

DCBX NEXT STEPS

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Goals

- DCBX allows “plug-and-play” for DCB devices
 - Allows to detect legacy vs. enhanced capabilities
 - Allows capability to distribute configuration
- DCBX has the following stated goals
 - Ability to exchange DCB parameters between two endpoints on a link
 - Set local “operational” parameters based on received parameters
 - Detect and if possible resolve conflicting parameters
 - Common protocol for all DCB functionality
- These goals have not changed since original DCBX proposal

What has changed?

- LLDP
 - DCBX proposal was based on prior version of LLDP
 - Prior version of LLDP had no Fast Retransmit mode
 - hence any packet drop can result in large delay in peer receiving a MIB change
 - Current version has improved reliability in LLDP by transitioning to Fast Retransmit mode on each MIB change

Concerns about DCBX

- Some concerns discussed on DCBX calls:
 1. Sequence number and associated retransmissions may not be required.
 2. Why does one need ACK for information from peer.
 3. State machine and TLVs can be minimized/simplified.
 4. Synchronization of enabling of feature.
 5. TX and RX starting simultaneously.

In light of LLDP Changes

- **In absence of LLDP change (to Fast Retransmit)**
 - DCBX had included retransmission in its state machine to improve reliability
- **LLDP is now reliable**
 - DCBX could be simplified
 - This may address #1, #2, #3 in previous slide
- **Further discussion is required on #4 and #5**

Next Steps

- Let's work on resolving these issues with DCBX
 - Simplify DCBX protocol based on LLDP changes
 - Define how features interoperate