# 在100 PDU错误消息的DCX没有ACK

## 目录



## 简介

本文描述此错误消息和如何识别根本原因："%ETHPORT-2-IF_DOWN_ERROR_DISABLED ：接口Ethernet115/1/17发生故障(禁用的错误。辩解在100 PDU的CX没有ACK)”。

## 先决条件

### 要求

Cisco 建议您了解以下主题：

- 连结CLI
- 在以太网(FCoE)协议的光纤信道

### 使用的组件

本文档中的信息根据所有连结5000和5500系列交换机平台。

本文档中的信息都是基于特定实验室环境中的设备编写的。本文档中使用的所有设备最初均采用原始（默认）配置。如果您使用的是真实网络，请确保您已经了解所有命令的潜在影响。

## 问题

数据中心桥接功能交换(DCBX)类型长度值(TLV)在交换在交换机和融合网络适配器的链路层发现协议(LLDP)帧内包(CNA)之间。一这样控制子TLV使用确认(ACK)，顺序根据。例如，交换机发送与SeqNo 1和AckNo的控制子TLV 2。主机是推测的对反面这，并且发送有控制子TLV的一LLDP帧与SeqNo 2欲了解更详细的信息，并且AckNo 1.参考此条款的数据包捕获部分。

交换机期待从主机的此交换每30秒。如果交换机为100个协议数据单元(PDU)看不到此交换，是3000秒或50分钟，交换机禁用与此错误：

```
N5k %ETHPORT-2-IF_DOWN_ERROR_DISABLED: Interface Ethernet115/1/17 is down
(Error disabled. Reason:DCX-No ACK in 100 PDUs)
N5k %ETHPORT-2-IF_DOWN_ERROR_DISABLED: Interface Ethernet116/1/16 is down
(Error disabled. Reason:DCX-No ACK in 100 PDUs)
```

## 解决方案

如果禁用LLDP，您能解决此问题。然而，如果运行FCoE， LLDP要求，因为虚拟光纤通道端口不出现没有它。为了禁用LLDP，请输入这些命令：

```
N5k(config)# interface E1/1
N5k(config-if)# no lldp receive
N5k(config-if)# no lldp send
```

这是帮助缩小根本原因的一些on命令交换机。

```
N5k# show lldp interface ethernet 1/22
Interface Information:
 Enable (tx/rx/dcbx): Y/Y/Y    Port Mac address: 00:05:73:ab:29:bd

Peer's LLDP TLVs:
Type Length Value
---- ------ -----
001  007    040000c9 9d2372
002  007    030000c9 9d2372
003  002    0078
006  045    456d756c 6578204f 6e65436f 6e6e6563 74203130 4762204d 756c7469
           2066756e 6374696f 6e204164 61707465 72
007  004    00800080
127  055    001b2102 020a0000 00000002 00000001 04110000 c0000001 00003232
           00000000 00000206 060000c0 00080808 0a0000c0 00890600 1b2108
000  000

N5k# show lldp dcbx interface ethernet 1/22

Local DCBXP Control information:
Operation version: 00  Max version: 00  Seq no: 1  Ack no: 2  <<---Our sequence
# and Ack #
Type/
Subtype    Version    En/Will/Adv Config
003/000     000        Y/N/Y      0808
004/000     000        Y/N/Y      8906001b21 08
002/000     000        Y/N/Y      0001000032 32000000 00000002

Peer's DCBXP Control information:
Operation version: 00  Max version: 00  Seq no: 2  Ack no: 1  <<---Peer sequence #
and Ack # should be reversed.
Type/      Max/Oper
Subtype    Version    En/Will/Err Config
002/000     000/000    Y/Y/N      0001000032 32000000 00000002
003/000     000/000    Y/Y/N      0808
004/000     000/000    Y/Y/N      8906001b21 08
```

此问题在大多数情况下的根本原因是CAN/server行为不端或一不正确固件/驱动程序在CNA。A命令为连结5000系列交换机平台介绍在版本5.2(1)N1(1)及以后为了从此防错状态自动地恢复。

