

WG14 Issues - CIM Issues #6284

Need to refine modeling of special need information

03/07/2023 03:28 PM - Henry Dotson

Status:	Open	
Priority:	Normal	
Target version:		
Author/Contact Info:	Henry Dotson / hdotson@mandlasolutions.com	Standard(s):
Base Release:	CIM 101	Version:
Solution to be Applied To:	CIM 101	Clause:
Solution Version:	Edition 4	Sub-Clause:
Solution Applied By:		Paragraph:
Completion Date:		Table:
CIM Keywords:	61968-Common, 61968-Customers, 61968-Metering	Originally Closed in Version:
Breaking Change:	Yes	Origination Date:
Breaking Change Description:	The refactored classes are used in WG14 Part 3, 6, 8, and 9 profiles.	Origination ID:
CIM Impacted Groups:	WG14	Originally Assigned To:
Requestor:	Henry Dotson	

Description

CIM users require information defining the need for electric service. Specifying the need for electric service is required from both the customer and the service provider perspectives.

The specification of need from the customer perspective is binary, i.e. critical or non-critical. To avoid non-compliance with privacy laws, the reason why the customer indicates the need for service is critical **SHOULD NOT** be captured, only that the need is critical. Critical from a customer perspective indicates the service should be maintained for the customer if at all possible. A common use case is the service is required for the operation of life-sustaining medical equipment. Non-critical from a customer perspective indicates a loss of service will not have catastrophic or life-threatening consequences.

The specification of need from the service provider perspective is binary (critical or non-critical), prioritized, and topological. Critical from a service provider perspective indicates priority must be taken into consideration to determine criticality before service is discontinued or resumed. Non-critical from a service provider perspective indicates service may be discontinued without considering the consequences in the decision making process. Specifying priority of need indicates relative criticality. Each service provider establishes the priority of need amongst its customers based on business rules and government regulations. Therefore priority of need must be modeled in a way that allows service providers to specify how they prioritize criticality. Specifying topological need of service indicates where in the topology of the physical network service especially needs to be present for the customer in order to meet customer need.

Special need information is currently captured in the CIM as a String datatype attribute named specialNeed in the Person, Customer, and MarketPerson classes. Service priority information is currently captured in the CIM as a String datatype attribute named servicePriority in the UsagePoint class.

Proposed Solution

The proposed solution is: 1) Remove the specialNeed attribute from the Person class; 2) Have Part Team 8 determine the appropriate class within the Customer package to contain the specialNeed attribute based on the information contained in the Issue Description field and 3) change the attribute's datatype to Binary; 4) Change the specialNeed attribute datatype to Binary in the UsagePoint class; 5) Model an attribute of datatype String constrained to the format of either a URI or IRI that can be used to point to external reference data sources so electric service providers can specify their service criticality priority schemes; 6) Decide where the external reference pointer attribute identified in 5) should be located in the CIM.

History

#1 - 10/14/2023 10:39 AM - Henry Dotson

- Status changed from New to Open

