

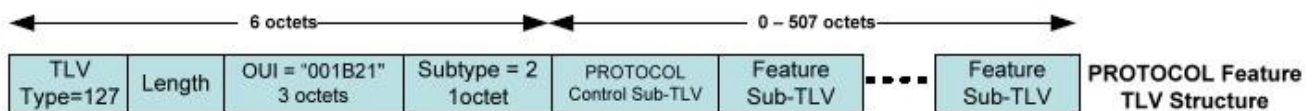
The primary difference between the baseline and IEEE versions of DCBX is the format the frames are transmitted. While baseline DCBX includes one TLV in which all DCBX-pertinent information is sent in the form of sub-TLVs, IEEE DCBX divides each attribute of DCB into a unique TLV, of which the relevant information is stored.

Each version includes certain DCB technologies that the other does not. While baseline DCBX includes a sub-TLV for DCBX Control values, this information is not present in IEEE DCBX frames. IEEE DCBX includes TLVs for ETS Configuration and ETS Recommendation, the ETS Configuration TLV replacing the Priority Group information found in the baseline DCBX TLV. The subtypes for each TLV or sub-TLV are different between the two versions of DCBX.

A side-by-side comparison of the baseline and IEEE versions of DCBX is as follows:

BASELINE DCBX TLV

All DCB information is stored within sub-TLVs of the DCBX TLV, which is formatted as such:



DCBX CONTROL TLV

The DCBX Control TLV includes information regarding the DCBX operating version, sequence numbers reflecting altered local DCB settings, and an acknowledgement number reflecting the most recent sequence number received from the peer device.

Baseline:

Type = 1	Length = 10	Operating version	Max version	Sequence Number	Acknowledgement Number
7 bits	9 bits	1 octet	1 octet	4 octets	4 octets

IEEE:

[Control TLV not included in IEEE DCBX frames]

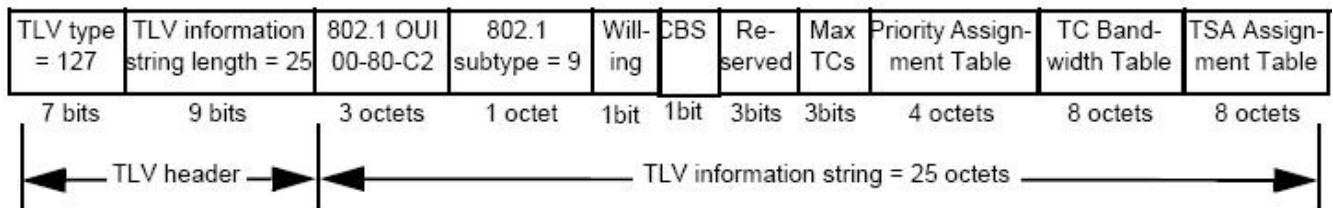
ETS CONFIGURATION/PRIORITY GROUP TLV

The ETS Configuration TLV (or Priority Group sub-TLV in baseline versions) reports configured settings for traffic classes including its priority mapping, percentage of allocated bandwidth, and, in IEEE versions, a scheduling algorithm for bandwidth management.

Baseline (Priority Group TLV):

Type = 2	Length = 17	Operating Version	Max Version	En.	W.	Err.	Re-served	Subtype	Priority Group to Priority	Priority Group Percent Allocation	Max Num. of TCs
7 bits	9 bits	1 octet	1 octet	1 bit	1 bit	1 bit	5 bits	1 octet	4 octets	8 octets	1 octet

IEEE (ETS Configuration TLV):



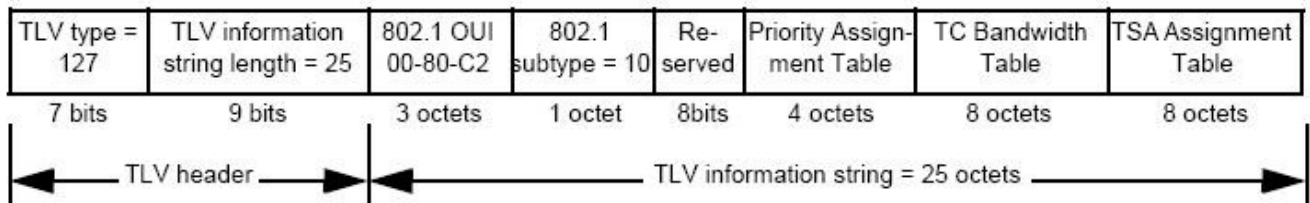
ETS RECOMMENDATION TLV

The ETS Recommendation TLV outlines the ETS settings for which a local device desires its peer to be configured. Like the ETS Configuration TLV, information transmitted includes priority mapping, percentage of bandwidth for each traffic class, and a transmission selection algorithm assignment table for each traffic class.

