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Goals of Protocol

- Discovery of DCB capability in a peer
  - Mechanism to know if the peer device supports a particular feature such as Priority Groups (PG) or Priority-based Flow Control (PFC)
- DCB feature misconfiguration detection
  - Detect misconfiguration of a feature between the peers on a link
- Peer configuration of DCB features
  - Provide basic peer to peer configuration
DCBX Deployment Scenario

Switch Management

Server Management

Conflict alarm

PFC enabled region
DCBX Exchange Overview

- **Exchanged parameters:** Exchanged parameters are sent to the peer
  - Administered parameters
  - Operational parameters
- **Local parameters:** Local parameters are not exchanged in LLDP messages
Uses LLDP for exchange information between link peers
- Adds control protocol above LLDP to ensure synchronization between peers for information
  - Additional mechanism for reliability and synchronization
- Defines protocol to (optionally) provide desired configuration to link peer
DCBX Control and Protocol TLVs

DCBX Control TLV Definition

Type | Length
---|---
Oper_Version | Max_Version
SeqNo
AckNo
Each feature carries its version number, subtype and configurability information.
**DCBX: PG and PFC TLVs**

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<th>PGID_UP2</th>
<th>PGID_UP3</th>
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**Priority Group Parameters Structure**

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**Priority-based Flow Control Parameters Structure**

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Details of proposal


- Includes additional state machine and other details that are not covered in this presentation

- Comments/Questions/Suggestions are welcome
Thank You!