Well Known Ports

Port # / Layer	Name	Comment
		TCP port service multiplexer
5	rje	Remote Job Entry
7	echo	Echo service
9	discard	Null service for connection testing
11	systat	System Status service for listing connected ports
13	daytime	Sends date and time to requesting host
17	qotd	Sends quote of the day to connected host
18	msp	Message Send Protocol
19	chargen	Character Generation service; sends endless stream of characters
20	ftp-data	FTP data port
21	ftp	File Transfer Protocol (FTP) port; sometimes used by File Service Protocol (FSP)
22	ssh	Secure Shell (SSH) service
23	telnet	The Telnet service
25	smtp	Simple Mail Transfer Protocol (SMTP)
37	time	Time Protocol
39	rlp	Resource Location Protocol
42	nameserver	Internet Name Service
43	nicname	WHOIS directory service
49	tacacs	Terminal Access Controller Access Control System for TCP/IP based authentication and access
50	re-mail-ck	Remote Mail Checking Protocol
53	domain	domain name services (such as BIND)
63	whois++	WHOIS++, extended WHOIS services
67	bootps	Bootstrap Protocol (BOOTP) services; also used by Dynamic Host Configuration Protocol (DHCP) services
68	bootpc	Bootstrap (BOOTP) client; also used by Dynamic Host Control Protocol (DHCP) clients

69	tftp	Trivial File Transfer Protocol
70	gopher	(TFTP) Gopher Internet document
		search and retrieval
71	netrjs-1	Remote Job Service
72	netrjs-2	Remote Job Service
73	netrjs-3	Remote Job Service
73	netrjs-4	Remote Job Service
79	finger	Finger service for user contact information
80	http	HyperText Transfer Protocol (HTTP) for World Wide Web (WWW) services
88	kerberos	Kerberos network authentication system
95	supdup	Telnet protocol extension
101	hostname	Hostname services on SRI- NIC machines
102/tcp	iso-tsap	ISO Development Environment (ISODE) network applications
105	csnet-ns	Mailbox nameserver; also used by CSO nameserver
107	rtelnet	Remote Telnet
109	pop2	Post Office Protocol version 2
110	pop3	Post Office Protocol version 3
111	sunrpc	Remote Procedure Call (RPC) Protocol for remote command execution, used by Network Filesystem (NFS)
113	auth	Authentication and Ident protocols
115	sftp	Secure File Transfer Protocol (SFTP) services
117	uucp-path	Unix-to-Unix Copy Protocol (UUCP) Path services
119	nntp	Network News Transfer Protocol (NNTP) for the USENET discussion system
123	ntp	Network Time Protocol (NTP)
137	netbios-ns	NETBIOS Name Service used in Red Hat Enterprise Linux by Samba
138	netbios-dgm	NETBIOS Datagram Service used in Red Hat Enterprise Linux by Samba

139	netbios-ssn	NETBIOS Session Service used in Red Hat Enterprise Linux by Samba
143	imap	Internet Message Access Protocol (IMAP)
161	snmp	Simple Network Management Protocol (SNMP)
162	snmptrap	Traps for SNMP
163	cmip-man	Common Management Information Protocol (CMIP)
164	cmip-agent	Common Management Information Protocol (CMIP)
174	mailq	MAILQ email transport queue
177	xdmcp	X Display Manager Control Protocol (XDMCP)
178	nextstep	NeXTStep window server
179	bgp	Border Gateway Protocol
191	prospero	Prospero distributed filesystem services
194	irc	Internet Relay Chat (IRC)
199	smux	SNMP UNIX Multiplexer
201	at-rtmp	AppleTalk routing
202	at-nbp	AppleTalk name binding
204	at-echo	AppleTalk echo
206	at-zis	AppleTalk zone information
209	qmtp	Quick Mail Transfer Protocol (QMTP)
210	z39.50	NISO Z39.50 database
213	ipx	Internetwork Packet Exchange (IPX), a datagram protocol commonly used in Novell Netware environments
220	imap3	Internet Message Access Protocol version 3
245	link	LINK / 3-DNS iQuery service
347	fatserv	FATMEN file and tape management server
363	rsvp_tunnel	RSVP Tunnel
369	rpc2portmap	Coda file system
		portmapper
370	codaauth2	Coda file system authentication services
372	ulistproc	UNIX LISTSERV
389	ldap	Lightweight Directory Access Protocol (LDAP)
427	svrloc	Service Location Protocol (SLP)

