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TCP / IP Reference Page

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Shortcuts to popular Protocols

IP Internet Protocol version 4
IPv6 Internet Protocol version 6
TCP Transmission Control Protocol
UDP User Datagram Protocol

The Defense Advance Research Projects Agency (DARPA) originally developed Transmission Control Protocol/Internet Protocol (TCP/IP) to interconnect various defense department computer networks. The Internet, an international Wide Area Network, uses TCP/IP to connect government and educational institutions across the world. TCP/IP is also in widespread use on commercial and private networks. The TCP/IP suite includes the following protocols

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Data Link Layer

ARP/RARP

Address Resolution Protocol/Reverse Address

DCAP

Data Link Switching Client Access Protocol

Network Layer

DHCP

Dynamic Host Configuration Protocol

DVMRP

Distance Vector Multicast Routing Protocol

ICMP/ICMPv6

Internet Control Message Protocol

IGMP

Internet Group Management Protocol

IP

Internet Protocol version 4

IPv6

Internet Protocol version 6

MARS

Multicast Address Resolution Server

PIM

Protocol Independent Multicast-Sparse Mode (PIM-SM)

RIP2

Routing Information Protocol

RIPng for IPv6

Routing Information Protocol for IPv6

RSVP

Resource ReSerVation setup Protocol

VRRP

Virtual Router Redundancy Protocol

Transport Layer

<u>ISTP</u>	
<u>Mobile IP</u>	Mobile IP Protocol
<u>RUDP</u>	Reliable UDP
<u>TALI</u>	Transport Adapter Layer Interface
<u>TCP</u>	Transmission Control Protocol
<u>UDP</u>	User Datagram Protocol
<u>Van Jacobson</u>	compressed TCP
<u>XOT</u>	X.25 over TCP

Session Layer

<u>BGMP</u>	Border Gateway Multicast Protocol
<u>Diameter</u>	
<u>DIS</u>	Distributed Interactive Simulation
<u>DNS</u>	Domain Name Service
<u>ISAKMP/IKE</u>	Internet Security Association and Key Management Protocol and Internet Key Exchange Protocol
<u>iSCSI</u>	Small Computer Systems Interface
<u>LDAP</u>	Lightweight Directory Access Protocol
<u>MZAP</u>	Multicast-Scope Zone Announcement Protocol
<u>NetBIOS/IP</u>	NetBIOS/IP for TCP/IP Environment

Application Layer

<u>COPS</u>	Common Open Policy Service
<u>FANP</u>	Flow Attribute Notification Protocol
<u>Finger</u>	User Information Protocol
<u>FTP</u>	File Transfer Protocol
<u>HTTP</u>	Hypertext Transfer Protocol
<u>IMAP4</u>	Internet Message Access Protocol rev 4
<u>IMPPpre/IMPPmes</u>	Instant Messaging and Presence Protocols
<u>IPDC</u>	IP Device Control
<u>IRC</u>	Internet Relay Chat Protocol
<u>ISAKMP</u>	Internet Message Access Protocol version 4rev1
<u>ISP</u>	
<u>NTP</u>	Network Time Protocol
<u>POP3</u>	Post Office Protocol version 3
<u>Radius</u>	Remote Authentication Dial In User Service
<u>RLOGIN</u>	Remote Login
<u>RTSP</u>	Real-time Streaming Protocol
<u>SCTP</u>	Stream Control Transmission Protocol
<u>S-HTTP</u>	Secure Hypertext Transfer Protocol
<u>SLP</u>	Service Location Protocol
<u>SMTP</u>	Simple Mail Transfer Protocol
<u>SNMP</u>	Simple Network Management Protocol
<u>SOCKS</u>	Socket Secure (Server)
<u>TACACS+</u>	Terminal Access Controller Access Control System
<u>TELNET</u>	TCP/IP Terminal Emulation Protocol
<u>TFTP</u>	Trivial File Transfer Protocol
<u>WCCP</u>	Web Cache Coordination Protocol
<u>X-Window</u>	X Window

Routing

<u>BGP-4</u>	Border Gateway Protocol
<u>EGP</u>	Exterior Gateway Protocol
<u>EIGRP</u>	Enhanced Interior Gateway Routing Protocol
<u>HSRP</u>	Cisco Hot Standby Router Protocol
<u>IGRP</u>	Interior Gateway Routing
<u>NARP</u>	NBMA Address Resolution Protocol
<u>NHRP</u>	Next Hop Resolution Protocol
<u>OSPF</u>	Open Shortest Path First
<u>TRIP</u>	Telephony Routing over IP

