Tuesday, PM Session 1

Companies Represented

- Southern California Edison
- Xtensible Solutions
- Cap Gemini
- Pacific Gas & Electric
- Cisco
- ATCO i_Tek
- Elster Solutions
- Southern Company
- ITRON
- Guiding Principle Consulting
- Coriney Comm
- SDGE

- Review Status and Plans General Goals
 - o Work towards use cases, requirements specification, semantic model by Q1, 2012
- Be in a position to work on use cases 7/19
- Review of SGAC Semantic Framework v2
 - One interpretation sees the CIM as the central data model tying everything together
 - SGAC is helping to create a consistent model, but the Task Force can help accelerate the SGAC progress
 - SGAC is trying to do some level of harmonization across models
 - CIM and Security
 - Currently CIM does not really address security
 - CIM relies on other standards to provide security
 - The standards follow this path
 - · Define payload
 - Define transactions
 - Define context use context to define security needs
- Project contraints
 - Multiple standards are applicable
 - o Integrations are required
 - o How to create a common language that supports projects
 - o Projects may use multiple models that need to communicate or interact with each other
- Model considerations

- Need to maintain the integrity of the relationships that are maintained within the different models while relating the models to each other
- The work needs to be broken into chunks that are useful but can be delivered in a timely fashion
 - Want to leverage other standards
 - Leverage what makes sense from the other standards
- Presentation on Smart Grid Reference Architecture SCE-Cisco-IBM
 - o Represents the ability to separate data from the original source of data
 - o Decoupling data from the source introduces flexibility in data consumption and sourcing
 - Early adopters will face some changes, but they should not let the fear of change prevent them from taking steps towards improvement and a new architecture
 - The use of partners and thinking ahead will help mitigate some of the risks
 - Smart grid programs will have a number of projects over many years, and laying out this strategy will help projects understand their role in the Smart Grid program
- Briefly preview the actors discussed during the weekly meetings
 - Initially started looking at use cases to apply to EIM
 - The existing use cases for do not support EIM very well, and the task force needs to develop EIM use cases
 - Develop the actors and generate use cases from an Actors' point of view
 - What do the actors have to do to make things work from their point of view
 - As we think of the case studies we can analyze them from the Actors' point of view and start developing use cases
 - o Create use cases that drive requirements in each of the areas under the EIM Framework

Tuesday, PM Session 2

Companies Represented

- Southern California Edison
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- Cap Gemini
- Pacific Gas & Electric
- Cisco
- ATCO i_Tek
- Elster Solutions
- Southern Company
- ITRON
- Guiding Principle Consulting
- Coriney Comm
- SDGE (Sempra)
- OSISoft
- ONCOR

- Case study presentations
 - Sempra (SDGE)
 - Data model a combination of the IEC CIM, SAP, and proprietary models
 - The organization is being continually educated on the definition of EIM
 - Use decision trees to help provide the service and service definition for the project team
 - At some point the solution architecture will be recommended for the development team based on the services designed
 - Southern California Edison
 - ONCOR
 - o PG&E

Wednesday, AM Session 1

Companies Represented

- Southern California Edison
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- AEP
- Ventyx/ABB
- Bit Stew
- PG&E
- Boreas Group
- Duke Energy
- OSI Soft
- Southern Company
- Cisco
- Sempra (SDGE)

- Case Study Presentations
 - o AEP
 - Ontology is maintained in a combination of Enterprise Architect, Rational Software Architect,
 - Looking at Metadata Manager from InfoSphere and will eventually try to integrate it with the ontology management in the future
 - o Duke
- Use Case Actors
 - o EIM is the Enterprise Information Management, not just Smart Grid EIM
 - Which actor will be responsible for metadata management?
 - Traditionally within utilities there is no role that manages the relationships between domains. How should the Actors list define a role that manages the relationships?
 - Data steward is a business role, data SME is an IT role
 - Per TOGAF 8, the security architect is responsible for the security in the whole lifecycle of architecture development
 - Which role will identify the legal issues around data (what can be done with it, who can access it, etc)?

- Is this something that a legal department will need to be involved with this process?
- Does the data custodian or the data steward have the ability to understand and flesh out the ramifications of the data combination.
 - Does this fall under data security and protection, data privacy, the NERC SIP issues?
- Several use cases exist around security architecture
 - Privacy impacts of implemented systems
 - Privacy impacts of data integrations
- Use case development will contribute to further role definition and role addition

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- SISCO
- Elster

- Initial Use Case list
 - Security
 - Security architect performs impact analysis
 - New systems
 - New interfaces
 - New data exchanges
 - Interpret regulations and develop control rules
 - Actor: Data steward,
 - Define data access, security privacy and control rules between business units
 - Power generation vs. distribution vs. markets
 - Create the business metadata
 - Actor: Data steward
 - Define project data requirements
 - Define new or revised business processes
 - Define data requirements
 - Define integration requirements for an
 - RFP/RFI
 - COTS Implementation
 - New custom application development
 - Merger and acquisition
 - Actor: Integration Architect,

