

WG13 Issues - CIM18 Release Notes (Aggregate Report)

#	Priority	Subject	Completion Date	Solution Version	Breaking Change	Breaking Change Description
5384	Normal	Update all UML diagrams to include the UCAlug "used with permission" notice	06/17/2022	CIM18v02	No	
Release Notes The "Reproduced with the permission of UCAlug" notification was applied to all UML diagrams within the IEC61970 package and its sub-packages.						
5383	Normal	CIM18 merge official Dynamics package changes corresponding to IEC 61970-457 Ed 2.0 and IEC 61970-302 Ed 2.0 published standards.	06/17/2022	CIM18v02	No	
Release Notes The latest Dynamics package that aligns with the newly published IEC 61970-457 Ed 2.0 and IEC 61970-302 Ed 2.0 standards has been merged into the IEC61970 package.						
5285	Normal	Addition of value3 attributes in BasicIntervalSchedule and RegularTimePoint (possibly IrregularTimePoint as well to be consistent?)	06/21/2022	CIM18v02	No	
Release Notes A third set of value related attributes have been added to the BasicIntervalSchedule , RegularTimePoint , and IrregularTimePoint classes where applicable. The specific changes included: <ul style="list-style-type: none"> BasicIntervalSchedule.value3Multiplier (UnitMultiplier) BasicIntervalSchedule.value3Unit (UnitSymbol) BasicIntervalSchedule.value3Description (String) RegularTimePoint.value3 (Float) IrregularTimePoint.value3 (Float) 						
5151	Normal	Addition of value description attributes to BasicIntervalSchedule class.	06/21/2022	CIM18v02	No	
Release Notes The following two attributes have been added to the BasicIntervalSchedule class: <ul style="list-style-type: none"> BasicIntervalSchedule.value1Description (String) "Description for value1." BasicIntervalSchedule.value2Description (String) "Description for value2." 						
5107	Normal	New Names proposal - inverted associations	10/19/2021	CIM18v01	No	
Release Notes After applying the new Names proposal to the CIM18v00 release it was discovered that two associations had their source and target specifications (and descriptions) reversed. This has been corrected in the CIM18v01 release.						
5067	High	Remove out of date Dataset and Profile UML	09/28/2021	CIM18v01	No	
Release Notes The following association and attribute updates were applied to the Dataset related classes within the GenericDataseSet package: <ul style="list-style-type: none"> • Removed the Dataset-Profile role • Removed the Profile class from the diagram. • Removed the Dataset.name and Dataset.description attributes. • A new Part303 package was introduced under the top level IEC61970 package and is a peer package to Base. Subsequently the GenericDataSet package was moved to this new location. This reorg is beneficial to better represent the future IEC61970-303 publication as separate and distinct from Base (i.e. IEC61970-301) 						

#	Priority	Subject	Completion Date	Solution Version	Breaking Change	Breaking Change Description
5066	Normal	Address issues with the Names classes construct introduced as of CIM15	08/06/2021	CIM18v00	Yes	NameTypeAuthority class was removed and association role ends renamed.

Release Notes

The following changes were applied to CIM18 to address insufficiency in the existing Names construct in the 61970 package:

- Add a new association i.e. **Name (0..n) --> IdentifiedObject (0..1)** to handle alternative identifiers distinct and different from alternate names (i.e using the existing associatoin).
- Added a new class **ObjectType** to the Core package
 1. Added attribute **type** to the **ObjectType** class
 2. Added a new association **ObjectType (0..1) --> IdentifiedObject (0..n)**
- Added a new class **NamingAuthority** to replace **NameTypeAuthority** which was also deleted (a breaking change).
 1. Add **description** , **mRID** , and **name** attributes to this new class
 2. Added a new association **NameType (0..n) --> NamingAuthority (0..1)**
 3. Added a new association **Name (0..n) --> NamingAuthority (0..1)**
- Added the following attributes to existing classes:
 1. Added **language** and **mRID** attributes to the existing **Name** class
 2. Added **mRID** attribute to the **NameType** class
- Added a new association between the existing **Name** and **IdentifiedObject** classes with the following role end names and cardinality:
 1. **Alternativedentifier (0..n) --> UniquelidentifiedObject (0..1)**
- Renamed the role end name for the existing **Name --> IdentifiedObject** associations. Changed it from it's plural form (i.e. Names) to its singular form. This to conform with formal CIM modeling guidelines

5065	Normal	The CIM definition for the Analog.positiveFlowIn attribute should be aligned with the more semantically pure definition being proposed for IEC 61850	06/30/2021	CIM18v00	No	
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Release Notes

The CIM definition for the **Analog.positiveFlowIn** attribute should be aligned with the more semantically pure definition being proposed for IEC 61850. This request was part of IEC 61850 harmonization recommendations (Recommendation R16).

