

DLL Autoclass v100

Info (not part of baseline)

The DLL Autoclass procedure is currently not described in the draft. See [yesebootd_3_0915_v120.pdf](#) for how Autoclass DLL works.

33.5.3.3 Variables

Add the following variables:

do_autoclass

A control variable used in the PD to trigger a new Autoclass measurement request to the PSE.

Values:

FALSE: The PD does not want to trigger a new Autoclass measurement

TRUE: The PD wants to trigger a new Autoclass measurement

PDAutoclassRequest

A boolean that indicates if the PD requests Autoclass in the PD. This variable is mapped from aLldpXdot3LocPDAutoclassRequest (30.12.2.1.18n).

Values:

FALSE: The PD does not request an Autoclass measurement to be performed

TRUE: The PD requests an Autoclass measurement to be performed

MirroredPDAutoclassRequest

The copy of the PD Autoclass request field in the Power via MDI TLV that the PSE receives from the remote system. This variable is mapped from the aLldpXdot3RemPDAutoclassRequest (30.12.3.1.18n) attribute.

Values:

FALSE: The PD does not request an Autoclass measurement to be performed

TRUE: The PD requests an Autoclass measurement to be performed

pd_full_power

A boolean control variable in used the PD Autoclass control state that indicates of the PD should be in a mode where it consumes the amount of power it wants to be budgeted for.

Values:

FALSE: No requirement on PD power consumption

TRUE: The PD consumes the maximum amount of power it needs

PSEAutoclassSupport

A boolean control variable that indicates if the PSE supports Autoclass in the PSE. This variable is mapped from the aLldpXdot3LocPSEAutoclassSupport (30.12.2.1.18l) attribute.

Values:

FALSE: The PSE does not support Autoclass

TRUE: The PSE supports Autoclass

MirroredPSEAutoclassSupport

The copy of the PSE Autoclass support field in the Power via MDI TLV that the PSE receives from the remote system. This variable is mapped from the aLldpXdot3RemPSEAutoclassSupport (30.12.3.1.18l) attribute.

Values:

FALSE: The PSE does not support Autoclass

TRUE: The PSE supports Autoclass

PSEAutoclassCompleted

A boolean that indicates the PSE has completed the PD Autoclass request. This variable is mapped from the aLldpXdot3LocPSEAutoclassCompleted (30.12.2.1.18m) attribute.

Values:

FALSE: The PSE has not completed the Autoclass measurement, or it is not performing a Autoclass measurement

TRUE: The PSE has completed the Autoclass measurement

MirroredPSEAutoclassCompleted

The copy of the PSE Autoclass completed field in the Power via MDI TLV that the PD receives from the remote system. This variable is mapped from the aLldpXdot3RemPSEAutoclassCompleted (30.12.3.1.18m) attribute.

Values:

FALSE: The PSE is not ready with the Autoclass measurement

TRUE: The PSE has completed the Autoclass measurement

Create a new subsection title “Timers” after 33.5.3.3 as follows:

33.5.3.3a Timers

tautoclass_timeout

A timer used to detect the timeout of a pending Autoclass request by the PD. The value of this timer may be set to any value greater than 10 seconds.

33.5.3.5 State diagrams

Add the following two figures (redrawn in Frame) after Figure 33–49:

