| OSI Layer # | ISO Layer Name | TCP/IP # | TCP/IP layer Name | Encapsulation Units | Devices or Components | TCP/IP Protocols | Keywords/Description |
|-------------------|-------------------|-------------|----------------------|------------------------|-----------------------|---------------------|--------------------------------------|
| | | | | | | FTP, HTTP, | |
| | | | | | | POP3, IMAP, | Network services for application |
| _ | Application | | | | 20 | telnet, SMTP, | processes, such as file, print, |
| 7 | (Away) | | | data | PC | DNS, TFTP | messaging, database services |
| | | | | | | | Standard interface to data for the |
| | | _ | Application | | | | application layer. MIME |
| | Dragontation | 4 | (Apple) | | | | encoding, data encryption, |
| 6 | Presentation | | · · · · / | data | | | conversion, formatting, |
| 6 | (Pizza) | | | data | | | compression Interhost communication. |
| | | | | | | | Establishes, manages and |
| | Session | | | data | | | terminates connection between |
| 5 | (Sausage) | | | (Drippy) | | | applications |
| | (Gausage) | | | (БПРРУ) | | TCP, UDP | End-to-end connections and |
| | | | | | | 101,001 | reliability. |
| | | | | | | | Segmentation/desegmentation of |
| | Transport | | Transport | segments | | | data in proper sequence. Flow |
| 4 | (Throw) | 3 | (Tainted) | (Sweet) | | | control |
| | | | | • | | IP | Logical addressing and path |
| | Network | | Internet | packets | | | determination. Routing. |
| 3 | (not) | 2 | (Ingest) | (Pancakes) | router | | Reporting delivery errors |
| | | | | | | | |
| | | | | | | | Physical addressing and access |
| | _ | | | |] | | to media. Two sublayers: Logical |
| | Data Link | | Network | frames | bridge, switch, | | Link Control (LLC) and Media |
| 2 | (DO) | 1 | Access | (For) | NIC | | Access Control (MAC) |
| | | | (Never) | | | | Binary transmission signals and |
| | Dharainal | | | la ita | | | encoding. Layout of pins, |
| | Physical | | | bits | repeater, hub, | | voltages, cable specifications, |
| 1 | (Please) | | | (Breakfast) | tranciever | | modulation |