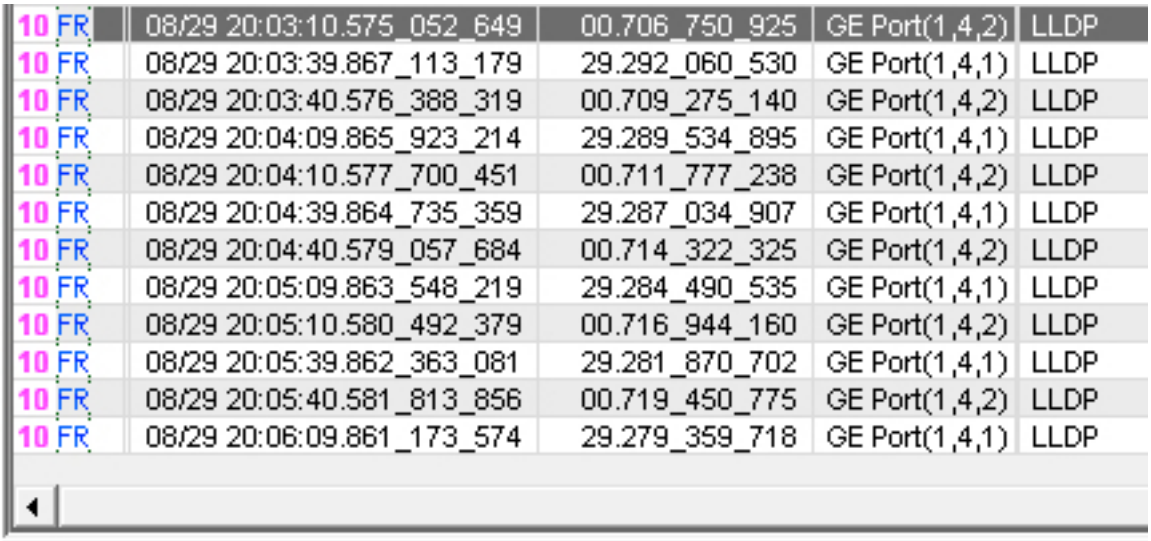
```
N5k(config)# errdisable recovery cause dcbx-no-ack
```

