

The OSI Model as explained by Laura A. Robinson

I use an analogy of two Mafia Dons preparing to meet. (Anybody who has seen one of the 'Godfather' movies usually gets this)

Application Layer: This is the Don. Now, everybody knows that a Don never actually does the dirty work himself; he has underlings that do that. He doesn't have to know exactly "how" his orders are accomplished, just that they are. So, this Don (let's call him Don Juan) wants to meet another Don (Don Johnson). So Don Juan says to his consigliere, "Hey, I want a meeting with Don Johnson to discuss the future of our enterprises." [In terms of OSI, the applications layer is all that the user sees; in the analogy, the world sees the Family as Don Juan. Nobody really knows his internal mechanics just by hearing the family's name.]

Presentation Layer: This is the consigliere (counselor). It is his job to take the orders from the Don and present them to the underlings. Being pretty high in the family, the consigliere isn't just going to walk out and tell the chauffeur to get the car ready. Heck, no! He issues orders to the capo, the captain of the troops. So, consigliere, as the Don's translator, walks out of the Don's office and says to the capo, "The Don wants a meeting with the Johnson family. Make it happen." [Consigliere=redirector]

Session Layer: The capo. The capo, like the session layer, is responsible for security and name recognition. Pretty straightforward. The capo receives the order from the consigliere, and he proceeds to make arrangements for bodyguards, etc. Additionally, he issues the order to one of his men to start arranging the actual logistics of the meeting. Capo says, "Tell the Johnson family that the Juan family wants to meet, and start getting the bodyguards together." This order goes to his lieutenant.

Transport Layer: The lieutenant. [In OSI, the layer responsible for the unpackaging, repackaging, and acknowledgement of data.] In Don Juan's family, this is the guy responsible for putting the request for the meeting into an envelope to be delivered to Don Johnson's family. In Don Johnson's family, the lieutenant would be the one who opens up the envelope to make sure it isn't a bomb. He would also be responsible for sending a message back that the meeting request had been received. The lieutenant also calls one of his logistics men over and says, "Figure out how to get us to the meeting."

Network Layer: The logistics man. This is the guy who picks the restaurant where the meeting will take place, writes down the location, and determines the route that will be taken to get there. [Addressing, translation of logical address to physical address, data path, and routing]. Logistics man takes this information and hands it to the bodyguard on a piece of paper.

Data Link Layer: The bodyguard. The bodyguard is handed a piece of paper by the logistics man. It's not really any of his business what is on the piece of paper; he just knows that it is supposed to go to the chauffeur. Bodyguard folds the paper neatly, makes sure it is not torn or coffee stained, and walks it outside to the driver/chauffeur. He hands it to the driver, waits for the driver to open the paper and read it so that he can make sure the message is understood, then walks back into the house and nods to the Logistics man. [Data Link layer is responsible for error-free frame transfer].

Physical Layer: The driver (Mafia driver, not OSI driver). This guy's responsibility is the actual transporting of the Don and all his people to the meeting. The Don, surrounded by the consigliere, the capo, the lieutenant, the logistics man, and the bodyguard all get into the big huge car and are driven to the meeting. [In OSI, the actual transmitter of the data, which has been packaged by the upper layers on the way down.]

Okay, it is a dorky example, but it is fairly easy to remember and I think it maps pretty well.