporation DECnet+ (Phase V) over TCP/IP (RFC1859)
401	Ye	es			Uninterruptible power supply (UPS)
427	Ye	es			Service Location Protocol (SLP)[11]
433	Ye	es			NNTP, part of Network News Transfer Protocol
434	Ye	es			Mobile IP Agent (RFC 5944)
443	Yes		Yes ^[12]		Hypertext Transfer Protocol Secure (HTTPS)[49][50] uses TCP in versions 1.x and 2. HTTP/3 uses QUIC, [51] a transport protocol on top of UDP.
444	Ye	es			Simple Network Paging Protocol (SNPP), RFC 1568
445	Ye	es			Microsoft-DS (Directory Services) Active Directory, [89] Windows shares
	Yes	Assigned			Microsoft-DS (Directory Services) SMB[11] file sharing
464	Ye	es			Kpasswd: [90] Kerberos Change/Set password
465 ^[note 1]	Yes	No			Message Submission over TLS protocol ^{[91][92]}
403[Yes	No			URL Rendezvous Directory for Cisco SSM ^[91]
475	Ye	es			tcpnethaspsrv, Aladdin Knowledge Systems Hasp services
476–490	Unof	ficial			Centro Software ERP ^[93] ports
491	Unofficial				GO-Global remote access and application publishing software
497	Ye	es			Retrospect
500	Assigned	Yes			Internet Security Association and Key Management Protocol (ISAKMP) / Internet Key Exchange (IKE)[11]
502	Ye	es			Modbus Protocol

Port	ТСР	UDP	SCTP	DCCP	Description
504	Ye	Yes			Citadel, multiservice protocol for dedicated clients for the Citadel groupware system
510	Ye	es			FirstClass Protocol (FCP), used by FirstClass client/ server groupware system
512	Yes				Rexec, Remote Process Execution
312		Yes			comsat, together with biff
513	Yes				rlogin
313		Yes			Who[68]
514	Unofficial				Remote Shell, used to execute non-interactive commands on a remote system (Remote Shell, rsh, remsh)
	No	Yes			Syslog,[11] used for system logging
515	Yes	Assigned			Line Printer Daemon (LPD),[11] print service
517		Yes			Talk
518		Yes			NTalk
F00	Yes				efs, extended file name server
520		Yes			Routing Information Protocol (RIP)
521		Yes			Routing Information Protocol Next Generation (RIPng)
524	Ye	es			NetWare Core Protocol (NCP) is used for a variety things such as access to primary NetWare server resources, Time Synchronization, etc.
525		Yes			Timed, Timeserver
530	Ye	es			Remote procedure call (RPC)
532	Yes	Assigned			netnews ^[11]
533		Yes			netwall, for emergency broadcasts
540	Yes				Unix-to-Unix Copy Protocol (UUCP)
542	Ye	es			commerce (Commerce Applications)
543	Yes				klogin, Kerberos login
544	Yes				kshell, Kerberos Remote shell
546	Ye	es			DHCPv6 client

Port	ТСР	UDP	SCTP	DCCP	Description
547	Ye	es			DHCPv6 server
548	Yes	Assigned			Apple Filing Protocol (AFP) over TCP[11]
550	Ye	es			new-rwho, new-who ^[68]
554	Ye	es			Real Time Streaming Protocol (RTSP)[11]
556	Yes				Remotefs, RFS, rfs_server
560		Yes			rmonitor, Remote Monitor
561		Yes			monitor
563	Ye	es			NNTP over TLS/SSL (NNTPS)
564	Unofficial				9P (Plan 9)
585	N			Previously assigned for use of Internet Message Access Protocol over TLS/SSL (IMAPS), now deregistered in favour of port 993. [94]	
587	Yes	Assigned			Email Message Submission (No longer preferred; see port 465.) ^{[92][11][95]}
591	Yes				FileMaker 6.0 (and later) Web Sharing (HTTP Alternate, also see port 80)
593	Ye	es			HTTP RPC Ep Map, Remote procedure call over Hypertext Transfer Protocol, often used by Distributed Component Object Model services and Microsoft Exchange Server
601	Yes				Reliable Syslog Service — used for system logging
604	Yes				TUNNEL profile, ^[96] a protocol for BEEP peers to form an application layer tunnel
623		Yes			ASF Remote Management and Control Protocol (ASF-RMCP) & IPMI Remote Management Protocol
625	Unofficial	No			Open Directory Proxy (ODProxy)[11]
	Yes				Internet Printing Protocol (IPP)[11]
631	Unofficial				Common Unix Printing System (CUPS) administration console (extension to IPP)
635	Ye	es			RLZ DBase

Port	ТСР	UDP	SCTP	DCCP	Description
636	Yes	Assigned			Lightweight Directory Access Protocol over TLS/SSL (LDAPS)[11]
639	Ye	es			Multicast Source Discovery Protocol, MSDP
641	Ye	es			SupportSoft Nexus Remote Command (control/ listening), a proxy gateway connecting remote control traffic
643	Ye	es			SANity
646	Ye	es			Label Distribution Protocol (LDP), a routing protocol used in MPLS networks
647	Yes				DHCP Failover protocol[97]
648	Yes				Registry Registrar Protocol (RRP)[98]
651	Ye	es			IEEE-MMS
653	Ye	es			SupportSoft Nexus Remote Command (data), a proxy gateway connecting remote control traffic
654	Yes				Media Management System (MMS) Media Management Protocol (MMP) ^[99]
655	Ye	es			Tinc VPN daemon
657	Ye			IBM RMC (Remote monitoring and Control) protocol, used by System p5 AIX Integrated Virtualization Manager (IVM)[100] and Hardware Management Console to connect managed logical partitions (LPAR) to enable dynamic partition reconfiguration	
660	Yes	Assigned			macOS Server administration, [2] version 10.4 and earlier [11]
	Ye	es			Doom, the first online first-person shooter
666	Unofficial				airserv-ng,[101] aircrack-ng's server for remote- controlling wireless devices
674	Yes				Application Configuration Access Protocol (ACAP)
684	Ye	es			CORBA IIOP SSL[102]
688	Yes				REALM-RUSD (ApplianceWare Server Appliance Management Protocol)
690	Ye	es			Velneo Application Transfer Protocol (VATP)

