

CIM Joint Issues - CIM Issues #5312

Change associations for meter UsagePoint to make it more like Measurements

02/09/2022 11:03 AM - Tom Berry

Status: Open	
Priority: Normal	
Target version:	
Solution Version:	Clause:
Breaking Change:	Sub-Clause:
Breaking Change Description:	Paragraph:
CIM Impacted Groups: WG13, WG14	Table:
Requestor: Tom Berry	Origination Date: 02/09/2022
Standard(s): IEC 61968	Origination ID:
Version:	Originally Assigned To:
Description	
The underlying use case is to make it easier to run analyses that combine meter readings with network models	
One metering device can provide energy, RMS and many other variables for single point in the network, or for containers like a substation.	
The protocol could be IEC 61850 or COSEM or something else	
There are two choices for mapping these variables	
1. Via Measurement: Equipment and Terminal are explicitly defined	
2. Via Metering Usage Point: Terminal is implied by associated Equipment	
This unambiguous for an EnergyConnection = DER	
But it is ambiguous for branch devices e.g. supplying a Campus; or summary metering e.g. for a substation	
Proposal: use same associations as Measurement	
Deprecate UsagePoint -> Equipment	
Add UsagePoint -> PowerSystemResource	
Add UsagePoint -> ACDCTerminal	
Decision	
As presented and discussed 9-Feb in UCA joint meeting	

History

#1 - 04/20/2022 10:24 AM - Eric Stephan

In a WG13 discussion April 20,2022 (from a WG13 perspective):

Tom McDermott approves of the proposed changes.

Svein Olsen shared this is being addressed in part in the Energy Modeling Requirements subgroup. He also shared: UsagePoint is already an overloaded term and it would be better to create another class.

#2 - 04/27/2022 08:02 AM - Tom Berry

- File *CIM_ElectricalConnectionPointV3.pptx* added

Attached presentation has some more information

Slide 6 - Can/should UsagePoint represent a Point of Connection? IEV definition

Slide 7 - from David Haynes UsagePoint – some history

Slide 8 - from Pat Brown UsagePoint – the attributes imply it represents several roles

Slide 9 - from Pat Brown GMDM PointOfCommonCoupling

TB: Looks like a UsagePoint that emphasizes operational monitoring and control aspects

#3 - 05/11/2022 09:25 AM - Eric Stephan

- Status changed from New to Open

#4 - 05/11/2022 11:08 AM - Eric Stephan

- Breaking Change deleted (No)

#5 - 05/16/2022 06:56 AM - Tom Berry

- File *CIM_ElectricalConnectionPointV4.pptx* added

Presentation updated following discussion in join WG13, WG14, WG16 UCA meeting 11-May-2022
The decision was that WG14 need to review the proposal which means planning sufficient meeting time.

Slides 2 and 3 are a summary of the issue Scope and Proposal for planning purposes
Slide 2 has a list of the related topics that were mentioned but I think should be considered separately later

Added slides 4-7 to give more background on the requirement

#6 - 09/21/2022 02:28 AM - Tom Berry

Discussed 19-Sep-2022 UCA WG13/WG14/WG16 CIM Model Managers – Joint UML Issues Session

A lot of the discussion was related to understanding the purpose and applications of UsagePoint.

Proposal summary: use similar associations for UsagePoint as for Measurement

#1: Add optional association [0..1] to Terminal

#2: Make association with Equipment more general Replace UsagePoint -> Equipment with UsagePoint -> PowerSystemResource

#3 Improve descriptive text of UsagePoint and refer to IEC 60050 (IEV) definitions <https://www.electropedia.org/>

decisions

#1 agreed

#2 agreed

#3 agreed in principle - Tom Berry to provide a draft

Files

CIM_ElectricalConnectionPointV2.pptx	272 KB	02/09/2022	Tom Berry
CIM_ElectricalConnectionPointV3.pptx	281 KB	04/27/2022	Tom Berry
CIM_ElectricalConnectionPointV4.pptx	431 KB	05/16/2022	Tom Berry