OMG P&C WG Activity Debrief

Presented to: OMG Finance Domain Task Force
March 28th 2007

By: OMG P&C WG members

http://www.omgwiki.org/pcwg/doku.php
Agenda

- P&C WG background
- P&C WG Mission
- Proposed P&C Standard- Logical Components
- P&C Information Models RFP: Summary
- P&C WG Roadmap
- Opportunities to collaborate with other OMG WGs
P&C WG background

- Around Dec. 06, P&C Carriers approached OMG to develop MDA Compliant Information Models
- At the Dec. 06 OMG meeting, Penn National presented their analytics oriented data model and participants expressed need to develop an industry standard (using ACORD’s existing Global Data Dictionary)
- Follow-up meeting in NYC (Feb. 7th) - participants discussed the scope of the proposed standard and agreed to develop a RFP
  
  (http://www.omgwiki.org/pcwg/doku.php?id=p_c_meetings)
- March 07, San Diego meeting- focus on approval of mission, revise draft RFP and timeline
P&C WG Mission

- To develop Property and Casualty Information Models using MDA and standard Business Glossary to support P&C business functions (operational and analytics) extensible to other insurance domains
  - Leverage and validate OMG’s standards (existing and planned) that support Information modeling (CWM/IMM, ODM, SBVR for example); leverage the work from OMG FDTF and others as applicable
  - Leverage work from organizations such as ACORD and Open Source as applicable and/or available
  - Develop Standard ‘Reference Metadata’ for Property and Casualty (Party, Organization, list of Coverage types for example) that can also be reused in other related domains like Life and Reinsurance

- Develop models of P&C Business ‘Services’ and ‘Business Events’ in collaboration with OMG SOA SIG
  - Leverage Ontology Definition Metamodel (ODM) and UML Profile and Metamodel (UPMS) for Services
P&C WG approach to Information Models

- Leverage OMG’s Model Driven Architecture and related standards as “Foundation” of the proposed standard
- Develop Information Models that utilize the standard Business Glossary (P&C business concepts) to ensure Semantic Consistency across models
- Develop Platform Independent Models (PIMs) that can be transformed into desired Platform Specific Models (PSMs)
- Develop models that can address the transactional and analytical needs of interested parties
- Enable exchange of models using industry standard formats (XMI for example)
Business Glossary <> Information Models

Producers and Consumers of P&C Business Glossary

- Subject Matter Experts Define the P&C Concepts, Rules
- Vendors, System Integrators, Partners...
- Legal, Compliance
- Business Process Modelers
- Business Analysts, Data Modelers, DBAs, Data Integration, Data Quality, ETL Users
- Application, Service Developers

P&C Business Glossary <> Information Models

- P&C Business Glossary, Rules
  - Conceptual Data Model / Ontology
    - OWL, RDF...
  - Logical Data Model (LDM)
    - XMI
  - Relational Model
    - DDL
  - Dimensional Model
    - DDL
  - XML Schema Model
    - XSD

Traceability
P&C Standard-Logical Components

Property and Casualty Standard: Logical Components

Mandatory Components
- Physical Data Model (Relational/Transactional)
- Physical Data Model (Dimensional/Analytical)
- XML Schema Model

Optional Components
- Reusable Service Components (Policy, Account...)
- P&C Ontological Model
- UML Model
- Other...

RDF, OWL
SQL DDL
XSD
Other...

P&C Logical Data Model
P&C Conceptual Data Model
P&C Business Glossary

Model Driven Architecture (P&C Standard Foundation)
The RFP solicits proposals for Information Models to address the data management (modeling/database design, analytics and exchange) needs of the P&C Insurance Community.

Mandatory Components:

- Glossary of P&C Business Terms and accompanying metadata (definition, source (SME/Authority/Standard...), format, date, revisions/version, Acronyms for example)
  - Subject areas in scope:
Reference metadata* that supports the subject areas in scope

- Party, Party Role
  - Employee
  - Agent
  - Producer
  - Claimant
  - Line of Business
  - Adjuster
  - Driver
  - Third Party and Legal

- Address

- Products

*Existing OMG standards like Organization Structure metamodel (OSM) and ‘Party’ Model will be leveraged
A Conceptual Data Model representing P&C business concepts with a target audience of business SMEs/users/analysts

A fully attributed Logical Data Model derived from the Conceptual Data Model with appropriate Identifiers, logical data types and Relationships as appropriate

A fully attributed Relational Model (a.k.a. Physical Data Model) derived from the Logical Data Model to support development and interoperability of transactional systems.

A fully attributed Dimensional Model (a.k.a. Star Schema that consists of ‘Fact Tables and Dimensions) derived from the Logical Data Model to support P&C Analytics (DW/Data Mart, BI Tools)
P&C Information Models RFP: Summary contd.

- An XML Schema model to support P&C data exchange and development of ‘Data Services’

- XML Metadata Interchange (XMI) representation of the above models to facilitate interchange of P&C metadata among data management tools (data modeling/DB mgmt., DW, Data Quality, ETL, BI tools and metadata repositories)

- P&C Ontology to support:
  - Development of semantic web services and use in Semantic reasoning and rules engines
  - Support generation of OWL (Ontology Web Language) and Resource Description Framework, Common Logic, Topic Maps and Description Logic

- Traceability of P&C Business Terms to models listed above as well as valid semantic variations where applicable (synonyms, aliases, geographical variations etc.)
Optional Components

- UML model of P&C (subject areas as defined in slide 7)
- List of ‘Fact Tables’ in Dimensional Model to support standard reporting (for regulatory compliance for example)
- Re-usable Service components
- Transformations to convert Conceptual <> Ontology <> Logical <> Relational <> Dimensional models
P&C Standard Roadmap

- RFP to be issued in June 2007 (OMG meeting in Brussels)
- Proposed LOI date: Sept. 2007
- Initial Submission: Nov. 2007
- Ontology of P&C Business Services*
- Ontology of P&C Business Events*

*Timeline TBD
Opportunities with other Organizations

OMG

- **FDTF**
  - Support ‘Conversion Models for Payment Message Standards’ work
  - Payment Process Model
  - Use/enhance Party model

- **SOA SIG**
  - Jointly develop an Ontology of Business Services
  - Validate standards in development – UML Profile and Metamodel for Services for example
  - Contribute to development of Event Metamodel and UML Profile RFP

- **Analysis and Design Task Force (ADTF)**
  - Support IMM work and proposed prototype

- **Business Process Modeling (BPM)**
  - Leverage BPM standards, support/validate BPDM

Non-OMG Organizations

- **ACORD**
  - Joint development of Business Glossary
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Thanks for your Time..