- Define additional implementation data requirements
- A specific use case of interest to me is "Data migration to external agency (i.e. WECC, Cal-ISO, etc.)
 - Define data publication guidelines (more privacy related)
 - Privacy of data
 - Physical protection of the data transport
 - Data formatting (refers to semantic modeling use cases)
- Suggested "Data Migration" as a broad UC topic
- Request data access
 - o Review published metadata catalogs for available data
 - Dependency: Define roles that have access to the metadata catalog
 - Role based access is from a business role perspective
 - Find available data sources
 - Request access to the data
 - Actor: Information consumer
- Develop policies governing enterprise information access
 - Develop roles governing data access (i.e. AP, Field Crew, etc)
- Define and refine systems of record
 - o Actor: Data Architect, Data Steward
 - Define and refine data integrity requirements
- Define and refine data lifecycle
 - Actor: Data Architect, Data Steward
- Data quality
 - Evaluate data quality
 - Actor: Data Steward
 - Produce data quality report
 - Source of data vs. data processing
 - Actor: Data Custodian
 - Create data quality improvement path
 - Actor:
 - Evaluate what is core (necessary data) vs. peripheral data (seasonal, temporal, etc)
 - Minimize multiple entry of the same data (single entry multiple use)
 - Example: reducing the need for multiple configurations of devices using already recorded and entered data from the back-end systems
 - Creating a Data Scorecard" determining where to focus limited information governance resources by using KPIs with business-focused and IT metrics.
 - Data Governance" is another broad UC category I recommend (see above for a specific use case under this heading)
- Real time event processing
 - Deliver real-time event data
 - Manage real-time event data
 - Process real-time event data
 - "Real-time monitoring of assets" this use case wraps around how to manage information needed for complex, event-based controls.
 Examples: GIS data needed to manage mobile assets, Smart Meter (AMI) data for energy goals & billing, Smart Grid transmission/distribution line sensors for wide-area situational awareness
- Develop and maintain data architecture
 - Incorporating project data models with enterprise data model

OpenSG EIM Task Force July 22, 2011

- Incorporating vendor data models with the enterprise data model
 Incorporating other (new) organizational data models with the enterprise data model

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- Walked through the creation of the Create Business Metadata use case
- Proposed course of action:
 - o Discuss SDLC of the participating utilities
 - o Identify where utility SDLCs interact with governance and EIM
 - o Discuss how to insert EIM activities into the SDLCs of the utilities
 - o Create use cases based on the SDLC interactions
 - o Follow the use case creation with the EIM components

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- OSI Soft
- Enernex
- ONCOR
- BCIT

- Discuss the example of the use case that was created in the previous session
- Ratify the approach going forward starting with SDLC
- Discuss the Smart Grid Semantic Model
 - o EIM is not stating which specific standards must be used in which way
 - Don't want to duplicate NIST or SDO work
 - O How do users use the standards effectively?
 - Start by taking the chunks that are relevant to the OpenSG EIM semantic model
 - Create a requirements document that discusses how to build a semantic model using the parts of the standards that are applicable
 - Task force does not need to build models or road maps
 - The task force looks at how to integrate the different standards in a way that supports an organization
 - If we create a UML model, the model may need to be reconciled with and approved by each of the standards organizations referenced
 - Building the model needs to be clarified so that it indicates that the Task Force will provide guidance to put together a solution that leverages the standard models
 - This will be handled in later calls
 - The charter has not been submitted to the TC for approval as of yet

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- Initial proposal is that the deliverable would be the requirements document
- Capture the thinking of why a standard would use and how the standards would be meshed together
- The task force needs to continue to leverage SGIP work

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- Xtensible Solutions
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- Elster Solutions
- Cisco
- Enernex
- Landis & Gyr
- Arizona Public Service
- Toshiba
- SDGE
- SCE
- Gridmerge
- ATCO I-Tek
- Alienvault

Meeting Minutes

TOGAF Framework

- TOGAF has some usefulness
- o The Task Force will change the TOGAF framework as needed
- o Downloaded and reviewed a trial of the TOGAF 9 framework
- Reference Model from TOGAF can be viewed as a way to show the information management reference architecture
- Also want to follow the TOGAF ADM model
- The TOGAF metamodel is the metamodel for a reference architecture
- Question around looking at Archimate model from OpenGroup
 - A quick review of Archimate was given on July 21, 2011 by Adnaan Sikandar.
 - Archimate could be a useful modeling technique to visualize the CIM Interface Reference Model
 - The task force will explore the use of Archimate in identifying and exploring the recommendations for standards
 - A mini team should be created to understand how to factor it into the requirement specification
 - Adnaan Sikandar, Jerry Grey, Joe Zhou, and Jim Horstman will review Archimate to determine how it can support the requirement specification
- Use Cases

OpenSG EIM Task Force July 22, 2011

- o Remove the existing ones and insert new ones as they are developed
- Make 1.6 flow under 1.5
 - o Repurpose 1.6 to reflect the overview of the requirements document

С

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Meeting Minutes

Reviewed the Requirements Document and made changes