

WG14 Part 4 Issues - CIM Issues #5296

5295:5297:5296 - WG14 Part 4 WireAssemblyInfo and related cleanup for ACLineSegment physical modeling

01/29/2022 05:40 PM - Pat Brown

Status:	Review		
Priority:	Normal		
Target version:			
Author/Contact Info:	Pat Brown	Standard(s):	61968-11, 61968-4
Base Release:		Version:	
Solution to be Applied To:	iec61970cim18v01_iec61968cim14v00_iec62325cim04v08_CIM101.0	Clause:	
Solution Version:		Sub-Clause:	
Solution Applied By:	Pat Brown	Paragraph:	
Completion Date:		Table:	
CIM Keywords:	61968-AssetInfo	Originally Closed in Version:	
Breaking Change:	Yes	Origination Date:	
Breaking Change Description:	WirePhaseInfo and WireUsageKind classes deleted, 2 classes renamed, 2 attributes deleted, 4 associations deleted	Origination ID:	
CIM Impacted Groups:	WG13, WG14	Originally Assigned To:	
Requestor:	Pat Brown		

Description

This issue describes the 61968 Part 4 changes which are the only subset of the 61968 changes related to CIM Issue [#5295](#) (Joint issue on ACLineSegment physical modeling clarification).

Proposed Solution

At a high level the following are proposed:

WireSpacingInfo - Repurpose class for use only in describing collections of wires carrying a single phase. Rename class to IntrphaseSpacing, remove .isCable and .usage attributes, create new associations to ACLineSegmentPhase and WirePosition to allow it to be used in the 3 templating approaches. Also remove no-longer-needed WireUsageKind class.
WirePhaseInfo - Remove class and its 3 associations. Relocate its only attribute (.phaseInfo) to the WirePosition class.
WireAssemblyInfo - Rename class and add 3 associations to allow it to serve as the only class supporting the description of collections of wires carrying multiple phases.

Decision

Part 4 has been updated according to the proposed solution.

Release Notes

61968 changes

Change class name WireAssemblyInfo to WireAssembly
Change association role name PerLengthLineParameter.WireAssemblyInfo to PerLengthLineParameter.WireAssembly, ensuring that association has PerLengthLineParameter as source and WireAssembly as target
Add association ACLineSegment.WireAssembly, ensuring that association has ACLineSegment as source and WireAssembly as target
Add association WirePosition.WireAssembly, ensuring that association has WirePosition as source and WireAssembly as target
Change inheritance WireAssembly to inherit from IdentifiedObject instead of AssetInfo and move WireAssembly to the 61970 package

Move WirePosition to the 61970 package

Add association WirePosition.WireInfo ensuring that association has WireInfo as source and WirePosition as target as it crosses the 61968/61970 boundary

Add attribute WirePosition.phase
Delete class WirePhaseInfo
Delete association WirePhaseInfo.WireAssemblyInfo
Delete association WirePhaseInfo.WirePosition
Delete association WirePhaseInfo.WireInfo

Delete attribute WireSpacingInfo.isCable
Delete attribute WireSpacingInfo.usage
Delete class WireUsageKind
Change class name WireSpacingInfo to IntraphaseSpacing
Change attribute name WireSpacingInfo.phaseWireSpacing to IntraphaseSpacing.wireSpacing
Change attribute name WireSpacingInfo.phaseWireCount to IntraphaseSpacing.wireCount
Delete association ACLineSegment.WireSpacingInfo
Change association role name WirePositions.WireSpacingInfo to WirePosition.IntraphaseSpacing, ensuring that association has WirePosition as source and IntraphaseSpacing as target
Add association IntraphaseSpacing.ACLineSegmentPhase ensuring that association has ACLineSegment as source and IntraphaseSpacing as target
Change inheritance IntraphaseSpacing to inherit from IdentifiedObject instead of AssetInfo and move IntraphaseSpacing class to 61970 package

See attached 2023-09-20 Device Datasheet ACLineSegment requested UML updates.docx for details on description changes.

