CISCO CDP

Cisco CDP is a Cisco proprietary protocol that is for collecting directly connected neighbor device information like hardware, software, device name etc.

HOW CDP WORKS

A Cisco devices transmit CDP packets periodically with a default time of 60s, packets are advertised with a TTL (Time-to-live) with indicates the number of seconds a packet must be retained before it is discarded with a default value of 180s (hold time).

All Cisco devices recive CDP packets, process them and cache the information in the packet, Cisco devices don't forward CDP packets. If any information changes from the last received packets, the new information is cached and the older information is descarded.

NOTES FOR CDP

- CDP only works on directly connected interfaces.
- CDP table info is refreshed each time new information is received from connected neighbor.
- CDP can be enable on GRE tunnel which is useful in DMVPN.
- CDP runs on all media that supports Subnetwork Access Protocol (SNAP)

LINK LAYER DISCOVERY PROTOCOL

Link Layer Discovery Protocol (LLDP) is a vendor neutral protocol used by network devices for advertising their identity, capabilities, and neighbors on a local area network based on IEEE 802 technology.

It is a standard layer 2 topology discovery protocol defined in IEEE 802.1ab. It collects local device information including the management IP address, device ID, and port ID and advertises the information to neighboring devices which the save the information in their management information base [MIB]. A network management system [NMS] can search required information in MIB to determine the link status.