

# 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	
Presentation		
Session		'Represents data users, encodes and controls the dialog.'
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	Link	
Physical		'Controls the hardware devices and media that make up the network'.

# Host Communications Terminology

