

# The Upper OSI Layers



- Network engineers do not typically work directly with the upper 3 layers of the OSI model... but we still need to know what they do.
- They are more relevant to application developers.
- In this lecture I will primarily be giving you the Cisco definitions of the layers.
- Information included in the upper layers would include the Message Body and Subject Line in an email message for example.

# Layer 7 – The Application Layer



- The application layer provides network services to the applications of the user.
- It differs from the other layers in that it does not provide services to any other OSI layer.
- The application layer establishes the availability of intended communication partners.
- It then synchronizes and establishes agreement on procedures for error recovery and control of data integrity.

# Layer 6 – The Presentation Layer



- The presentation layer ensures that the information that is sent at the application layer of one system is readable by the application layer of another system.
- The presentation layer can translate among multiple data formats using a common format (eg computers with different encoding schemes).

# Layer 5 – The Session Layer



- The session layer establishes, manages, and terminates sessions between two communicating hosts.
- The session layer also synchronizes dialog between the presentation layers of the two hosts and manages their data exchange.
- For example, web servers have many users, so there are many communication processes open at any given time to track.
- It also offers efficient data transfer, CoS, and exception reporting of upper layer problems.