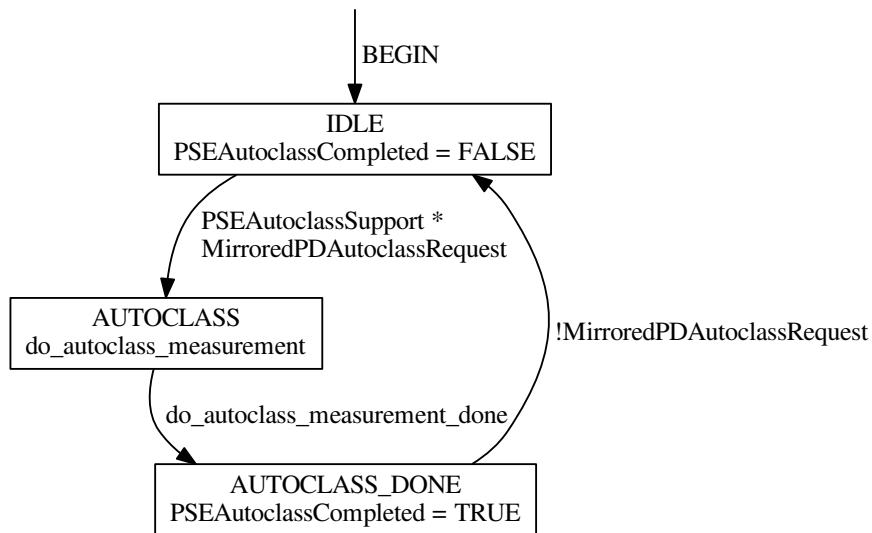


Figure 33–49a — PSE Autoclass control state diagram

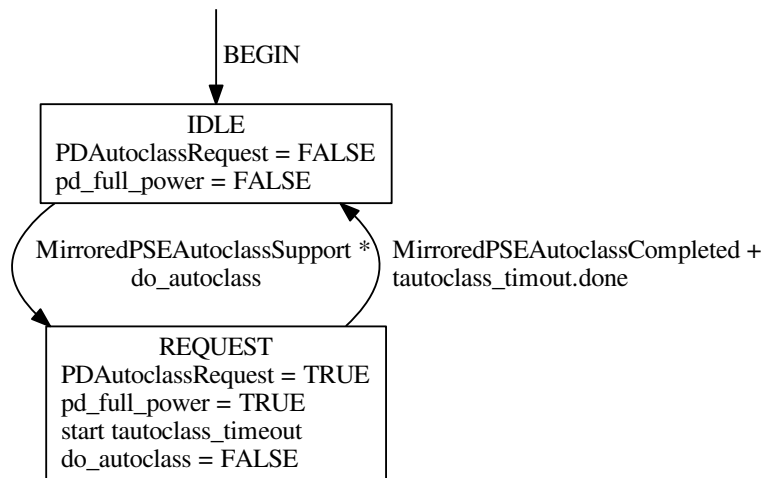


Figure 33–49b — PD Autoclass control state diagram

33.5.3.4 Functions

Add the following rows to Table 33–41 “Attribute to state diagram variable cross-reference”:

Entity	Attribute	Mapping	State diagram variable
oLldpXdot3LocSystemsGroup Object Class			
PSE	aLldpXdot3LocPSEAutoclassSupport	←	PSEAutoclassSupport
	aLldpXdot3LocPSEAutoclassCompleted	←	PSEAutoclassCompleted
PD	aLldpXdot3LocPDAutoclassRequest	←	PDAutoclassRequest
oLldpXdot3RemSystemsGroup Object Class			
PSE	aLldpXdot3RemPSEAutoclassSupport	⇒	MirroredPSEAutoclassSupport
	aLldpXdot3RemPSEAutoclassCompleted	⇒	MirroredPSEAutoclassCompleted
PD	aLldpXdot3RemPDAutoclassRequest	⇒	MirroredPDAutoclassRequest

33.5.5 Autoclass

Remove Table 33–42 and insert the following text:

A PSE can indicate it supports an Autoclass request by means of the aLldpXdot3LocPSEAutoclassSupport (30.12.2.1.18l) attribute in the oLldpXdot3LocSystemsGroup object class. This property appears to the PD as a change to aLldpXdot3RemPSEAutoclassSupport (30.12.3.1.18l) attribute in the oLldpXdot3RemSystemsGroup object class.

A PD connected to a PSE that supports Autoclass, can initiate an Autoclass request, to optimize the allocated power budget, through the aLldpXdot3LocPDAutoclassRequest (30.12.2.1.18n) attribute in the oLldpXdot3LocSystemsGroup object class. This request will appear to the PSE as a change in the aLldpXdot3RemPDAutoclassRequest (30.12.3.1.18n) attribute in the oLldpXdot3RemSystemsGroup object class. When the PD sends this request, it needs to be in a state where it consumes the amount of power that will from that moment onward be its maximum consumption.

When the PSE receives the request for Autoclass, it shall measure the power consumption per the requirements in 33.2.7.3. After this measurement has been completed, the PSE may update the PSEAllocatedPowerValue and follow the procedure in 33.5.4.1. The PSE also communicates the completion of the Autoclass procedure by means of the aLldpXdot3LocPSEAutoclassCompleted (30.12.2.1.18m) attribute in the oLldpXdot3LocSystemsGroup object class. This will appear to the PD as a change in the aLldpXdot3RemPSEAutoclassCompleted (30.12.3.1.18m) attribute in the oLldpXdot3LocSystemsGroup object class.

A PD that receives the indication that Autoclass is completed through the MirroredPSEAutoclassCompleted then resets the PDAutoclassRequest variable, thereby completing the procedure.