OSI Reference Model

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Transmit Data

User

Receive Data

Application Layer

Presentation Layer

Session Layer

Transport Layer

Network Layer

Data Link Layer

Physical Layer

Physical Link
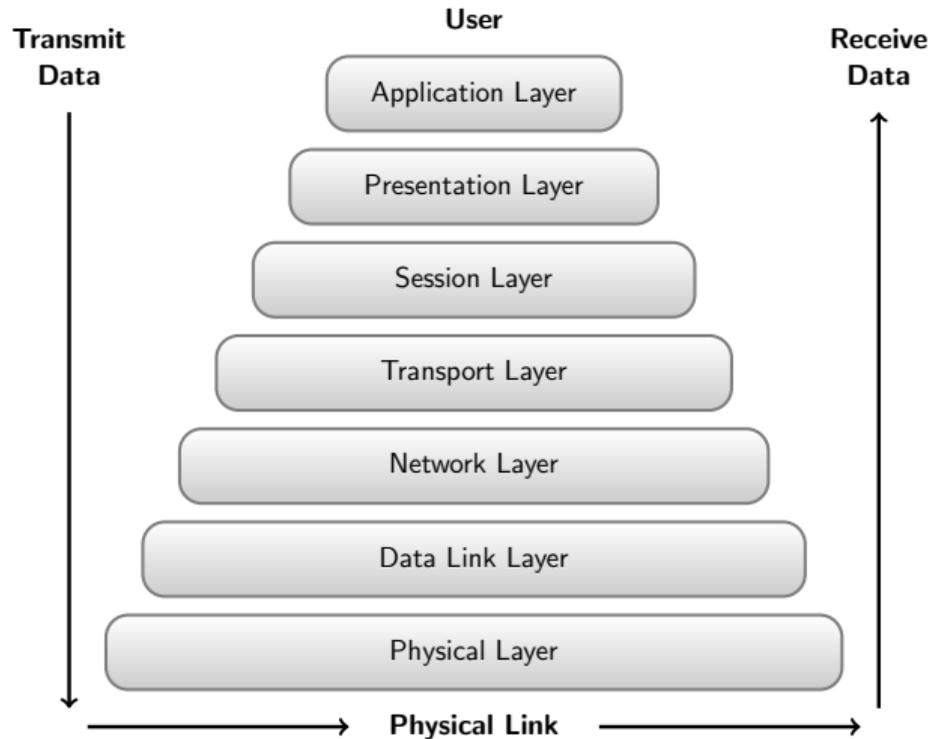
Layer 7 Application

- Specifies the shared communications protocols and interface methods used by hosts
- Protocols: DHCP(v6), DNS, FTP, HTTP, HTTPS, IMAP, LDAP, MQTT

Layer 6 Session/Syntax

- Data translation, data conversion, encryption and decryption, ...
- Protocols: Network Data Representation, Lightweight Presentation Protocol

Layer 5 Session

- Opening, closing and managing a session. Authentication, authorization, session restoration
- Protocols: Password Authentication Protocol, Remote Procedure Calls (RCP)

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Layer 4 Transport

- Host-to-host communication services for applications
- Protocols: TCP, UDP

Layer 3 Network

- Transferring variable-length network packets from a source to a destination
- Protocols: Internet Protocol IP

Layer 2 Data link

- Transfer data between network entities and may also provide the means to detect and possibly correct errors that can occur in the physical layer
- Logical Link Control (LLC) and Media Access Control (Mac) sub layers
- Protocols: Address Resolution Protocol ARP oder IEEE 802.5 (Token Ring)

Layer 1 Physical

- Electronic circuit transmission
- Translates logical communications requests from the data link layer into hardware-specific operations
- Supports higher layers responsible for generation of logical data packets

Additional Resources

- https://www.youtube.com/results?search_query=osi+modell
- https://de.wikipedia.org/wiki/OSI-Modell