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OSI model

The Open Systems Interconnection model (OSI model) is a conceptual model that characterizes and standardizes the communication functions of a telecommunication or computing system without regard to its underlying internal structure and technology

OSI model			
Layer		Protocol data unit (PDU)	Function
Host layers	7 Application	Data	High-level APIs, including resource sharing, remote file access
	6 Presentation		Translation of data between a networking service and an application; including character encoding, data compression and encryption/decryption
	5 Session		Managing communication sessions, i.e., continuous exchange of information in the form of multiple back-and-forth transmissions between two nodes
	4 Transport	Segment, Datagram	Reliable transmission of data segments between points on a network, including segmentation, acknowledgement and multiplexing
Media layers	3 Network	Packet	Structuring and managing a multi-node network, including addressing, routing and traffic control
	2 Data link	Frame	Reliable transmission of data frames between two nodes connected by a physical layer
	1 Physical	Symbol	Transmission and reception of raw bit streams over a physical medium

Snippet from [Wikipedia: OSI model](#)

The **Open Systems Interconnection model (OSI model)** is a reference model from the International Organization for Standardization (ISO) that "provides a common basis for the coordination of standards development for the purpose of systems interconnection." In the OSI reference model, the communications between systems are split into seven different abstraction layers: Physical, Data Link, Network, Transport, Session, Presentation, and Application.

The model partitions the flow of data in a communication system into seven abstraction layers to describe networked communication from the physical implementation of transmitting bits across a communications medium to the highest-level representation of data of a distributed application. Each intermediate layer serves a class of functionality to the layer above it and is served by the layer below it. Classes of functionality are realized in all software development through all standardized communication protocols.

Each layer in the OSI model has well-defined functions, and the methods of each layer communicate and interact with those of the layers immediately above and below as

appropriate.

The Internet protocol suite as defined in RFC 1122 and RFC 1123 is a model of networking developed contemporarily to the OSI model, and was funded primarily by the U.S. Department of Defense. It was the foundation for the development of the Internet. It assumed the presence of generic physical links and focused primarily on the software layers of communication, with a similar but much less rigorous structure than the OSI model.

In comparison, several networking models have sought to create an intellectual framework for clarifying networking concepts and activities, but none have been as successful as the OSI reference model in becoming the standard model for discussing and teaching networking in the field of information technology. The model allows transparent communication through equivalent exchange of protocol data units (PDUs) between two parties, through what is known as peer-to-peer networking (also known as peer-to-peer communication). As a result, the OSI reference model has not only become an important piece among professionals and non-professionals alike, but also in all networking between one or many parties, due in large part to its commonly accepted user-friendly framework.

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The OSI-model.txt

Layer 1: The physical layer
Layer 2: The data link layer
Layer 3: The network layer
Layer 4: The transport layer
Layer 5: The session layer
Layer 6: The presentation layer
Layer 7: The application layer



Video

Source: [YouTube](#)

External links:

- <https://www.geeksforgeeks.org/layers-of-osi-model>
- <https://www.guru99.com/layers-of-osi-model.html>

[kb](#), [architecture](#), [network](#), [osi](#)

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