CIM – MultiSpeak Harmonization Update

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Agenda

- Why harmonize?

- Where we left off...

- Current status

  – Correlation Level

- Lab integration

Why harmonize?

- While the standards evolved by supporting different constituencies, they cover the same domain

- Learn how the standards are similar
  - Leverage best practices of each going forward

- Develop integration guidance for systems integrators, utilities, vendors

- Open vendors to additional markets
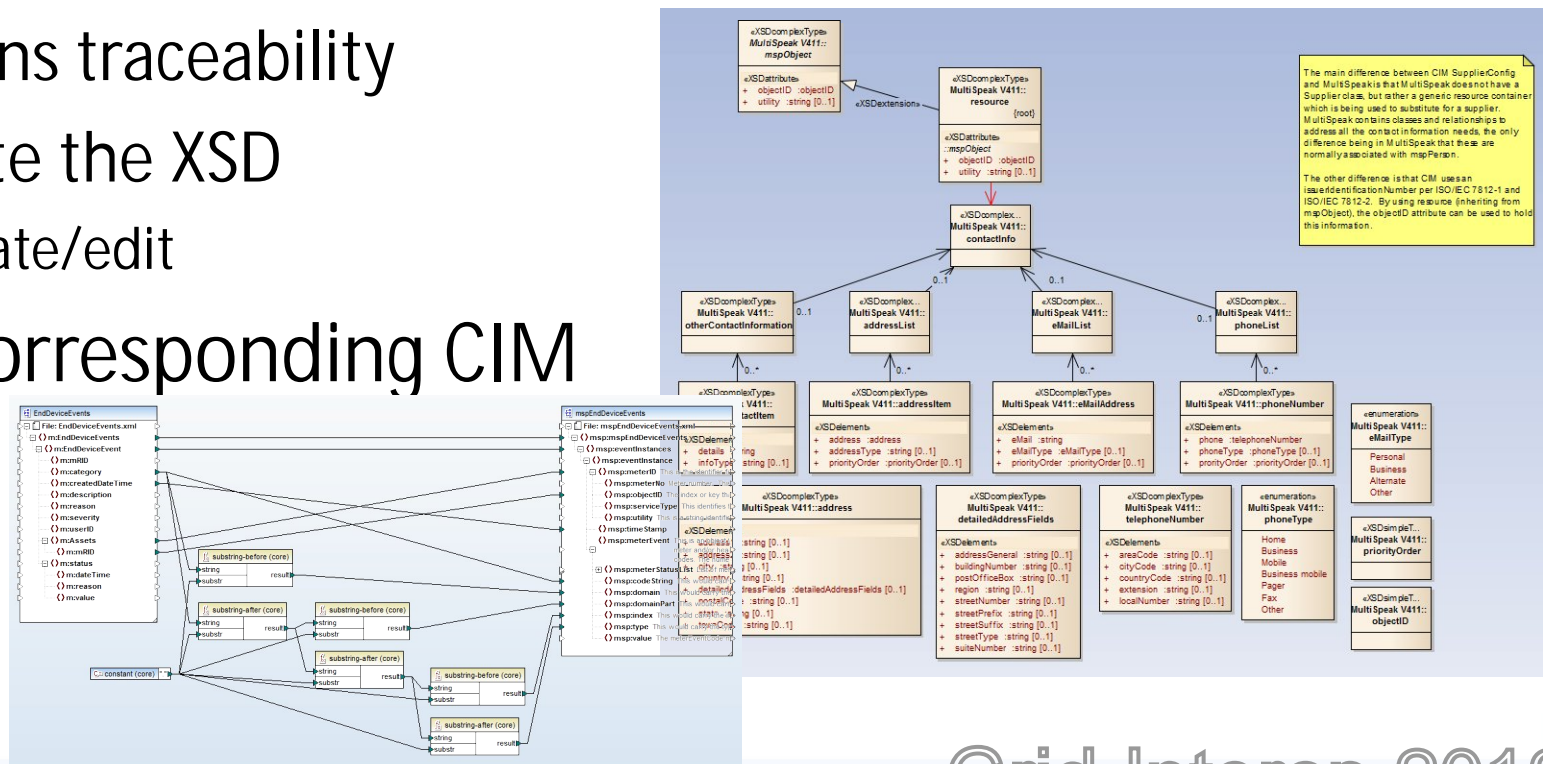
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- EPRI report 1024443