Baseline:

[ETS Recommendation TLV not included in baseline DCBX frames]

IEEE:



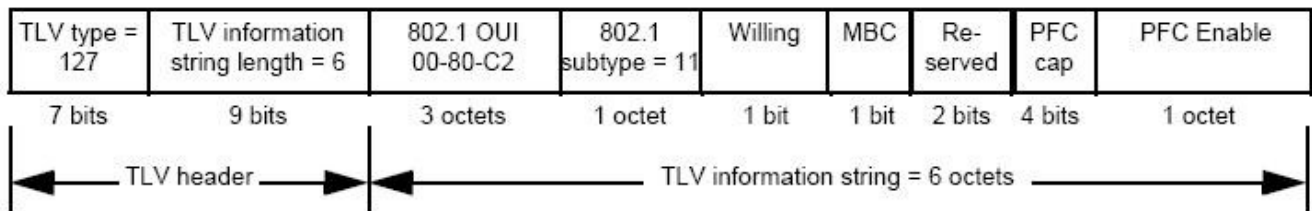
PRIORITY-BASED FLOW CONTROL TLV

The Priority-Based Flow Control TLV reports which priorities are enabled for flow control as well as the maximum number of priorities on which PFC may be simultaneously enabled.

Baseline:

Type = 3	Length = 6	Operating Version	Max Version	En.	W.	Err.	Re-served	Subtype	PFC Enabled Table	Max TCs w/ PFC Support
7 bits	9 bits	1 octet	1 octet	1 bit	1 bit	1 bit	5 bits	1 octet	1 octet	1 octet

IEEE:



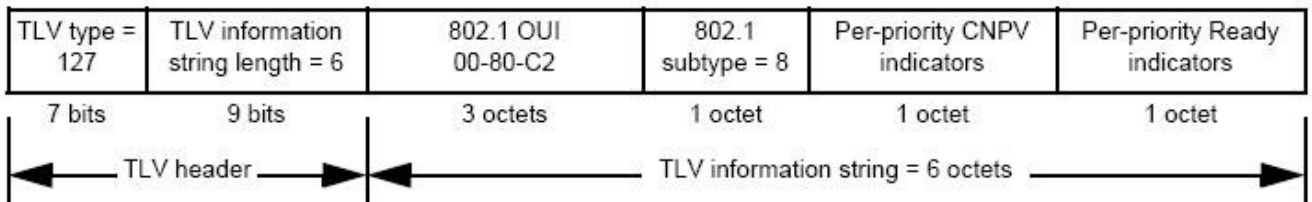
CONGESTION NOTIFICATION TLV

The Congestion Notification TLV includes the relevant per-priority CNPV indicators and per-priority Ready indicators.

Baseline:

[Congestion Notification TLV not included in baseline DCBX frames]

IEEE:



APPLICATION TLV

The Application TLV indicates which protocols are implemented as well as their associated priority. Examples of such applications include FCoE and iSCSI. Each application consists of its own table of information, as shown.

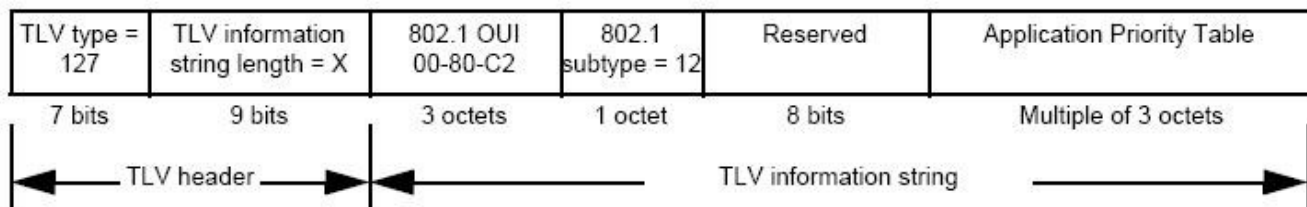
Baseline:

Type = 4	Length = X	Operating Version	Max Version	En.	W.	Err.	Reserved	Sub_Type = 0	Application Table
7 bits	9 bits	1 octet	1 octet	1 bit	1 bit	1 bit	5 bits	1 octet	Multiple of 6 octets

Application table:

Application Protocol ID	Upper OUI	Sel. field	Lower OUI	User Priority Map
2 octets	6 bits	2 bits	2 octets	1 octet

IEEE:



Application table:

Octets:	1		2		3			
	Priority	Reserved	Sel	Protocol ID				
Bits:	23	21	20	19	18	16	15	0