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The Ultimate in Performance

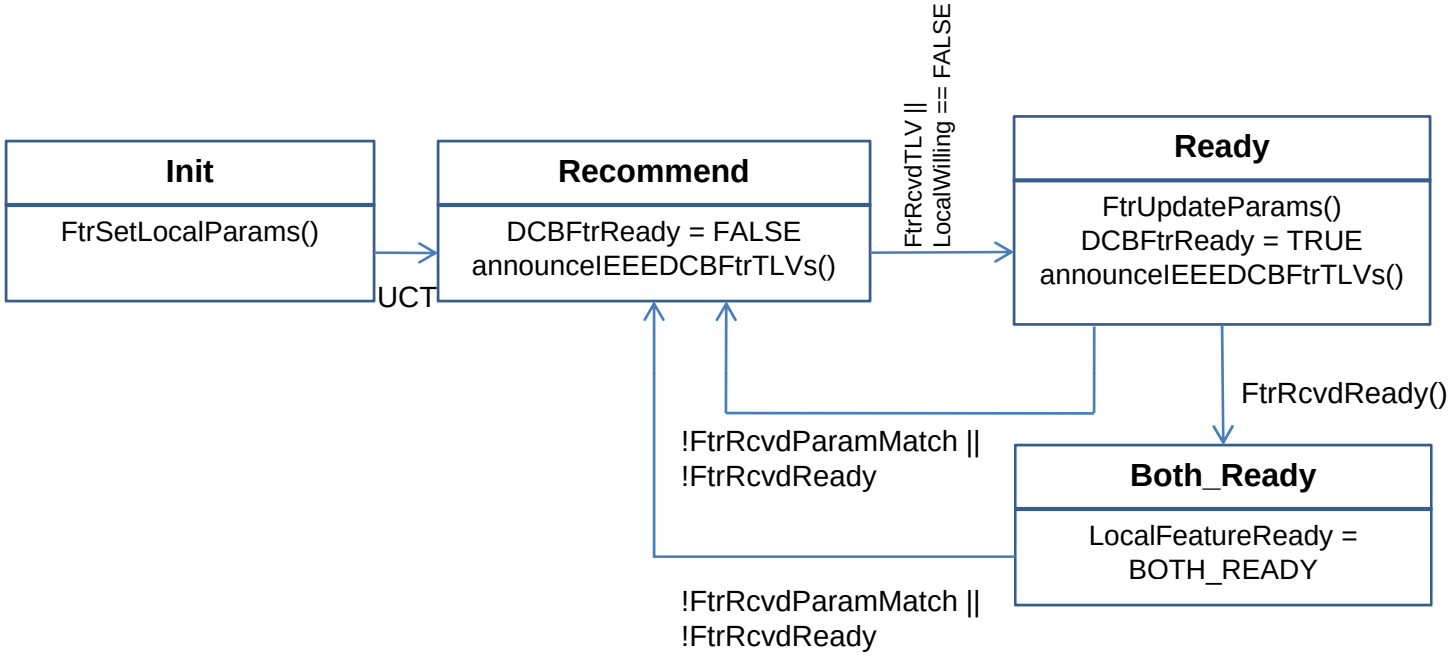
DCBX – Fixing bug

Manoj Wadekar

Update to last presentation

- Bug in state machine published last time
- WIP: still reviewing to find bugs

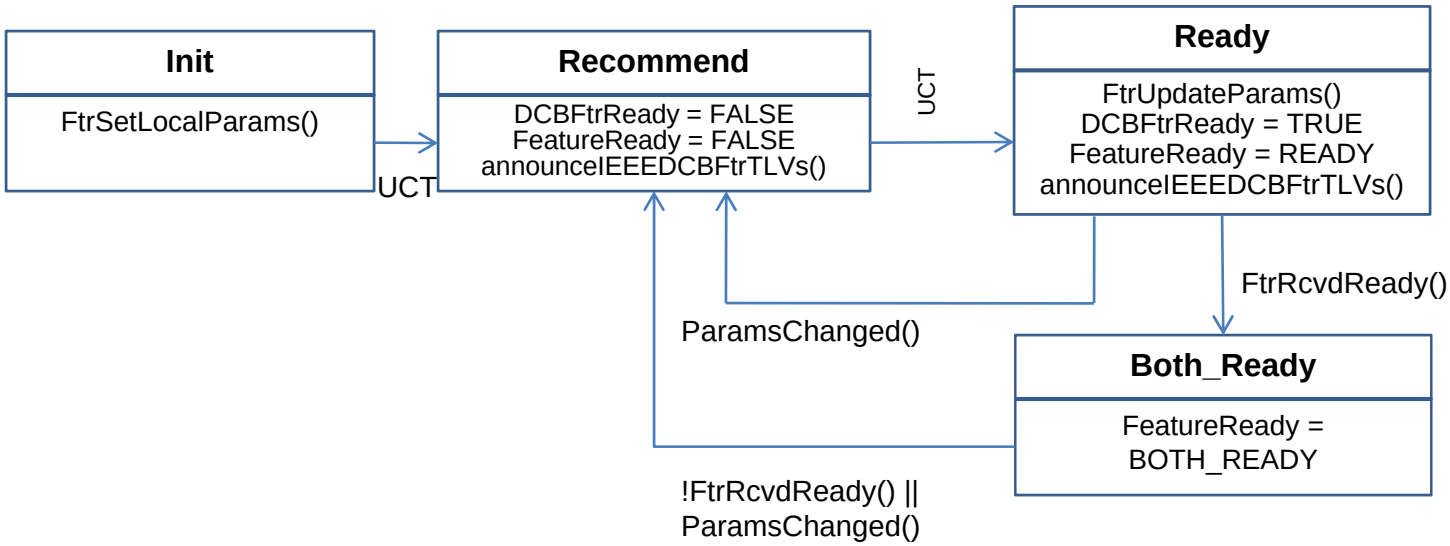
Bug in previous state machine



- **Major: Infinite loop if !Willing node receives TLV with Ready set and parameters mismatching**
- **Minor: LocalFeatureReady not initialized**

