## WG13 Issues - CIM Issues #6806

## **DL Template Problems**

06/10/2024 10:26 PM - Martin Miller

Status: Open

Priority: Normal

Target version:

Author/Contact Info: Standard(s): IEC 61970-453

Base Release: Version: 3

Solution to be Clause:

Applied To:

Solution Version: Sub-Clause: Solution Applied By: Paragraph:

Completion Date: Table:

CIM Keywords: 61970-DiagramLayout Originally Closed in

Version:

To:

Breaking Change: Origination Date:

Breaking Change Origination ID:

Description:

CIM Impacted WG13 Originally Assigned

Groups:

Requestor: Martin Miller

# Description

Problems found in the latest draft of the template for IEC 61970-453 for CIM 18:

Contains one or more references to IEC 61970-451. The referenced document does not exist and this reference should be removed.

Contains references to the specific contents of the IEC 61970-552 header. This description will no longer be valid in IEC 61970-552 edition 3 and should be removed or rephrased in a less specific manner.

Constraint C:453:DL:Diagram:units makes an unverifiable restriction of requiring units to be in millimeters. This is unverifiable. If I put in a value of "40" how can you prove that it is or is not millimeters?

Are we requiring screen DPI to be taken into account? Should it be 40 mm with a ruler held up to the operator screen? should be also be only 40mm on a ruler held up to the mapboard wall? Is zooming in and out forbidden because it would change the physical distance?

Constraints C:453:DL:DiagramObject:SynchronousMachine and C:452:DL\_DiagramObject:PowerElectronicsConnection assume that the only types of diagrams that can exist are network diagrams. The prohibition of GeneratingUnits means that is impossible to create an AGC display or a production overview display or a facility display.

Constraint C:453:DL:DiagramStyle:name assumes that the only types of diagrams that can exist are network diagrams. What about SCADA diagrams? What about AGC diagrams? What about overview diagrams? What about simplified diagrams?

### **Decision**

17-Sep-2024 Joint TF Hybrid Meetings - Minneapolis:

Problems found in the latest draft of the template for IEC 61970-453 for CIM18:

- Contains one or more references to IEC 61970-451. The referenced document does not exist and this reference should be removed.

(Agreed to remove)

- Contains references to the specific contents of the IEC 61970-552 header. This description will no longer be valid in IEC 61970-552 edition 3 and should be removed or rephrased in a less specific manner.

(Agreed that this should be made more generic)

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- Constraint C:453:DL:Diagram:units makes an unverifiable restriction of requiring units to be in millimeters. This is unverifiable. If I put in a value of "40" how can you prove that it is or is not millimeters?

Are we requiring screen DPI to be taken into account? Should it be 40 mm with a ruler held up to the operator screen? should be also be only 40mm on a ruler held up to the mapboard wall? Is zooming in and out forbidden because it would change the physical distance?

Decision is to delete the constraint and to replace it with an attribute on the diagram. The attribute should be called: Diagram.baseSymbolDimension who's datatype is Float (unit = None) Description: "The dimension specified is a non-zero positive value and assumed to be a default sized square symbol. The dimension is unitless."

#### **ACTION ITEM:**

The below two constraints need to have proposal for updates. We meed at least two styles define. Martin has volunteered to draft text which we can review in a TF13 call.

Constraints C:453:DL:DiagramObject:SynchronousMachine and C:452:DL\_DiagramObject:PowerElectronicsConnection assume that the only types of diagrams that can exist are network diagrams. The prohibition of GeneratingUnits means that is impossible to create an AGC display or a production overview display or a facility display.

This constraint is dependent on the outcome of the last constraint in this list (see below). It needs to be linked to a particular style. Depending on the style it needs to be linked to a specific piece of conducting equipment:

C:453:DL:DiagramObject:SynchronousMachine

The DiagramObject should link to SynchronousMachine and not GeneratingUnit.

Constraint C:453:DL:DiagramStyle:name assumes that the only types of diagrams that can exist are network diagrams. What about SCADA diagrams? What about AGC diagrams? What about overview diagrams? What about simplified diagrams?

Decision/action item is that we need to determine the full set of "options".

C:453:DL:DiagramStyle:name

For the purposes of network exchange, the inherited IdentifiedObject.name shall have one of the following names: "node-breaker", "bus-branch", "hybrid (node-breaker and bus-branch)" or "geoschematic".

#### History

#### #1 - 09/04/2024 10:45 AM - Chavdar Ivanov

- Status changed from New to Open

## #2 - 09/17/2024 04:20 PM - Todd Viegut

- Decision updated

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