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**DIFFERENCE BETWEEN THE 7-LAYER OSI MODEL AND THE TCP/IP MODEL.**

* OSI is a general protocol independent standard which acts as an interacting gateway between the network and end user whereas TCP/IP depends on standard protocols about which the computer network network has created, TCP is a connection protocol that assigns the network of hosts over the internet.
* OSI was developed first then protocols were created to fit network architecture’s needs whereas in the case of TCP/IP ,protocols were created first and then the model followed.
* OSI represents/defines administration interfaces and conventions whereas TCP/IP does not.
* OSI clearly describes which layers provides what services hence provides better services unlike TCP/IP
* OSI uses vertical approach whereas TCP/IP uses horizontal approach.
* OSI segments multiple functions unlike TCP/IP which model groups into single layer.
* OSI physical layer deals with specifically medium of transmission whereas TCP/IP combines both the physical and data link layer naming it network interface layer which deals with the physical and data link aspects of network communication.
* TCP/IP application layer combines elements of the OSI session,presentation and application in order to provide application services and protocols.

**SIMILARITIES**

* They are logical models.
* Define standards for networking.
* They simplify and divide the network communication process into making their layers.
* Both provide a framework for creating and implementing networking standards and devices.
* Both models simplify the troubleshooting process by dividing complex functions into simpler components.
* In both models, a single layer defines a particular functionality and set standards for that functionality only.
* Their manufacturers allow making sets of devices and network components that can co-exist and work with the devices and components that are made by the other manufacturers.
* Instead of defining the already defined standards and protocols, both models referenced them.