434	mobileip-agent	Mobile Internet Protocol (IP) agent
435	mobilip-mn	Mobile Internet Protocol (IP) manager
443	https	Secure Hypertext Transfer Protocol (HTTP)
444	snpp	Simple Network Paging Protocol
445	microsoft-ds	Server Message Block (SMB) over TCP/IP
464	kpasswd	Kerberos password and key changing services
468	photuris	Photuris session key management protocol
487	saft	Simple Asynchronous File Transfer (SAFT) protocol
488	gss-http	Generic Security Services (GSS) for HTTP
496	pim-rp-disc	Rendezvous Point Discovery (RP-DISC) for Protocol Independent Multicast (PIM) services
500	isakmp	Internet Security Association and Key Management Protocol (ISAKMP)
535	iiop	Internet Inter-Orb Protocol (IIOP)
538	gdomap	GNUstep Distributed Objects Mapper (GDOMAP)
546	dhcpv6-client	Dynamic Host Configuration Protocol (DHCP) version 6 client
547	dhcpv6-server	Dynamic Host Configuration Protocol (DHCP) version 6 Service
554	rtsp	Real Time Stream Control Protocol (RTSP)
563	nntps	Network News Transport Protocol over Secure Sockets Layer (NNTPS)
565	whoami	whoami user ID listing
587	submission	Mail Message Submission Agent (MSA)
610	npmp-local	Network Peripheral Management Protocol (NPMP) local / Distributed Queueing System (DQS)
611	npmp-gui	Network Peripheral Management Protocol (NPMP) GUI / Distributed Queueing System (DQS)

612	hmmp-ind	HyperMedia Management Protocol (HMMP) Indication / DQS
631	ipp	Internet Printing Protocol (IPP)
636	Idaps	Lightweight Directory Access Protocol over Secure Sockets Layer (LDAPS)
674	acap	Application Configuration Access Protocol (ACAP)
694	ha-cluster	Heartbeat services for High- Availability Clusters
749	kerberos-adm	Kerberos version 5 (v5) 'kadmin' database administration
750	kerberos-iv	Kerberos version 4 (v4) services
765	webster	Network Dictionary
767	phonebook	Network Phonebook
873	rsync	rsync file transfer services
992	telnets	Telnet over Secure Sockets Layer (TelnetS)
993	imaps	Internet Message Access Protocol over Secure Sockets Layer (IMAPS)
994	ircs	Internet Relay Chat over Secure Sockets Layer (IRCS)
995	pop3s	Post Office Protocol version 3 over Secure Sockets Layer (POP3S)

Table C-1. Well Known Ports

<u>Table C-2</u> lists UNIX-specific ports and cover services ranging from email to authentication and more. Names enclosed in brackets (for example, [service]) are either daemon names for the service or common alias(es).