**注意**：Cisco Bug ID CSCtq30118 Enh ：归档在100 PDU的DCX没有ACK为了提高功能为了

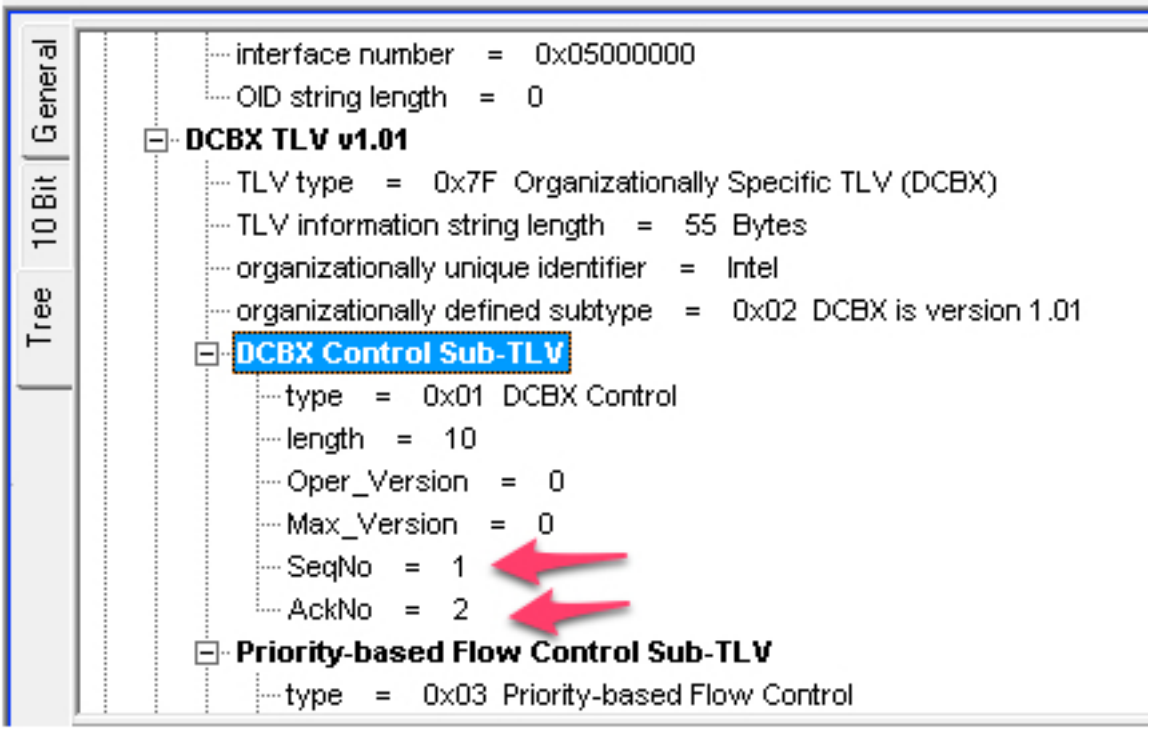
排除故障此问题。此修正也允许客户启用从此情况的恢复。

# 数据包视图

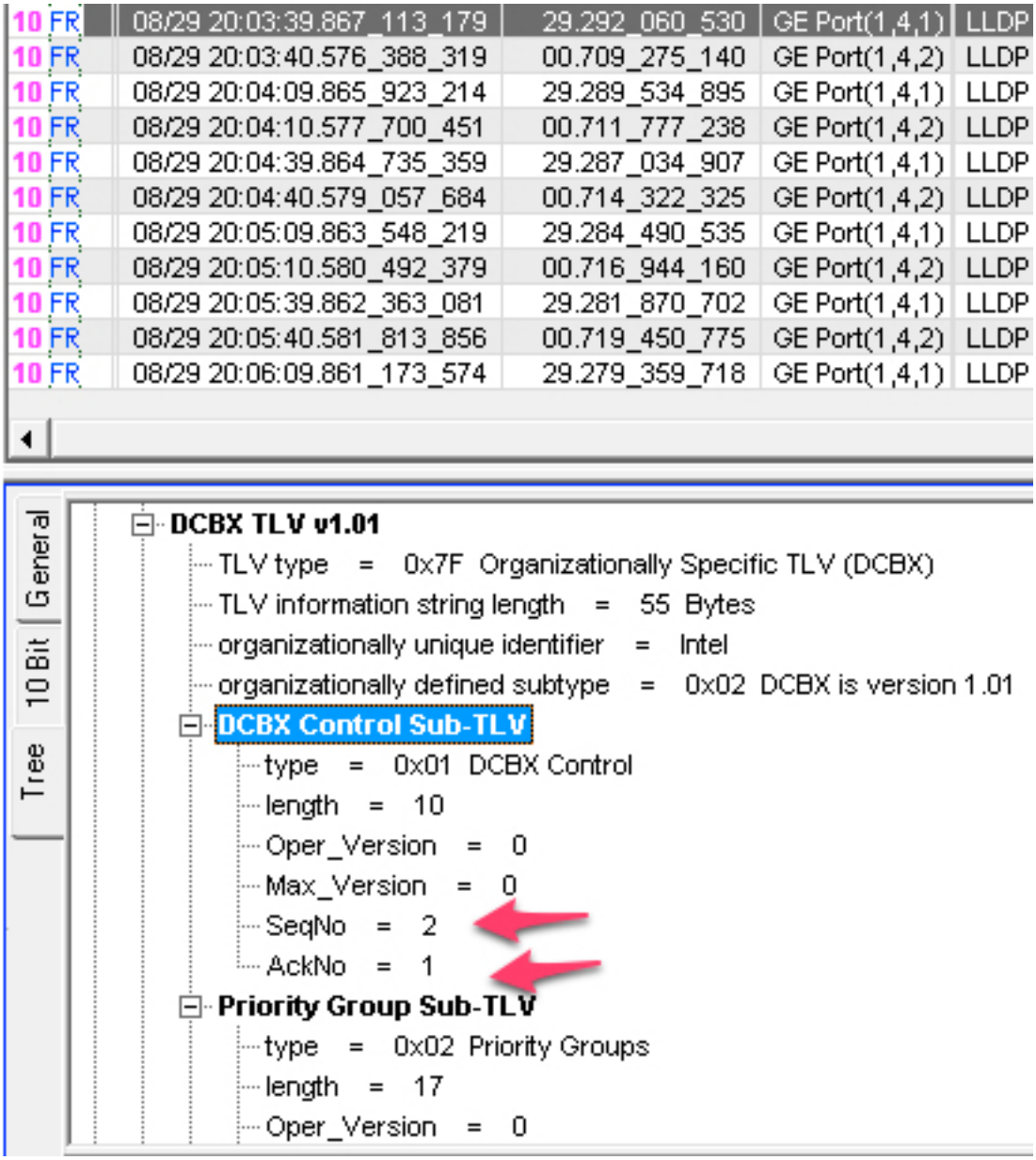
**连结5000发送的LLDP帧DCBX控制子TLV的轴向数据包捕获SeqNo 1和AckNo 2**



