

Answer on Question #52541 – Programming – Other

what are the five layers of TCP/IP protocol suite.discuss each of them.

Solution:

The layers in the 5-layer model are:

| Layer | Name | Function |
|-------|------------------------|--|
| 5 | Process & Applications | Provide applications services to users and programs |
| 4 | Transport | Handles data-consistency functions, i.e., provides a reliable byte stream between two nodes on a network. TCP and UDP work at this level. |
| 3 | Network Layer | Provides network addressing and routing, and does so in such a way as also to provide a common address space across multiple lower-level protocols. This makes possible the interconnection of networks that characterizes the Internet. The IP protocol operates at this level. |
| 2 | Data Link Layer | This layer contains whatever IP will run over, e.g., Ethernet, token-ring, and Fiber Distributed Digital Interface (FDDI) networks. Individual network protocols, e.g., Ethernet, work at this level. |
| 1 | Physical | Not really part of the model, since TCP and IP, as protocols, deal with software rather than hardware. This layer is generally thought of as referring to all hardware under the Network Layer |
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