  - Focus: IEC 61968-9 Meter Reading and Control

  - 10 of 23 profiles

- On Demand Meter Read service mapping

- Developed MultiSpeak profile methodology

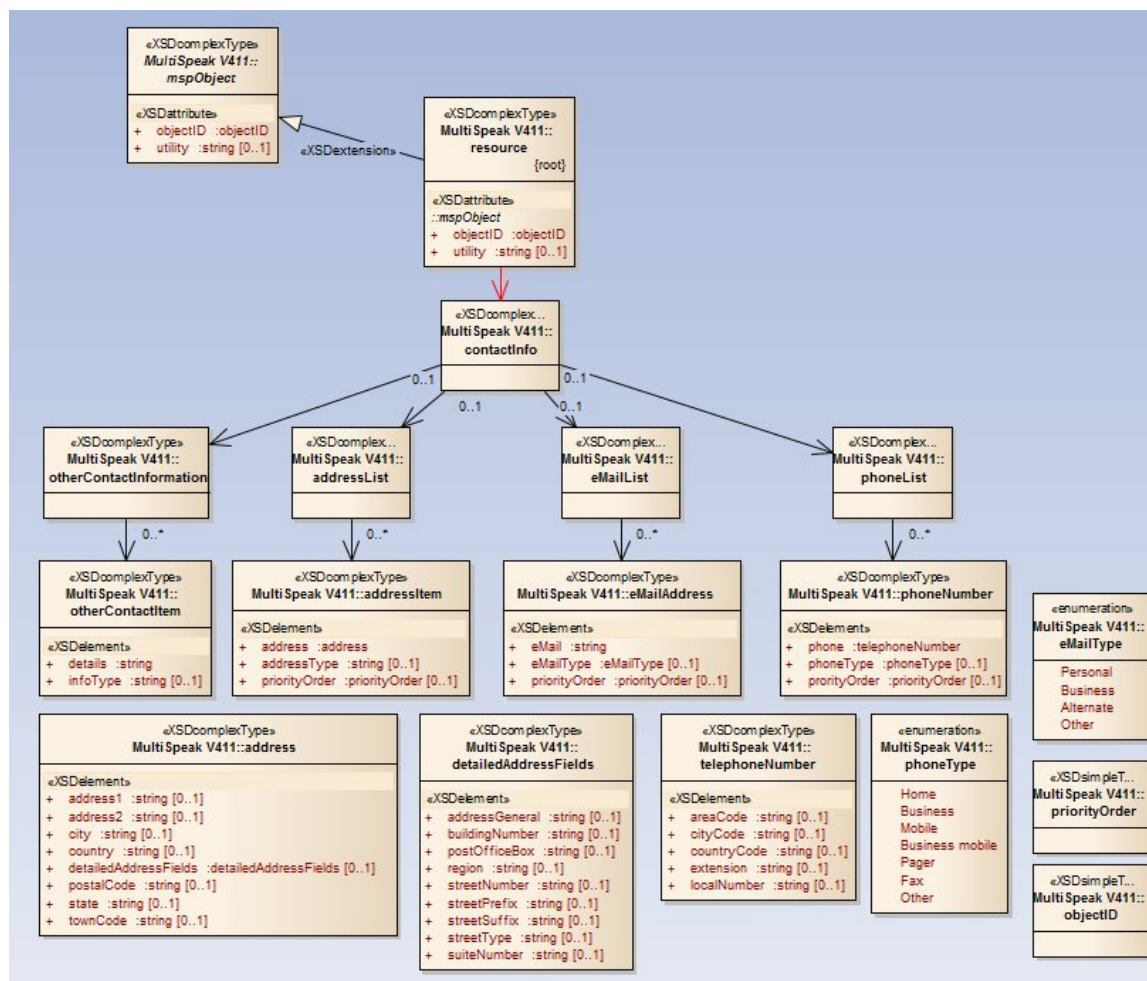| CIM Profiles	
CustomerAccountConfig	EndDeviceFirmware
CustomerAgreementConfig	MeterAssetConfig
EndDeviceControls	MeterReadSchedule
EndDeviceEvents	ServiceCategoryConfig
ServiceLocationConfig	SupplierConfig

Day in the life...