5064	Normal	Update the description on the PhaseCode and SinglePhaseCode classes to better clarify balanced and unbalanced usages.	06/30/2021	CIM18v00	No	
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Release Notes

The descriptions of **PhaseCode** and **SinglePhaseKind** enumerations were updated as part of IEC 61850 harmonization recommendations (Recommendation R10). This to better clarify their use for balanced and unbalanced models.

5061	Normal	Address issues and clarity around the Control.controlType description	08/24/2020	CIM18v00	No	
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Release Notes

The description of **Control.controlType** was:

"Specifies the type of Control, e.g. BreakerOn/Off, GeneratorVoltageSetPoint, TieLineFlow etc. The ControlType.name shall be unique among all specified types and describe the type."

This has now been changed to:

"Specifies the type of Control. For example, this specifies if the Control represents BreakerOpen, BreakerClose, GeneratorVoltageSetPoint, GeneratorRaise, GeneratorLower, etc.".

This was performed to align the description with the approach as expressed in Measurement.measurementType as we cannot have ControlType.name as mentioned in the original.

5059	Normal	The description of Terminal.phases refers to GroundSwitch,	08/24/2020	CIM18v00	No	
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Release Notes

The description of **Terminal.phases** refers to GroundSwitch which is not a class in the CIM. This reference has been removed.

5057	Normal	The description for ShuntCompensator has an error that must be corrected.	07/01/2020	CIM18v00	No	
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Release Notes

Addressed an error in the description of **ShuntCompensator** . Changed the sentence:

"A negative value for ReactivePerSection indicates that the compensator is a reactor."

to:

"A negative value for bPerSection indicates that the compensator is a reactor."

5055	High	The TapChangerControl class has a cardinality issue with the RegulatingControl.RegulatingCondEq association.	06/30/2020	CIM18v00	No	
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Release Notes

It was discovered in the published release of IEC 61970-301 Ed. 7.0 that the **TapChangerControl** class had an issue in the cardinality of the **RegulatingControl.RegulatingCondEq** association inherited from **RegulatingControl** . The cardinality on the association was changed from "0..n" to "1..n" sometime after CIM17v34. A country comment during CDV of IEC 61970-452 (for CIM17) exposed an issue with this. The "1..n" cardinality imposes a requirement that an instance of a **TapChangerControl** must reference at least one instance of a **RegulatingCondEq** class type via the **RegulatingCondEq.RegulatingControl** association. This requirement could not be fulfilled for **TapChangerControls** and thus had to be rolled back resulting in the need for an amendment to IEC 61970-301 Ed. 7.0. Consequently, the "reverting" of this cardinality back to "0..n" needed to occur in both CIM17 for the amendment and in CIM18 under development. This issue (i.e. 5055) is to track this change.

5053	Normal	Add explanatory text to show the differences between BusbarSection and Junction	06/30/2021	CIM18v00	No	
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Release Notes

Per an IEC 61850 harmonization recommendation (Recommendation R4) the CIM classes **BusbarSection** and **Junction** descriptions were updated. From a topology processing point of view the two classes are equivalent. In addition, **ConnectivityNodes** can be defined with or without associations to instances of these classes. IEC 61970-301 does not give clear guidance on when it would be appropriate for **ConnectivityNodes** to be associated with **BusbarSections** , **Junctions** or neither. This makes it difficult to define rules for automatic conversion from IEC 61850 SCL files. Section 4.5.4 in the standard has also been updated to better clarify.

5052	Normal	Typographical errors needing correction in CIM18	06/16/2020	CIM18v00	No	
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Release Notes

Minor typographical updates to descriptions of **OperatingParticipant** , **IdentifiedObject.aliasName** , **CurveData.xvalue** , **BaseVoltage** , and **BasicIntervalSchedule** .

5051	Normal	The description on the WaveTrap class is incorrect.	06/15/2020	CIM18v00	No	
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Release Notes

The description on the **WaveTrap** class was incorrect. The description states:

"Line traps are devices that impede high frequency power line carrier signals yet present a negligible impedance at the main power frequency."

"Line traps" was replaced with "Wave Traps"

5050	Normal	Description updates needed for the association between TopologicalNode and BusNameMarker.	06/15/2020	CIM18v00	No	
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Release Notes

Corrected minor typos and wording issues discovered in the **BusNameMarker** role end description for the association between **TopologicalNode** and **BusNameMarker** . Updated the role end to read:

"A user defined topological node that was originally defined in a planning model not yet having topology described by ConnectivityNodes. Once ConnectivityNodes have been created they may be linked to user defined TopologicalNodes using BusNameMarkers."

5046	Normal	Remove deprecated attributes from ShuntCompensator and Switch classes	08/06/2021	CIM18v00	Yes	Existing attributes that were declared deprecated in CIM17 have been removed
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Release Notes

The attributes **switchOnCount** and **switchOnDate** on the **ShuntCompensator** and **Switch** classes were flagged as deprecated in CIM17 and were removed now from CIM18. It was confirmed that these attributes are not in use in the IEC 61970-45x series standards nor in the IEC 61968 Part 3-9 series of standards.