Port	ТСР	UDP	SCTP	DCCP	Description
691	Yes				MS Exchange Routing
694	Yes				Linux-HA high-availability heartbeat
695	Yes	Assigned			IEEE Media Management System over SSL (IEEE-MMS-SSL)[103]
698		Yes			Optimized Link State Routing (OLSR)
700	Yes				Extensible Provisioning Protocol (EPP), a protocol for communication between domain name registries and registrars (RFC 5734)
701	Yes				Link Management Protocol (LMP),[104] a protocol that runs between a pair of nodes and is used to manage traffic engineering (TE) links
702	Yes				IRIS ^{[105][106]} (Internet Registry Information Service) over BEEP (Blocks Extensible Exchange Protocol) ^[107] (RFC 3983)
706	Yes				Secure Internet Live Conferencing (SILC)
711	Yes				Cisco Tag Distribution Protocol [108][109][110] — being replaced by the MPLS Label Distribution Protocol [111]
712	Yes				Topology Broadcast based on Reverse-Path Forwarding routing protocol (TBRPF; RFC 3684)
749	Yes				Kerberos administration[11]
750		Yes			kerberos-iv, Kerberos version IV
751	Unofficial				kerberos_master, Kerberos authentication
752		Unofficial			passwd_server, Kerberos password (kpasswd) server
753	Yes				Reverse Routing Header (RRH)[112]
/53		Unofficial			userreg_server, Kerberos userreg server
754	Yes				tell send
754	Unofficial				krb5_prop, Kerberos v5 slave propagation
760	Unofficial				krbupdate [kreg], Kerberos registration
777	Unofficial				machine socket eXtension [msx] protocol
782	Unofficial				Conserver serial-console management server
783	Unofficial				SpamAssassin spamd daemon

Port	ТСР	UDP	SCTP	DCCP	Description
800	Yes				mdbs-daemon
802	Yes				MODBUS/TCP Security[113]
808	Unofficial				Microsoft Net.TCP Port Sharing Service
829	Yes	Assigned			Certificate Management Protocol[114]
830	Yes				NETCONF over SSH
831	Yes				NETCONF over BEEP
832	Yes				NETCONF for SOAP over HTTPS
833	Yes				NETCONF for SOAP over BEEP
843	Unofficial				Adobe Flash[115]
847	Yes				DHCP Failover protocol
848	Yes				Group Domain Of Interpretation (GDOI) protocol
050	Yes				DNS over TLS (RFC 7858)
853		Yes			DNS over QUIC or DNS over DTLS[116]
860	Yes				iSCSI (RFC 3720)
861	Yes				OWAMP control (RFC 4656)
862	Yes				TWAMP control (RFC 5357)
873	Yes				rsync file synchronization protocol
000	Unofficial				cddbp, CD DataBase (CDDB) protocol (CDDBP)
888	Unofficial				IBM Endpoint Manager Remote Control
897	Unofficial				Brocade SMI-S RPC
898	Unofficial				Brocade SMI-S RPC SSL
902	Unofficial				VMware ESXi ^{[117][118]}
903	Unofficial				VMware ESXi[117][118]
953	Yes	Reserved			BIND remote name daemon control (RNDC)[119][120]
981	Unofficial				Remote HTTPS management for firewall devices running embedded Check Point VPN-1 software ^[121]
987		Unofficial			Sony PlayStation Wake On Lan

Port	ТСР	UDP	SCTP	DCCP	Description
	Unofficial				Microsoft Remote Web Workplace, a feature of Windows Small Business Server ^[122]
988	Unofficial				Lustre (file system)[123] Protocol (data).
989	Ye	Yes			FTPS Protocol (data), FTP over TLS/SSL
990	Yes				FTPS Protocol (control), FTP over TLS/SSL
991	Yes				Netnews Administration System (NAS)[124]
992	Yes				Telnet protocol over TLS/SSL
993	Yes	Assigned			Internet Message Access Protocol over TLS/SSL (IMAPS)[11]
994	Reserved				Previously assigned to Internet Relay Chat over TLS/ SSL (IRCS), but was not used in common practice.
995	Yes				Post Office Protocol 3 over TLS/SSL (POP3S)[11]
1010	Unofficial				ThinLinc web-based administration interface[125]
1011– 1020	Reserved				
	Reserved				[2]
1023	Unofficial				z/OS Network File System (NFS) (potentially ports 991–1023)[80][81][126]

Registered ports

The range of port numbers from 1024 to 49151 (2^{10} to $2^{15} + 2^{14} - 1$) are the registered ports. They are assigned by IANA for specific service upon application by a requesting entity. On most systems, registered ports can be used without superuser privileges.