| | | | | |
|---|---|---|---|---|
| 10 FR | 08/29 20:03:10.575_052_649 | 00.706_750_925 | GE Port(1,4,2) | LLDP |
| 10 FR | 08/29 20:03:39.867_113_179 | 29.292_060_530 | GE Port(1,4,1) | LLDP |
| 10 FR | 08/29 20:03:40.576_388_319 | 00.709_275_140 | GE Port(1,4,2) | LLDP |
| 10 FR | 08/29 20:04:09.865_923_214 | 29.289_534_895 | GE Port(1,4,1) | LLDP |
| 10 FR | 08/29 20:04:10.577_700_451 | 00.711_777_238 | GE Port(1,4,2) | LLDP |
| 10 FR | 08/29 20:04:39.864_735_359 | 29.287_034_907 | GE Port(1,4,1) | LLDP |
| 10 FR | 08/29 20:04:40.579_057_684 | 00.714_322_325 | GE Port(1,4,2) | LLDP |
| 10 FR | 08/29 20:05:09.863_548_219 | 29.284_490_535 | GE Port(1,4,1) | LLDP |
| 10 FR | 08/29 20:05:10.580_492_379 | 00.716_944_160 | GE Port(1,4,2) | LLDP |
| 10 FR | 08/29 20:05:39.862_363_081 | 29.281_870_702 | GE Port(1,4,1) | LLDP |
| 10 FR | 08/29 20:05:40.581_813_856 | 00.719_450_775 | GE Port(1,4,2) | LLDP |
| 10 FR | 08/29 20:06:09.861_173_574 | 29.279_359_718 | GE Port(1,4,1) | LLDP |

