DCBX Exchange Status

Eric Multanen – Intel
DCBX Exchange Status

Applications which have a policy that certain DCB features are configured and operational on the link will want to obtain this information once the two sides have completed the DCBX exchange.

The DCBX Exchange Status has 2 basic values:

1. Pending – a Feature TLV with different information than currently known is expected from the peer

2. Done – the Feature TLV information received from the peer (including no TLV) is final. (Won’t change except for administrative action on the peer.)
When is the DCBX Exchange ‘Done’?

**Local side is Willing**
1. No LLDP has been received yet from peer → Pending
2. LLDP received, but Feature TLV missing → Done
3. Remote Not Willing → Done
4. Remote Willing → Done

**Local Side is Not Willing**
1. No LLDP has been received yet from peer → Pending
2. LLDP received, but Feature TLV missing → Done
3. Remote Not Willing → Done
4. Remote Willing
   a) Local Config ≠ Peer Config → Pending
   b) Local Config == Peer Config → Done
DCBX Exchange Status Variables

**RemoteTLV** – true or false – indicates whether the Feature TLV was present in the most recent LLDP PDU.

**CfgMatch()** – Feature specific function – returns true if the OperParam values (which need to match) match.

**mmCnt** – mismatch count

**mmMaxCnt** – maximum value of the mismatch count

**Willing** – the local Willing value (true or false)

**RWilling** – the remote Willing value (true or false)
DCBX Exchange Status State Machine

BEGIN

RemotePending

mmCnt=0

!RemoteTLV || Rwilling==Willing ||
(Willing && !Rwilling) || CfgMatch()

ExchgDone

mmCnt=0

RemoteTTL Expired

MatchPending

mmCnt++

!Willing && Rwilling &&
!CfgMatch()

!RemoteTLV || Rwilling==Willing ||
CfgMatch() || mmCnt==mmMaxCnt

RemoteTTL Expired

!Willing && Rwilling &&
!CfgMatch()
Thanks!