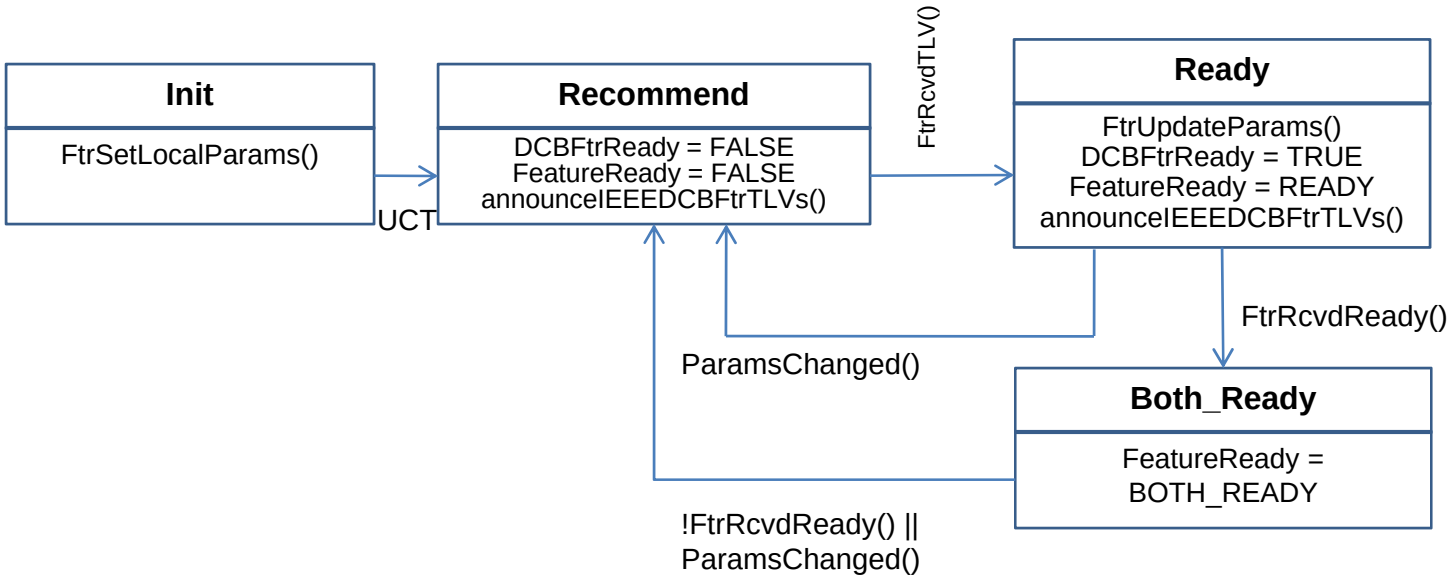
SM for “Willing” Node

- **Functions:**
  - FtrUpdateParams(): do_nothing()
  - FtrRcvdReady(): RemoteReady == TRUE
  - ParamsChanged (): Event generated when local parameters administratively changed
  - announceIEEEDCBFtrTLVs(): Update local LLDP MIB to send update to peer
- **Variables:**
  - FeatureReady: Indication to local entity whether feature is ready;
    - values: FALSE/READY/BOTH_READY
- **LLDP variable:**
  - DCBFtrReady



