

The TCP/IP Suite



- TCP/IP was developed during the 1960s by the US Department of Defense's (DoD) Advanced Research Projects Agency (ARPA).
- It is a protocol stack which consists of multiple protocols including TCP (Transmission Control Protocol) and IP (Internet Protocol).
- It is the main protocol stack used in computer operations today.
- Whereas the OSI Reference Model is conceptual, the TCP/IP stack is used to transfer data in production networks.
- TCP/IP is also layered but does not use all of the OSI layers, though the layers are equivalent in operation and function.

Comparing the OSI Model with the TCP/IP Stack

OSI Model	TCP/IP Stack	Cisco TCP/IP Stack Layer Definition
Application	Application	'Represents data users, encodes and controls the dialog.'
Presentation		
Session		
Transport	Transport	'Supports communication between end devices across a diverse network'.
Network	Internet	'Provides logical addressing and determines the best path through the network'.
Data Link		
Physical	Network Access	'Controls the hardware devices and media that make up the network'.

Host Communications Terminology

