## Configure and Verify Layer 2 Protocols:

CDP and LLDP, serve the same purpose, identify neighbor devices, LLDP is an industry standard and CDP is Cisco proprietary. CDP is used for many purposes in our current network like device identification and carrying vlan information for cisco devices. The voice vlan in Cisco switches carried by CDP packets to ip phone, if you have other vender such as Avaya phone, you can use LLDP to send the voice vlan information LLDP packets just like CDP.

LLDP	CDP
Link Layer Discovery Protocol	Cisco Discovery Protocol
LLDP is a layer two discovery protocol	CDP is a layer two discovery protocol
LLDP is a standard protocol	CDP is Cisco Proprietary protocol
LLDP use TLVs (Type, Length, and Value) to	CDP use TLVs (Type, Length, and Value) to
send and receive information to their directly	send and receive information to their directly
connected neighbors.	connected neighbors.
CDP message contains information about	CDP message contains information about
port, system name, system capabilities, and	Device ID, IP address, port ID, VLAN and
management address.	hardware platform.
LLDP allows switch ports configured with a	CDPv2 allows switch ports configured with a
voice vlan.	voice vlan.
LLDP announcements are send to the	CDP announcements are send to the
multicast destination address	multicast destination address
01-80-C2-00-00-0e on each interface	01-00-0c-cc-cc on each interface
LLDP is disabled by default	CDP is enable by default
LLDP advertisements are sent every 30 sec	CDP advertisements are sent every 60 sec
LLDP hold time advertised is 120 seconds	CDP hold time advertised is 180 seconds
Globally enable LLDP	Globally enable CDP
SW(config)#lldp run	SW(config)#cdp run
Globally disable LLDP	Globally disable CDP
SW(config)#no lldp run	SW(config)#no cdp run
Enable LLDP on an interface	Enable CDP on an interface
SW(config-if) #Ildp transmit	SW(config-if)#cdp enable
SW(config-if)#Ildp receive	
N/A	Enable CDP version 2
	SW(config)# cdp advertise-v2
SW# show lldp neighbors	SW# show cdp neighbors
SW# show lldp entry *	SW# show cdp entry *
SW# show lldp traffic	SW# show cdp traffic
SW# show lldp	SW# show cdp
SW# show lldp interface	SW# show cdp interface
SW(config)#lldp timer <time_ in_="" second=""></time_>	SW(config)#cdp timer <time_ in_="" second=""></time_>
SW(config)#lldp holdtime <time_ in_="" second=""></time_>	SW(config)#cdp holdtime <time_ in_="" second=""></time_>