Port # / Layer	Name	Comment
512/tcp	exec	Authentication for remote process execution
512/udp	biff [comsat]	Asynchrous mail client (biff) and service (comsat)
513/tcp	login	Remote Login (rlogin)
513/udp	who [whod]	whod user logging daemon
514/tcp	shell [cmd]	Remote shell (rshell) and remote copy (rcp) with no logging
514/udp	syslog	UNIX system logging service
515	printer [spooler]	Line printer (lpr) spooler
517/udp	talk	Talk remote calling service and client
518/udp	ntalk	Network talk (ntalk) remote calling service and client
519	utime [unixtime]	UNIX time (utime) protocol

520/tcp	efs	Extended Filename Server (EFS)
520/udp	router [route, routed]	Routing Information Protocol (RIP)
521	ripng	Routing Information Protocol for Internet Protocol version 6 (IPv6)
525	timed [timeserver]	Time daemon (timed)
526/tcp	tempo [newdate]	Tempo
530/tcp	courier [rpc]	Courier Remote Procedure Call (RPC) protocol
531/tcp	conference [chat]	Internet Relay Chat
532	netnews	Netnews newsgroup service
533/udp	netwall	Netwall for emergency broadcasts
540/tcp	uucp [uucpd]	UNIX-to-UNIX copy services
543/tcp	klogin	Kerberos version 5 (v5) remote login
544/tcp	kshell	Kerberos version 5 (v5) remote shell
548	afpovertcp	Appletalk Filing Protocol (AFP) over Transmission Control Protocol (TCP)
556	remotefs [rfs_server, rfs]	Brunhoff's Remote Filesystem (RFS)

Table C-2. UNIX Specific Ports

<u>Table C-3</u> lists ports submitted by the network and software community to the IANA for formal registration into the port number list.

Port # / Layer	Name	Comment
1080	socks	SOCKS network application proxy services
1236	bvcontrol [rmtcfg]	Remote configuration server for Gracilis Packeten network switches [a]
1300	h323hostcallsc	H.323 telecommunication Host Call Secure
1433	ms-sql-s	Microsoft SQL Server
1434	ms-sql-m	Microsoft SQL Monitor
1494	ica	Citrix ICA Client
1512	wins	Microsoft Windows Internet Name Server
1524	ingreslock	Ingres Database Management System (DBMS) lock services
1525	prospero-np	Prospero non-privileged
1645	datametrics [old-radius]	Datametrics / old radius entry
1646	sa-msg-port [oldradacct]	sa-msg-port / old radacct entry
1649	kermit	Kermit file transfer and management service

1701	l2tp [l2f]	Layer 2 Tunneling Protocol (LT2P) / Layer 2 Forwarding (L2F)
1718	h323gatedisc	H.323 telecommunication Gatekeeper Discovery
1719	h323gatestat	H.323 telecommunication Gatekeeper Status
1720	h323hostcall	H.323 telecommunication Host Call setup
1758	tftp-mcast	Trivial FTP Multicast
1759/udp	mtftp	Multicast Trivial FTP (MTFTP)
1789	hello	Hello router communication protocol
1812	radius	Radius dial-up authentication and accounting services
1813	radius-acct	Radius Accounting
1911	mtp	Starlight Networks Multimedia Transport Protocol (MTP)
1985	hsrp	Cisco Hot Standby Router Protocol
1986	licensedaemon	Cisco License Management Daemon
1997	gdp-port	Cisco Gateway Discovery Protocol (GDP)
2049	nfs [nfsd]	Network File System (NFS)
2102	zephyr-srv	Zephyr distributed messaging Server
2103	zephyr-clt	Zephyr client
2104	zephyr-hm	Zephyr host manager
2401	cvspserver	Concurrent Versions System (CVS) client/server operations
2430/tcp	venus	Venus cache manager for Coda file system (codacon port)
2430/udp	venus	Venus cache manager for Coda file system (callback/ wbc interface)
2431/tcp	venus-se	Venus Transmission Control Protocol (TCP) side effects
2431/udp	venus-se	Venus User Datagram Protocol (UDP) side effects
2432/udp	codasrv	Coda file system server port
2433/tcp	codasrv-se	Coda file system TCP side effects
2433/udp	codasrv-se	Coda file system UDP SFTP side effect
2600	hpstgmgr [zebrasrv]	Zebra routing[b]

