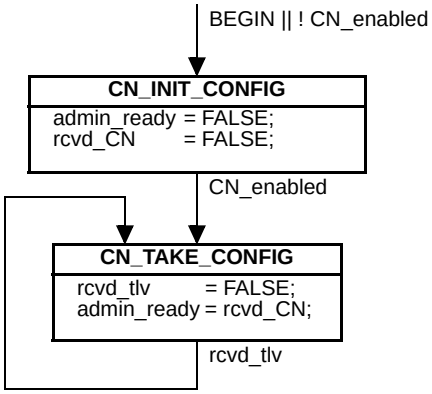
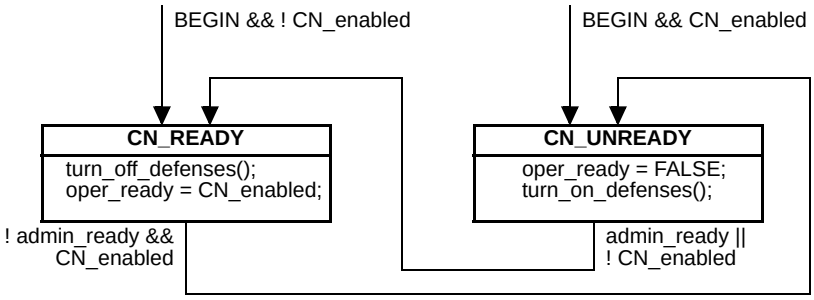
# Per-port per-priority state machines for LLDP TLVs for CN

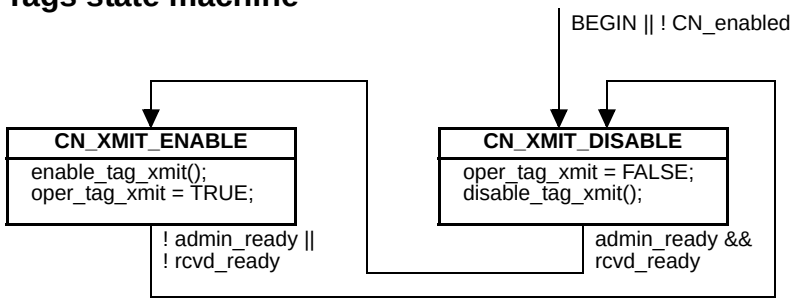
## Configuration state machine




## Receive Ready state machine




## Transmit Tags state machine



## Notes:

1) There is one set of state machines per port per CN Priority.

2) BEGIN is the usual initialization signal. It is asserted when the port is not operational.

3) CN_enabled drives the CN bit for this priority in the LLDP CN TLV.

4) The Configuration state machine runs whenever the CN TLV is received on the port or the local configuration changes. It sets its output, admin_ready, according to whether CN is enabled on the neighbor. That variable drives the Receive Ready and Transmit Tags state machines.

5) The Receive Ready state machine is driven by admin_ready. Its purpose is to turn on or off the defense of its Port and priority. That defense remaps all frame received on the CN Priority to a best-effort priority.

6) The Transmit Tags state machine is driven by both admin_ready and the receipt of the Ready flag in the neighbor's LLDP CN TLV. It enables the output of CN-tagged frames. This state machine provides oper_tag_xmit as an output that is not transmitted in the CN LLDP TLV, but may be useful in an end station for enabling CN applications.

7) The rcvd_xxx variables are set by each received LLDP TLV for my priority. rcvd_tlv indicates that the received TLV value has changed, appeared or disappeared. For example, if the neighbor is lost to LLDP, rcvd_tlv = TRUE, rcvd_ready = FALSE, and rcvd_willing = FALSE.

8) oper_config and oper_ready are transmitted in the LLDP TLV. Whenever either one changes, LLDP switches to fast mode and transmits three PDUs at one per second.