Tunneling

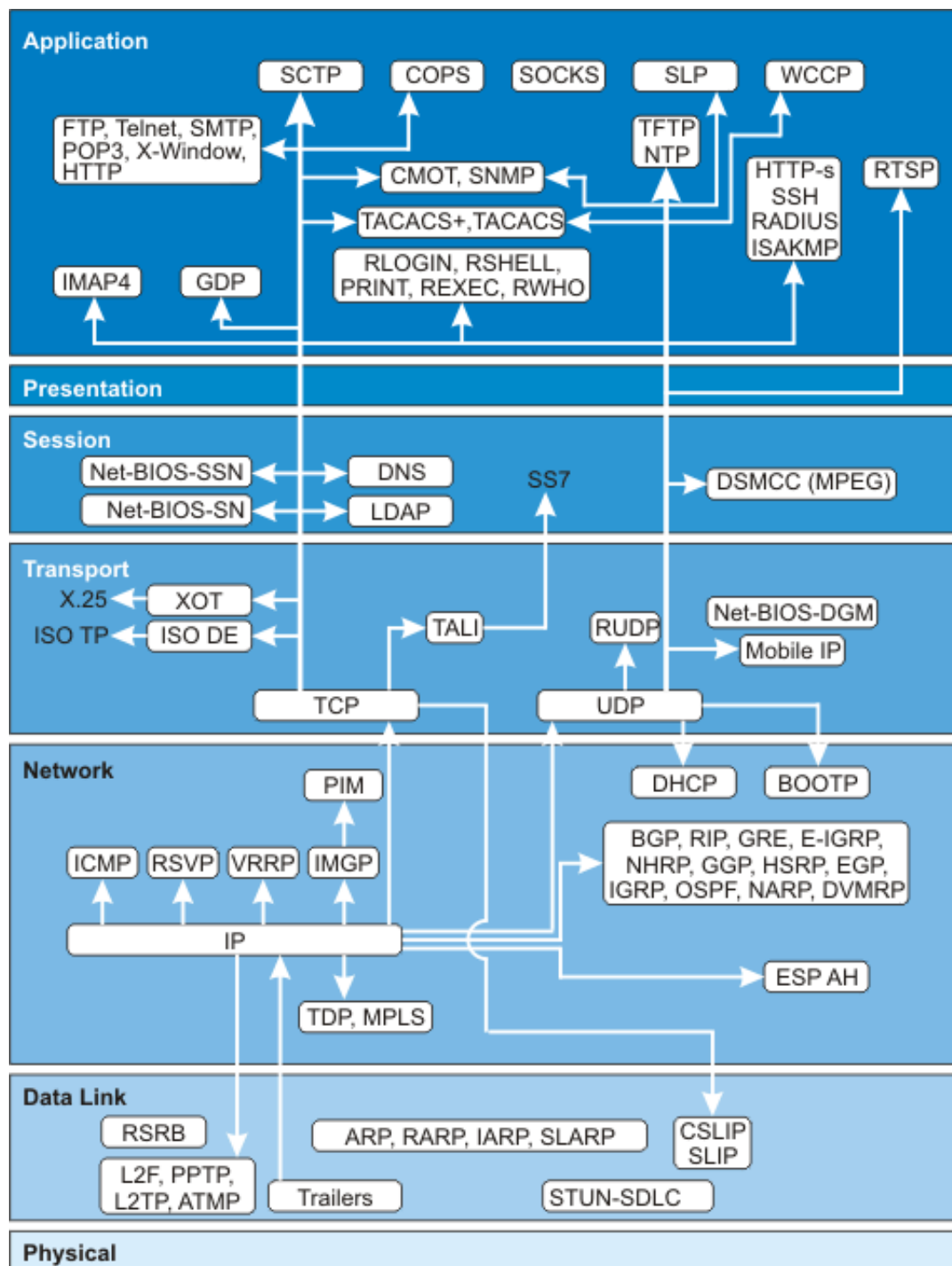
<u>ATMP</u>	Ascend Tunnel Management Protocol
<u>L2F</u>	The Layer 2 Forwarding Protocol
<u>L2TP</u>	Layer 2 Tunneling Protocol
<u>PPTP</u>	Point to Point Tunneling Protocol

Security

<u>AH</u>	Authentication Header
<u>ESP</u>	Encapsulating Security Payload
<u>TLS</u>	Transport Layer Security Protocol

The TCP/IP suite is illustrated here in relation to the OSI model:

[Click the protocols on the map to see more details.](#)



1 2 3 4 5 6 7 8 9 ►

TCP/IP Family Protocol Information

[AH](#) | [ATMP](#) | [ARP/RARP](#) | [BGP](#) | [BGP-4](#) | [COPS](#) | [DCAP](#) | [DHCP](#) | [Diameter](#) | [DIS](#) | [DNS](#) | [DVMRP](#) | [EGP](#) | [EIGRP](#) | [ESP](#) | [FANP](#) | [Finger](#) | [FTP](#) | [HSRP](#) | [HTTP](#) | [ICMP/ICMPv6](#) | [IGMP](#) | [IGRP](#) | [IMAP4](#) | [IMPPpre/IMPPmes](#) | [IPDC](#) | [IP](#) | [IPv6](#) | [IRC](#) | [ISAKMP](#) | [ISAKMP/IKE](#) | [iSCSI](#) | [ISTP](#) | [ISP](#) | [LDAP](#) | [L2F](#) | [L2TP](#) | [MARS](#) | [Mobile IP](#) | [MZAP](#) | [NARP](#) | [NetBIOS/IP](#) | [NHRP](#) | [NTP](#) | [OSPF](#) | [PIM](#) | [POP3](#) | [PPTP](#) | [Radius](#) | [RLOGIN](#) | [RIP2](#) | [RIPng for IPv6](#) | [RSVP](#) | [RTSP](#) | [RUDP](#) | [SCTP](#) | [S-HTTP](#) | [SLP](#) | [SMTP](#) | [SNMP](#) | [SOCKS](#) | [TACACS+](#) | [TALI](#) | [TCP](#) | [TELNET](#) | [TFTP](#) | [TLS](#) | [TRIP](#) | [UDP](#) | [Van Jacobson](#) | [VRRP](#) | [WCCP](#) | [X-Window](#) | [XOT](#)

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