2601	discp-client [zebra]	discp client; Zebra integrated shell
2602	discp-server [ripd]	discp server; Routing Information Protocol daemon (ripd)
2603	servicemeter [ripngd]	Service Meter; RIP daemon for IPv6
2604	nsc-ccs [ospfd]	NSC CCS; Open Shortest Path First daemon (ospfd)
2605	nsc-posa	NSC POSA; Border Gateway Protocol daemon (bgpd)
2606	netmon [ospf6d]	Dell Netmon; OSPF for IPv6 daemon (ospf6d)
2809	corbaloc	Common Object Request Broker Architecture (CORBA) naming service locator
3130	icpv2	Internet Cache Protocol version 2 (v2); used by Squid proxy caching server
3306	mysql	MySQL database service
3346	trnsprntproxy	Transparent proxy
4011	рхе	Pre-execution Environment (PXE) service
4321	rwhois	Remote Whois (rwhois) service
4444	krb524	Kerberos version 5 (v5) to version 4 (v4) ticket translator
5002	rfe	Radio Free Ethernet (RFE) audio broadcasting system
5308	cfengine	Configuration engine (Cfengine)
5999	cvsup [CVSup]	CVSup file transfer and update tool
6000/tcp	x11 [X]	X Window System services
7000	afs3-fileserver	Andrew File System (AFS) file server
7001	afs3-callback	AFS port for callbacks to cache manager
7002	afs3-prserver	AFS user and group database
7003	afs3-vlserver	AFS volume location database
7004	afs3-kaserver	AFS Kerberos authentication service
7005	afs3-volser	AFS volume management server
7006	afs3-errors	AFS error interpretation service
7007	afs3-bos	AFS basic overseer process

7008	afs3-update	AFS server-to-server updater
7009	afs3-rmtsys	AFS remote cache manager service
9876	sd	Session Director for IP multicast conferencing
10080	amanda	Advanced Maryland Automatic Network Disk Archiver (Amanda) backup services
11371	pgpkeyserver	Pretty Good Privacy (PGP) / GNU Privacy Guard (GPG) public keyserver
11720	h323callsigalt	H.323 Call Signal Alternate
13720	bprd	Veritas NetBackup Request Daemon (bprd)
13721	bpdbm	Veritas NetBackup Database Manager (bpdbm)
13722	bpjava-msvc	Veritas NetBackup Java / Microsoft Visual C++ (MSVC) protocol
13724	vnetd	Veritas network utility
13782	bpcd	Veritas NetBackup
13783	vopied	Veritas VOPIE authentication daemon
22273	wnn6 [wnn4]	Kana/Kanji conversion system[c]
26000	quake	Quake (and related) multi- player game servers
26208	wnn6-ds	Wnn6 Kana/Kanji server
33434	traceroute	Traceroute network tracking tool

Notes:	
a. Comment from /etc/	
services: "Port 1236 is	
registered as `bvcontrol',	
but is also used by the	
Gracilis Packeten remote	
config server. The official	
name is listed as the primary	
name, with the unregistered	
name as an alias."	
b. Comment from /etc/	
services: "Ports numbered	
2600 through 2606 are	
used by the zebra package	
without being registered.	
The primary names are the	
registered names, and the	
unregistered names used by	
zebra are listed as aliases."	
c. Comment from /etc/	
services: "This port is	
registered as wnn6, but also	
used under the unregistered	
name 'wnn4' by the	
FreeWnn package."	

Table C-3. Registered Ports

<u>Table C-4</u> is a listing of ports related to the Datagram Delivery Protocol (DDP) used on AppleTalk networks.

Port # / Layer	Name	Comment
1/ddp	rtmp	Routing Table Management Protocol
2/ddp	nbp	Name Binding Protocol
4/ddp	echo	AppleTalk Echo Protocol
6/ddp	zip	Zone Information Protocol

Table C-4. Datagram Deliver Protocol Ports

<u>Table C-5</u> is a listing of ports related to the Kerberos network authentication protocol. Where noted, v5 refers to the Kerberos version 5 protocol. Note that these ports are not registered with the IANA.