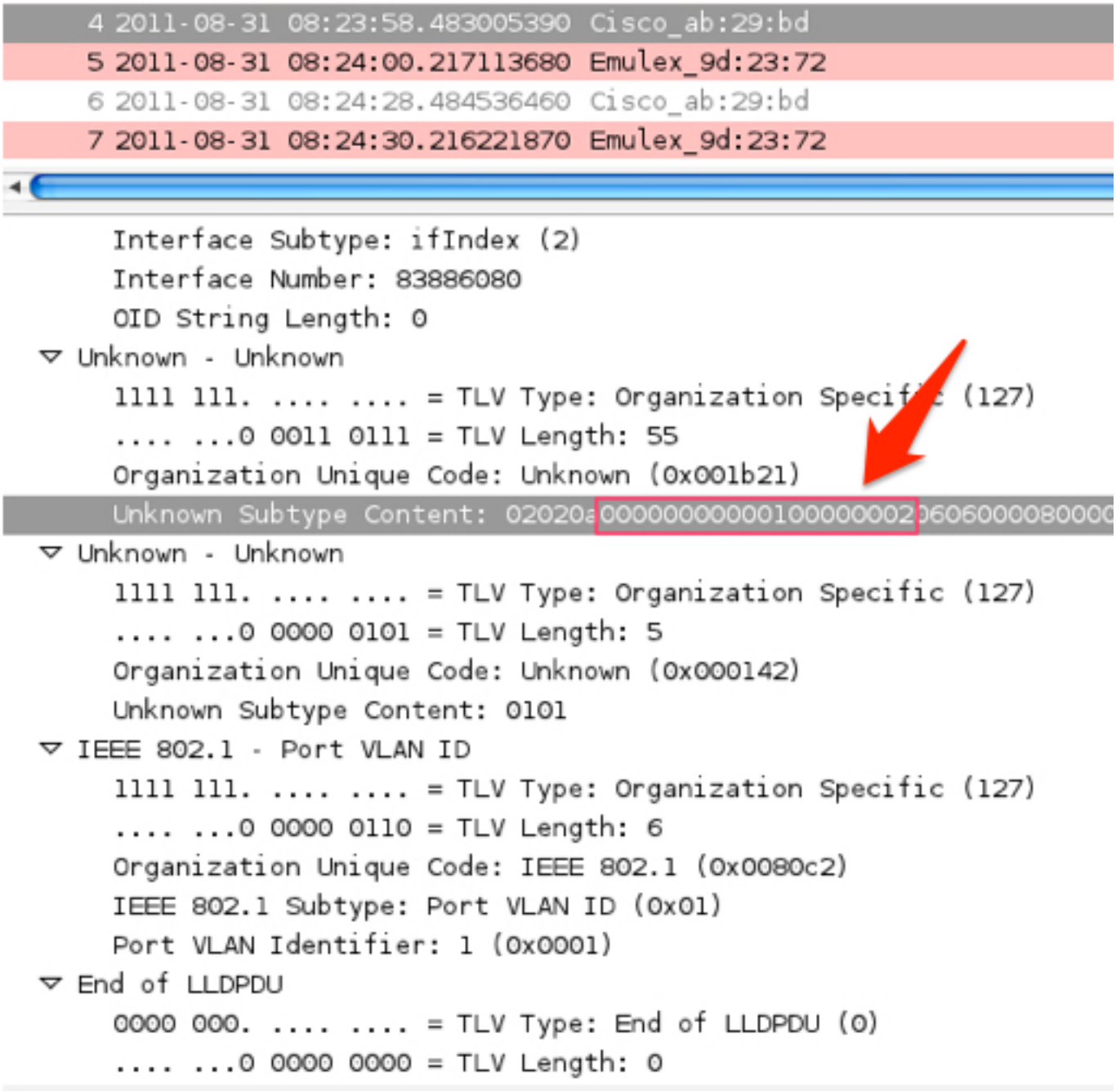



**发送LLDP帧DCBX控制子TLV SeqNo 2和AckNo 1的CNA的轴向数据包捕获**

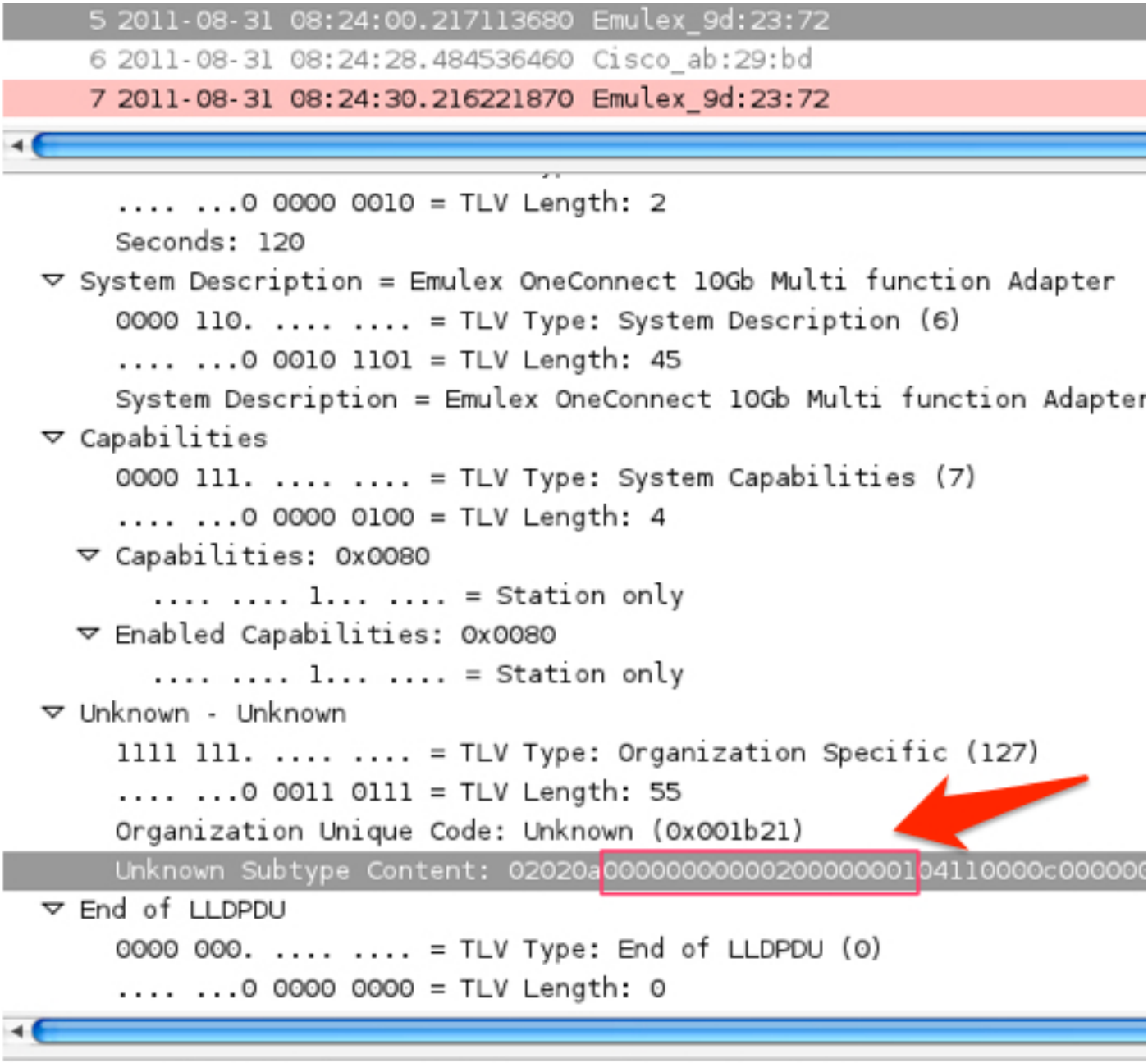



Wireshark不解码LLDP子TLV。他们显示作为一“未知子类型”在LLDP报头。请使用从in命令的序号前面部分为了找出他们在Wireshark trace。这是从交换端口分析器(SPAN)会话的跟踪。