Related issues:

Related to WG14 Issues - CIM Issues #5297: 5295:5297 61968 AssetInfo cleanup ...

[Open](#)

History

#1 - 01/29/2022 05:41 PM - Pat Brown

- Release Notes updated

#2 - 01/29/2022 05:53 PM - Pat Brown

- Project changed from WG13 Issues to WG14 Part 4 Issues

- Subject changed from WG14 Part 4 WireAssemblyInfo and related changes to WG14 Part 4 WireAssemblyInfo and related changes related to Issue #5297 - 61968 portion of #5295 - Joint issue on ACLineSegment physical modeling clarification

- Author/Contact Info set to Pat Brown

- Solution Applied By set to Pat Brown

- Standard(s) set to 61968-11, 61968-13

#3 - 01/30/2022 02:23 AM - Pat Brown

- File 2022-01-30 Device Datasheet ACLineSegment requested UML updates.docx added

- Subject changed from WG14 Part 4 WireAssemblyInfo and related changes related to Issue #5297 - 61968 portion of #5295 - Joint issue on ACLineSegment physical modeling clarification to 5296:5297:5296 - WG14 Part 4 WireAssemblyInfo and related cleanup for ACLineSegment physical modeling

- Solution to be Applied To set to iec61970cim18v01_iec61968cim14v00_iec62325cim04v08_CIM101.0

- Proposed Solution updated

- CIM Impacted Groups WG13 added

#4 - 01/30/2022 02:24 AM - Pat Brown

- Breaking Change Description changed from WirePhaseInfo and WireUsageKind classes deleted, 2 classes renamed, 2 attributes deprecated, 4 associations deleted to WirePhaseInfo and WireUsageKind classes deleted, 2 classes renamed, 2 attributes deleted, 4 associations deleted

#5 - 01/30/2022 02:28 AM - Pat Brown

- Subject changed from 5296:5297:5296 - WG14 Part 4 WireAssemblyInfo and related cleanup for ACLineSegment physical modeling to 5295:5297:5296 - WG14 Part 4 WireAssemblyInfo and related cleanup for ACLineSegment physical modeling

#6 - 01/30/2022 03:16 AM - Pat Brown

- Release Notes updated

#7 - 01/30/2022 04:12 AM - Pat Brown

- Standard(s) changed from 61968-11, 61968-13 to 61968-11, 61968-4

#8 - 09/23/2022 10:49 AM - Chuck DuBose

- Related to CIM Issues #5297: 5295:5297 61968 AssetInfo cleanup for ACLineSegment physical modeling added

#9 - 07/03/2023 09:10 AM - Shawn Hu

- Status changed from New to Open

#10 - 07/18/2023 07:51 AM - Shawn Hu

- Status changed from Open to Review

- Decision updated

#11 - 09/20/2023 09:50 AM - Pat Brown

- File 2023-09-20 Device Datasheet ACLineSegment requested UML updates.docx added

- File 2023-09-20 Device Datasheet ACLineSegment requested UML updates.docx added

- Release Notes updated

2023-09-20

Issue was updated to 1) remove the description updates to the IntraphaseSpacing (used to be WireSpacingInfo) class and its remaining attributes, 2) clarify that this issue includes the move of the following classes from the 61968 package to the 61970 package: WireAssembly (used to be WireAssemblyInfo), WirePosition, IntraphaseSpacing (used to be WireSpacingInfo).

A new Redmine issue will be opened to address the possible revision of attributes present in the IntraphaseSpacing class.

#12 - 09/20/2023 09:50 AM - Pat Brown

- File deleted (2023-09-20 Device Datasheet ACLineSegment requested UML updates.docx)

Files

2021-11-29 Device Datasheet ACLineSegment requested UML updates.docx	2.46 MB	01/29/2022	Pat Brown
2022-01-30 Device Datasheet ACLineSegment requested UML updates.docx	2.46 MB	01/30/2022	Pat Brown
2023-09-20 Device Datasheet ACLineSegment requested UML updates.docx	2.46 MB	09/20/2023	Pat Brown