Issues-1

PDs should be given sufficient time for boot-up. There is no indication from the PD that the boot-up is complete and DLL engine is up and running.

Proposed Resolution

Section 30.9.2

Define a new MIB variable in oPD managed object class under DLL PD Power Classification Basic Package

aPDDLLReady

ATTRIBUTE
APPROPRIATE SYNTAX:
A BOOLEAN value:

FALSE Local system has not completed initialization of the DLL engine and is not ready to receive/transmit LLDPDU containing DTE power via MDI classification TLV.

TRUE Local system has initialized the DLL engine and is ready to receive/transmit LLDPDU containing DTE power via MDI classification TLV.

BEHAVIOUR DEFINED AS:

A GET operation returns the initialization status the PD DLL engine

Section 33.6.6.2

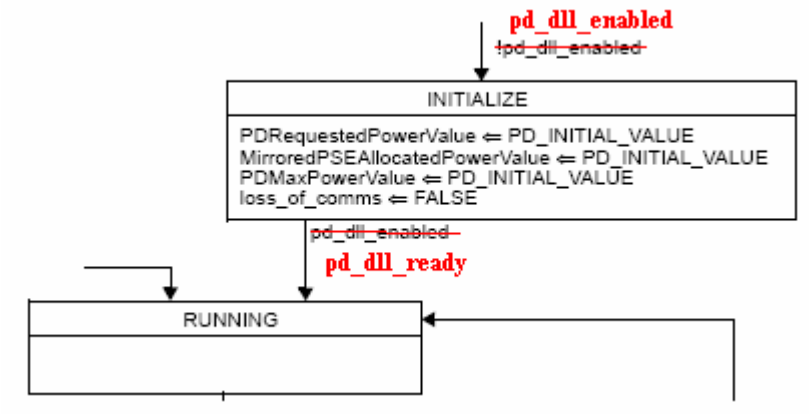
Define state variable:
pd_dll_ready

This variable is updated by the PD system software. This variable maps into the aPDDLLReady attribute (reference as above)

Table 33-29
Add a row item under oPD managed object class

pd_dll_ready state variable that maps into the local MIB variable aPDDLLReady.

Figure 33-30



Issues-2

Type-1 PSEs should be given sufficient time for boot-up. We need to use the 10 second timer only for type-2 PSE for the purpose of mutual identification.
There needs to be an indication from the PSE that the boot-up is complete and DLL engine is up and running.

Proposed Resolution

Section 30.9.1

Define a new MIB variable in oPSE managed object class under DLL PSE Power Classification Basic Package

aPSEDLLReady

ATTRIBUTE
APPROPRIATE SYNTAX:
A BOOLEAN value:

FALSE Local system has not completed initialization of the DLL engine and is not ready to receive/transmit LLDPDU containing DTE power via MDI classification TLV.

TRUE Local system has initialized the DLL engine and is ready to receive/transmit LLDPDU containing DTE power via MDI classification TLV.

BEHAVIOUR DEFINED AS:

A GET operation returns the initialization status the PSE DLL engine

Section 33.6.6.2

Define state variable:
pse_dll_ready

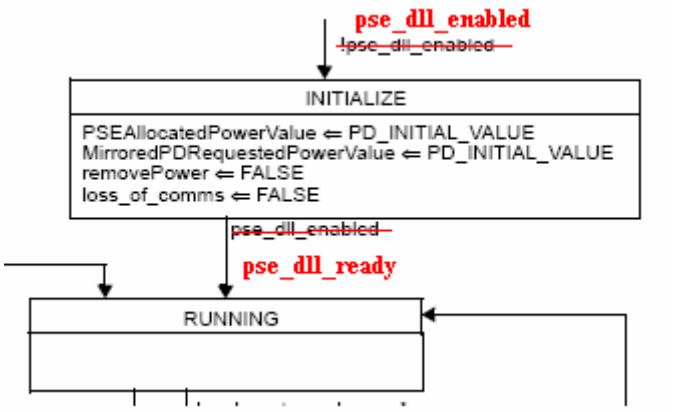
This variable is updated by the PSE system software. This variable maps into the aPSEDLLReady attribute (reference as above)

Table 33-29

Add a row item under oPSE managed object class

pse_dll_ready state variable that maps into the local MIB variable aPSEDLLReady.

Figure 33-29



Section 33.6.5

1st Paragraph in the Draft

An LLDPDU containing a DTE Power via MDI classification TLV shall be sent within 10 seconds of Data Link Layer classification being enabled in a PSE as indicated by the variable pse_dll_enabled (33.2.4.4, 33.6.6.2).

Change to:

A type-2 PSE shall send an LLDPDU containing a DTE Power via MDI classification TLV within 10 seconds of Data Link Layer classification being enabled in the PSE as indicated by the variable pse_dll_enabled (33.2.4.4, 33.6.6.2).

Add a new paragraph

A type-1 PSE shall send an LLDPDU containing a DTE power via MDI classification TLV when the PSE DLL engine is ready as indicated by the variable pse_dll_ready (reference).

2nd Paragraph in the Draft

An LLDPDU containing a DTE Power via MDI classification TLV shall be sent within 5 minutes of Data Link Layer classification being enabled in a PD as indicated by the variable pd_dll_enabled (33.3.3.3, 33.6.6.2) if the pse_power_type (33.3.3.3) variable is set to 2 and the power draw exceeds 12.95 W.

Change to:

All type-1 PDs that implement DLL and type-2 PDs shall set the state variable pd_dll_ready within 5 minutes of Data Link Layer classification being enabled in a PD as indicated by the variable pd_dll_enabled (33.3.3.3, 33.6.6.2).

3rd Paragraph in the Draft

Under normal operation, when the PSE MIB variables aDLLPSEAllocatedPowerValue and aReceivedDLLPDRequestedPowerValue are equal, an LLDPDU containing a DTE Power via MDI classification TLV with an updated value for the "PSE allocated power value" field shall be sent within 10 seconds of receipt of an LLDPDU containing a DTE Power via MDI classification TLV where the "PD requested power value" field is different from the previously communicated value.

Change to:

Under normal operation, an LLDPDU containing a DTE Power via MDI classification TLV with an updated value for the "PSE allocated power value" field shall be sent within 10 seconds of receipt of an LLDPDU containing a DTE Power via MDI classification TLV where the "PD requested power value" field is different from the previously communicated value.

4rd Paragraph in the Draft

Under normal operation, an LLDPDU containing a DTE Power via MDI classification TLV with an updated value for the "PD requested power value" field shall be sent within 10 seconds of receipt of an LLDPDU containing a DTE Power via MDI classification TLV where the "PSE allocated power value" field is different from the previously communicated value.

Do nothing.