

Agenda

*A quarter century of the CIM Model:
 The Development, Growth, and Acceptance of a Standard*
 May 17-19, 2023
 Brisbane, Australia

CIM University Agenda

Wednesday, May 17, 2023

Time	Track 1 CIM Basics and Enterprise Integration	Track 2 CIM and Network Analysis	Track 3 CIM Tools/Markets
9:00 – 9:15	Introduction and Logistics <i>Margaret Goodrich (PCITek)</i>		
9:15 – 9:30	Introduction to the CIM Standards and Architecture <i>Michael Covarrubias, (Xtensible Solutions)</i> This session CIM standards, how they are organized, and how they are used to exchange information between applications/systems. Topics will include: What is “the CIM?” - Role of the CIM in the Smart Grid architecture - Importance of CIM as a semantic model - Motivation for the coverage of CIM, what can be modeled, how does that save time and money in integration? - Three-layer architecture for organizing CIM standards - Work flow from semantic model to message/file assembly using CIM - Layer 1: CIM UML information model and contents - IEC 61970 and 61968 standards - Example: Substation model using CIM - Demo of UML modeling Tool – Sparx	Introduction to the Network Model Portion of the CIM (30 minutes) <i>David Bogen (Oncor) (9:15-9:45)</i> Introductions CIM and the two main types of grid model data - Grid Classes – whose objects describe some aspect of the grid - Meta Classes – whose objects enable management and exchange of grid objects Review of the agenda Tour of Major CIM Network Model Implementations (1 hour) (9:45-10:45) The CIM approach to structuring network model data in practice at utilities in the US and Europe • IGM-CGM for DSO Public Open Access – <i>Alan McMorran (OpenGrid Systems)</i> • TenneT’s CMM – <i>Scott Coe (GridOptimize)</i> • ERCOT’s NMMS – <i>Margaret Goodrich (PCITek)</i>	CIM UML <i>Margaret Goodrich (PCITek)</i> Learn about the UML that is used to define the Common Information Model (CIM) and describe the utility domain information. Also Includes Mapping to the CIM and using UML to prepare for Profile generation (9:15-9:45)
9:30 - 9:45			
9:45 – 10:00			
10:00 – 10:15			
10:15 – 10:30			
10:30 – 10:45	BREAK		

10:45 – 11:00	Introduction to the CIM and Related Standards (Cont'd)	Grid Classes – 61970-452 EQ Profile (aka the foundation) (30 minutes) (10:45-11:15)	CIMTool – A CIM Profiling Tool
11:00 – 11:15	<i>Michael Covarrubias, (Xtensible Solutions)</i> The session continues the introduction started in the earlier session by exploring information exchange techniques and enterprise semantic modeling	<i>Alan McMorran (Open Grid Systems)</i> The basics of the physical grid model profile for steady state	<i>Margaret Goodrich (PCItek)</i> Learn about the open-source tool for managing CIM-derived models, profiles, and schemas.
11:15 – 11:30	- Layer 2 , Profiles and profiling methodology for defining system interfaces – IEC 61970 and 61968	- What is information modelling? - Modeling a substation in UML with CIM objects	(10:45-12:00)
11:30 – 11:45	- Layer 3 , Message assembly and RDF/XML serialization technologies	Grid Classes – 61970-452 EQ Profiles for Distribution (45 minutes) (11:15-12:00)	
11:45 – 12:00	- Value of an Enterprise Semantic Model (ESM) based on the CIM	<i>Alan McMorran (OpenGrid Systems)</i> More complex parts of the physical network model profile	
	- Case studies	- Unbalanced linking to Assets and GIS data	
	- Where to get more CIM information		
12:00 - 13:00	LUNCH		
13:00 – 13:30	T1 - Information Model & Reference Model <i>Margaret Goodrich (PCItek)</i> Learn about the CIM as an Information Model & as a Reference Model.	Grid Classes – 61968-13 GIS and Asset Profiles (30 minutes) (13:00-13:30) <i>Alan McMorran (OpenGrid Systems)</i> Modeling the distribution network	Enterprise Architect <i>Scott Coe</i>
13:30 – 14:00	XSD Messaging in the 61968 IEC Standards <i>Margaret Goodrich (PCItek)</i> Learn about messaging and how it is used in the IEC 61968 Standards. (13:30 – 14:00)	- Extracting Electrical Connectivity from GIS	<ul style="list-style-type: none"> Learn how to navigate in Enterprise Architect Learn how to create various diagrams in Enterprise Architect
		Grid Classes – 61970-457 DY Profile (30 Minutes) (13:30-14:00) <i>David Bogen (Oncor)</i> The CIM approach to standard dynamics model exchange	(13:00-14:30)
		- Basics of dynamics modeling	
		- Update on Edition 2 of IEC 61970-457	
14:00 – 14:30	Asset Health (IEC 61968-PART 4) <i>Michael Covarrubias, (Xtensible Solutions)</i> Learn about Assets and Asset Health in Part 4 (14:00-14:30)	Grid Classes – 61970-453 DL Profile (30 minutes) (14:00-14:30) <i>Alan McMorran (Open Grid Systems)</i> Layout of schematic diagrams (Diagram Layout)	
14:30 – 14:45	BREAK		