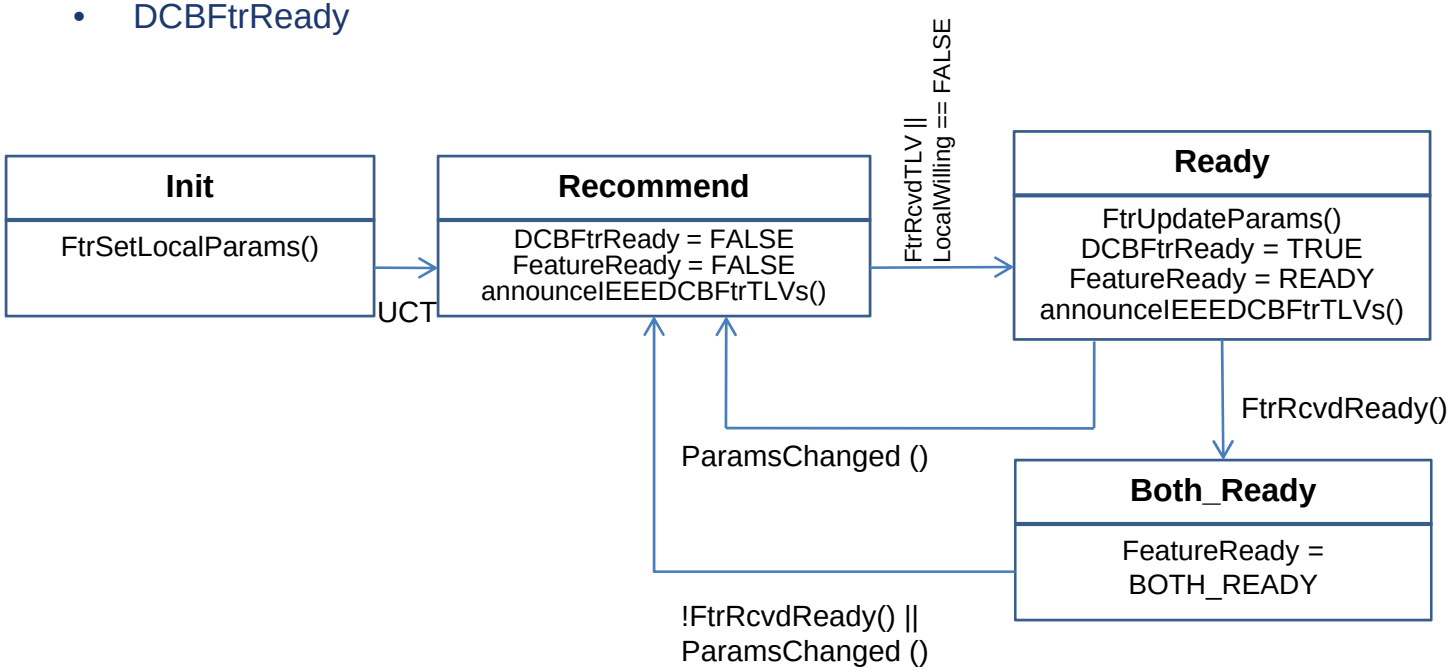
SM for “Willing” Node

- **Functions:**
  - FtrUpdateParams(): FtrCopyRemoteParams ()
  - FtrRcvdReady(): RemoteReady == TRUE
  - ParamsChanged (): Event generated when local parameters administratively changed
  - announceIEEEDCBFtrTLVs(): Update local LLDP MIB to send update to peer
- **Variables:**
  - FeatureReady: Indication to local entity whether feature is ready;
    - values: FALSE/READY/BOTH_READY
- **LLDP variable:**
  - DCBFtrReady



Joint SM

- **Functions:**
  - FtrUpdateParams(): if (LocalWilling == TRUE) FtrCopyRemoteParams(); else {}
  - FtrRcvdReady(): RemoteReady == TRUE
  - ParamsChanged (): Event generated when local parameters administratively changed
  - announceIEEEDCBFtrTLVs(): Update local LLDP MIB to send update to peer
- **Variables:**
  - FeatureReady: Indication to local entity whether feature is ready;
    - values: FALSE/READY/BOTH_READY
- **LLDP variable:**
  - DCBFtrReady



Proposed TLV Change

- **Add "Ready" bit in Configuration TLV**

TLV Type =127	TLV Info String Len=17	802.1 OUI 00-80-C2	802.1 Subtype = 9	Reserved	Willing	Priority Assignment Table	Priority Group Configured Bandwidth Table
7 bits	9 bits	3 octets	1 octet	7 bits	1 bit	4 Octets	8 Octets

TLV Type =127	TLV Info String Len=17	802.1 OUI 00-80-C2	802.1 Subtype = 9	Rsvd	**Ready**	Willing	Priority Assignment Table	Priority Group Configured Bandwidth Table
7 bits	9 bits	3 octets	1 octet	6 bits	**1 bit**	1 bit	4 Octets	8 Octets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