- Creating a harmonization profile
  - CIM and MultiSpeak are maintained in Enterprise Architect; UML

- CIMEA – extension to Enterprise Architect
  - Select classes, attributes, associations
  - Maintains traceability
  - Generate the XSD
    - Validate/edit

- Map to corresponding CIM profile

- Added association from resource to contact

Current Status

- EPRI Report, 1026585, CIM-MultiSpeak Harmonization, 2nd Edition

  - Documented

    - Correlations

    - Suggested transformations

    - Gaps

- All 23 IEC 61968-9 Meter Reading & Control 1st Profiles mapped

  - Feedback to IEC, MultiSpeak communities

- IEC 61968-14 Technical Report, NWIP status

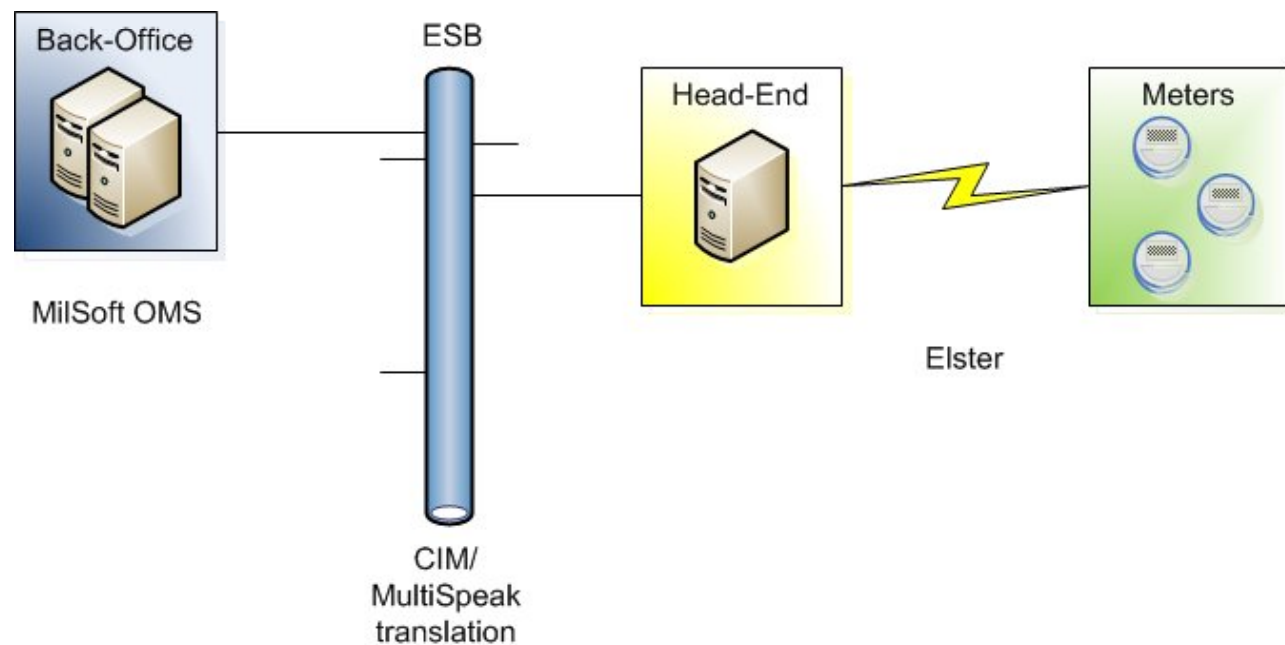 - This will include IEC 61968-9 2nd Edition Profiles

Correlations

Profile Name	Correlation Level
AuxiliaryAgreementConfig	Low
CustomerAccountConfig	Medium
CustomerAgreementConfig	Low
CustomerConfig	High
CustomerMeterDataSet	N/A*
EndDeviceAssets	Medium
EndDeviceControls	High
EndDeviceEvents	High
EndDeviceFirmware	High
MeterAssetConfig	Medium
MeterAssetReading	High
MeterReadings	High

Profile Name	Correlation Level
MeterReadSchedule	High
MeterServiceRequests	Medium
MeterSystemEvents	High
PricingStructureConfig	Low
ReceiptRecord	Low
SDPLocationConfig	High
ServiceCategoryConfig	High
ServiceDeliveryPointConfig	High
ServiceLocationConfig	High
SupplierConfig	High
TransactionRecord	Low

[1] CustomerMeterDataSet is a composition of several profiles; CustomerAgreement, EndDeviceAsset, SDPLocation, ServiceCategory, ServicedeliveryPoint, and ServiceLocation. The reader is referred to the EPRI report [7] for the specifics of those mappings.

- EndDeviceEvent profile
  - Power Out/Ping
- Meter to OMS
- CIM/MultiSpeak translation at the ESB
- Endpoints blissfully unaware of the transformation

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