

Lesson 8

Transport Layer – TCP & UDP

Knowledge is for action, action is for achievement, and achievement is for fulfillment.

Main Points

1. Transport layer provides efficient, reliable, end-to-end communications between processes on different computers on the network. Transport entities run on the host computers, not the router.
2. Transport layer protocols TCP and UDP provide connection-oriented and connectionless services through primitives like **listen**, **connect**, **send**, **receive**, and **disconnect**.
3. Transport services can be more reliable than the underlying network layer with features that add adaptability such as three-way handshakes, sliding windows, connection management, and timers. Creative intelligence is innovative and self-perpetuating; it is capable of making its own environment favorable to its growth.
4. Three-way handshake ensures connections are setup correctly despite whether requests or acknowledgements are duplicated or lost. Creative intelligence is systematic – a banyan seed always yields a banyan tree.
5. Two-army problem illustrates that releasing a connection in an unreliable network can still yield data loss. From SCI - the finite level of an object cannot be fully known on the finite level alone.

Connecting the Parts of Knowledge with the Wholeness of Knowledge

1. The transport layer is at the heart of the whole network reference model providing reliable communications service to the layers above while hiding differences between network interfaces.
 2. The purpose of knowledge is to make actions successful. Successful action leads to achievement, which results in fulfillment.
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3. Transcendental consciousness is the home of all knowledge.
 4. Wholeness moving within itself: In Unity Consciousness, the home of all knowledge is established in one's awareness so all actions lead to fulfillment.