14:45 – 15:30	Review of XSD Messages for all 61986 Part Standards <i>Margaret Goodrich (PCItek)</i> Show and Tell for some or all of the XSDs that are part of the 61968 Standards. (Includes Part 3, 5, 8 & 9) (14:45 – 15:45)	Grid Classes – 61970-456 SSH Profile (60 Minutes) (14:45-15:30) <i>David Bogen (Oncor)</i> Power flow case inputs (Steady State Hypothesis) – Status – Controls – Limits – Energy distribution Grid Classes – 61970-456 TP, SV Profiles (30 minutes) (15:30-16:00) <i>Alan McMorran (Open Grid Systems)</i> Power flow case outputs (Topology and State Variables)	AFFRIMA <i>Michael Covarrubias</i> (14:30-15:30)
15:45– 16:15	Interface Specification Documentation <i>Margaret Goodrich (PCItek)</i> Interface Specification Documentation details. (15:45-16:15)		
16:15 – 16:45	CIM-Based Integration – A Deep Dive <i>Margaret Goodrich (PCItek)</i> A deep dive into CIM-based integration and a look at the Success Factors that should be considered for any integration project. (16:15 – 16:45)	Model Exchange Techniques (45 minutes) (16:00-16:45) <i>Scott Coe (GridOptimization)</i> The model for managing and exchanging grid objects	
16:45	Adjourn and Go to Networking Reception – SEE YOU THERE!!		
17:30 – 19:00	NETWORKING RECEPTION Drinks and Hors d’oeuvres Provided <i>Mrs. Brown’s Bar and Kitchen</i>		

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CONFERENCE DAY 1 – Thursday, May 18th

Time	Topic	Presenter
8:30 – 9:00	Registration and Coffee/Tea	
	Session 1	
9:00 – 9:15	Welcome & Intro	<i>David Bogen, ONCOR & Michael Covarrubias, Xtensible</i>
9:15 – 10:00	Keynote: Adopting open standards as a key driver for the Energy Transition: OpenTDR and CIM Standards	<i>Mehdi Seyedmahmoudian, Swinburne University of Technology & Jose Moreira, Siemens National Manager, Grid Software Australia</i>
10:00-10:15	Sponsor Presentation: The Energy Workbench CIM data server	<i>Adam White, Zepben</i>
10:15– 10:30	BREAK	
	Session 2	
10:30 - 11:00	History of the CIM, Part 1	<i>David Bogen, ONCOR</i>
11:00 – 11:30	The Building Blocks of a Future Grid	<i>Tim Lewsey, Energy Queensland</i>
11:30 – 12:00	From Data to Intelligence: Network Model is Key	<i>Terese Milford, Energy Queensland</i>
12:00 – 13:00	LUNCH	
	Session 3	
13:00 – 13:30	A Regulatory Approach to support Open Data using the Common Information Model in Great Britain	<i>Alan McMorran, Open Grid Systems</i>
13:30 – 14:30	Implementing CIM at the Provincial Electricity Authority in Thailand	<i>Dr. Choompol Boonmee, PEA Thailand & Scott Coe, GridOptimize</i>
14:30 – 14:45	BREAK	
14:45 - 15:15	Network Model Dataflows: Establishing CIM Network Models at Energy Queensland	<i>Alex Guinman, Energy Queensland</i>
	Vendor Presentations	
15:15 – 17:15	Vendor Presentations (20 minutes each) <ol style="list-style-type: none"> 1. PCitek 15:15-15:35 2. Xtensible 15:35-15:55 3. Zepben 15:55-16:15 4. OpenGrid 16:15-16:35 5. GridQube 16:35-16:55 6. Siemens 16:55-17:15 	<ol style="list-style-type: none"> 1. Margaret Goodrich 2. Michael Covarrubias 3. Bill Tarlington 4. Alan McMorran 5. Olav Krause 6. Yang Feng
17:15	Adjourn for the Day and proceed to Reception Area	
17:30 – 19:00	Evening Reception Hospitality & Vendor Demonstrations <i>The Hub at Energy Queensland</i>	

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CONFERENCE DAY 2 – Friday May 19th

Time	Topic	Presenter
8:30 – 9:00	Registration and Coffee/Tea	
	Session 4	
9:00 – 9:30	Distribution Grid Model Exchange Interoperability Event Results	<i>Scott Coe, GridOptimize</i>
9:30 – 10:00	Optimizing Asset Investments and Operations with Grid Network Model Management with the CIM	<i>Michael Covarrubias, Xtensible Solutions</i>
10:00 – 10:30	Building Powerfactory Models from a shared CIM model	<i>Kurt Greaves, Zepben</i>
10:30 – 10:45	BREAK	
	Session 5	
10:45 – 11:30	Integrated Grid Data Management and Open Access to Real Time Data	<i>Alan McMorran, Open Grid Systems</i>
11:30 – 12:00	Bulk production of distribution network planning models in Essential Energy using a CIM based network service.	<i>Dr. Carlos Macana, Essential Energy</i>
12:00 – 13:00	LUNCH	
	Session 6	
13:00 – 13:30	CIM-Based DER Communications using IEC 62746-4	<i>Randall McDonnell, AEMO & Scott Coe, GridOptimize</i>
13:30 – 14:00	Challenges on utilizing the CIM in organizations – Panel Session	<i>Moderator – Michael Covarrubias, Xtensible Solutions</i>
14:00 – 14:30	UCA update – new website, newsletter (announcement of newsletter), re-org, ITCA, etc. (15 min) Business Update from Board (15 min)	<i>Margaret Goodrich, UCA Staff David Bogen, ONCOR & UCA Board Member</i>
14:30 – 14:45	BREAK	
	Session 7 - Meeting Wrap-Up	
14:45 - 15:45	What's New in the Latest CIM UML Model Release (Model Managers Report)	<i>Model Manager, Yang Feng</i>
15:45 – 16:15	Ask the Experts: Panel Session	<i>Michael Covarrubias, Xtensible Solutions</i>
16:15 – 16:30	Closing Comments & Two \$100 Amazon Gift Card Drawing (must be present to win)	<i>David Bogen, ONCOR & Michael Covarrubias, Xtensible Solutions</i>
16:30	Adjourn	<i>David Bogen, ONCOR & Michael Covarrubias, Xtensible Solutions</i>