**连结5000发送的LLDP帧DCBX控制子TLV Wireshark捕获SeqNo 1和AckNo 2**




**发送LLDP帧DCBX控制子TLV SeqNo 2和AckNo 1的CNA Wireshark捕获**




或者，请在连结5000系列交换机平台请使用内置的嗅探器为了发现LLDP帧。请使用源MAC地址，显示过滤器。

**发送LLDP帧DCBX控制子TLV SeqNo 2和AckNo 1.的CNA Ethanalyzer捕获。**

```
N5k# ethanalyzer local interface inbound-hi det display-filter eth.src==
00:00:c9:9d:23:72
Capturing on eth4
Frame 1215 (152 bytes on wire, 152 bytes captured)
   Arrival Time: Aug 31, 2011 09:06:25.549049000
   [Time delta from previous captured frame: 0.021367000 seconds]
   [Time delta from previous displayed frame: 1314795985.549049000 seconds]
   [Time since reference or first frame: 1314795985.549049000 seconds]
   Frame Number: 1215
   Frame Length: 152 bytes
   Capture Length: 152 bytes
   [Frame is marked: False]
   [Protocols in frame: eth:vlan:lldp]
Ethernet II, Src: 00:00:c9:9d:23:72 (00:00:c9:9d:23:72), Dst: 01:80:c2:00:00:0e
(01:80:c2:00:00:0e)
```

```
   Destination: 01:80:c2:00:00:0e (01:80:c2:00:00:0e)
       Address: 01:80:c2:00:00:0e (01:80:c2:00:00:0e)
       .... ...1 .... .... .... .... = IG bit: Group address (multicast/broadcast)
       .... ..0. .... .... .... .... = LG bit: Globally unique address (factory default)
   Source: 00:00:c9:9d:23:72 (00:00:c9:9d:23:72)
       Address: 00:00:c9:9d:23:72 (00:00:c9:9d:23:72)
       .... ...0 .... .... .... .... = IG bit: Individual address (unicast)
       .... ..0. .... .... .... .... = LG bit: Globally unique address (factory default)
   Type: 802.1Q Virtual LAN (0x8100)
802.1Q Virtual LAN
   000. .... .... .... = Priority: 0
   ...0 .... .... .... = CFI: 0
   .... 0000 0001 0100 = ID: 20
   Type: 802.1 Link Layer Discovery Protocol (LLDP) (0x88cc)
Link Layer Discovery Protocol
   Chassis Subtype = MAC address
       0000 001. .... .... = TLV Type: Chassis Id (1)
       .... ...0 0000 0111 = TLV Length: 7
       Chassis Id Subtype: MAC address (4)
       Chassis Id: 00:00:c9:9d:23:72 (00:00:c9:9d:23:72)
   Port Subtype = MAC address
       0000 010. .... .... = TLV Type: Port Id (2)
       .... ...0 0000 0111 = TLV Length: 7
       Port Id Subtype: MAC address (3)
       Port Id: 00:00:c9:9d:23:72 (00:00:c9:9d:23:72)
   Time To Live = 120 sec
       0000 011. .... .... = TLV Type: Time to Live (3)
       .... ...0 0000 0010 = TLV Length: 2
       Seconds: 120
   System Description = Emulex OneConnect 10Gb Multi function Adapter
       0000 110. .... .... = TLV Type: System Description (6)
       .... ...0 0010 1101 = TLV Length: 45
       System Description = Emulex OneConnect 10Gb Multi function Adapter
   Capabilities
       0000 111. .... .... = TLV Type: System Capabilities (7)
       .... ...0 0000 0100 = TLV Length: 4
       Capabilities: 0x0080
           .... .... 1... .... = Station only
       Enabled Capabilities: 0x0080
           .... .... 1... .... = Station only
   Unknown - Unknown
       1111 111. .... .... = TLV Type: Organization Specific (127)
       .... ...0 0011 0111 = TLV Length: 55
       Organization Unique Code: Unknown (0x001b21)
       Unknown Subtype Content: 02020A00000000000200000001 04110000C0000001000032... <<<<<
   End of LLDPDU
       0000 000. .... .... = TLV Type: End of LLDPDU (0)
       .... ...0 0000 0000 = TLV Length: 0

N5k# 1 packets captured
```