Port # / Layer	Name	Comment
751	kerberos_master	Kerberos authentication
752	passwd_server	Kerberos Password (kpasswd) server
754	krb5_prop	Kerberos v5 slave propagation
760	krbupdate [kreg]	Kerberos registration
1109	kpop	Kerberos Post Office Protocol (KPOP)
2053	knetd	Kerberos de-multiplexor
2105	eklogin	Kerberos v5 encrypted remote login (rlogin)

Table C-5. Kerberos (Project Athena/MIT) Ports

<u>Table C-6</u> is a listing of unregistered ports that are used by services and protocols that may be installed on your Red Hat Enterprise Linux system, or that is necessary for communication between Red Hat Enterprise Linux and other operating systems.

Port # / Layer	Name	Comment
15/tcp	netstat	Network Status (netstat)
98/tcp	linuxconf	Linuxconf Linux administration tool
106	poppassd	Post Office Protocol password change daemon (POPPASSD)
465/tcp	smtps	Simple Mail Transfer Protocol over Secure Sockets Layer (SMTPS)
616/tcp	gii	Gated (routing daemon) Interactive Interface
808	omirr [omirrd]	Online Mirror (Omirr) file mirroring services
871/tcp	supfileserv	Software Upgrade Protocol (SUP) server
901/tcp	swat	Samba Web Administration Tool (SWAT)
953	rndc	Berkeley Internet Name Domain version 9 (BIND 9) remote configuration tool
1127/tcp	supfiledbg	Software Upgrade Protocol (SUP) debugging
1178/tcp	skkserv	Simple Kana to Kanji (SKK) Japanese input server
1313/tcp	xtel	French Minitel text information system
1529/tcp	support [prmsd, gnatsd]	GNATS bug tracking system
2003/tcp	cfinger	GNU finger
2150	ninstall	Network Installation Service
2988	afbackup	afbackup client-server backup system
3128/tcp	squid	Squid Web proxy cache
3455	prsvp	RSVP port
5432	postgres	PostgreSQL database
4557/tcp	fax	FAX transmission service (old service)
4559/tcp	hylafax	HylaFAX client-server protocol (new service)
5232	sgi-dgl	SGI Distributed Graphics Library
5354	noclog	NOCOL network operation center logging daemon (noclogd)
5355	hostmon	NOCOL network operation center host monitoring
5680/tcp	canna	Canna Japanese character input interface
6010/tcp	x11-ssh-offset	Secure Shell (SSH) X11 forwarding offset

6667	ircd	Internet Relay Chat daemon (ircd)
7100/tcp	xfs	X Font Server (XFS)
7666/tcp	tircproxy	Tircproxy IRC proxy service
8008	http-alt	Hypertext Tranfer Protocol (HTTP) alternate
8080	webcache	World Wide Web (WWW) caching service
8081	tproxy	Transparent Proxy
9100/tcp	jetdirect [laserjet, hplj]	Hewlett-Packard (HP) JetDirect network printing service
9359	mandelspawn [mandelbrot]	Parallel mandelbrot spawning program for the X Window System
10081	kamanda	Amanda backup service over Kerberos
10082/tcp	amandaidx	Amanda index server
10083/tcp	amidxtape	Amanda tape server
20011	isdnlog	Integrated Services Digital Network (ISDN) logging system
20012	vboxd	ISDN voice box daemon (vboxd)
22305/tcp	wnn4_Kr	kWnn Korean input system
22289/tcp	wnn4_Cn	cWnn Chinese input system
22321/tcp	wnn4_Tw	tWnn Chinese input system (Taiwan)
24554	binkp	Binkley TCP/IP Fidonet mailer daemon
27374	asp	Address Search Protocol
60177	tfido	Ifmail FidoNet compatible mailer service
60179	fido	FidoNet electronic mail and news network