Objective and Agenda

Meeting Objective: Provide a status update on the development of the P&C Data Model and initiate effort to develop the next version of the model.

Agenda:
- Introductions and Agenda Review
- Overview of Initiative
- OMG Submission Status Update
- Current Model Overview
- OMG and ACORD
- Next Steps
Overview of Initiative

for

OMG Property and Casualty Data Model
Update Meeting
May 10, 2012
P&C Data Model Initiative

• Goal
  – Develop a commonly defined “data language” for the P&C industry, allowing participants to invest their time advancing the use of data, not the definition of it.

• Target Audience
  – Mid-to-small-sized P&C carriers (NAMIC types)
  – Product groups within large P&C carriers
  – Any organization looking for an alternative to other options currently available
  – Software solution providers and consulting organizations
Why the Object Management Group?

• The Object Management Group (OMG) emphasizes an open, community-driven process to develop “open-course” specifications.

• OMG provides the framework processes and templates to ensure all specifications meet a consistent level of quality and documentation precision.

• Specifications adopted by OMG are published and freely accessible to any interested parties.

• OMG specifications include CORBA, UML, BPMN, as well as specifications in the Life Sciences, Finance, Healthcare, and other industries.

• RFP issued for development of P&C Data Model in June 2007.
Development Approach

• P&C Insurance Industry Professionals working collaboratively in model development and review
  – Business Subject Matter Experts
  – Information Technology Leaders and Data Models
  – Insurance Company representative
  – Solution Providers
  – Consulting Organizations

• Entity-Relationship Modeling

• Leverage OMG Model Driven Architecture Approach

• Multi-phase submission and validation of artifacts
Based on Shared Knowledge

• Use of Donated Artifacts from Participants
  – IBM IAA
  – Maike Associates Insurance Process Model
  – Microsoft Insurance Capability Model
  – Penn National Insurance Data Model
  – Domain contributions from many other participants

• Collaborative working sessions used to develop models

• Result: Model containing over 270 Entities and over 3,000 discrete Attributes
Participants along the way
(Submitters/Reviewers/Advisors)

- Adaptive
- ACORD
- Allstate
- Advanced Systems Management Group (ASMG)
- Insurance Company of the West
- Inherit
- NY Magic
- Ohio Mutual Insurance
- Oracle
- Outline Systems
- Penn National Insurance
- SAS Institute
- Smallwood, Maike & Associates
- Unisys
- Vertafore, Inc.
- Employers Insurance
- Harleysville Insurance Co.
- IBM
- CSC
- Microsoft
- Arbella
- Chordiant
- Embarcadero
- Exigen
- Farmers Mutual Insurance
- ILOG
- Main Street America
- Utica National
- AIG
- Celent
- State Auto
- MetLife
- Progressive
- 21 Century
- LiquidHub
- ACE
- CTS-Consulting
- Accenture
- Tata Consulting
- Donegal Insurance
- iFlex
- Assurant
- CGI

Submission document recognizes key contributors in development effort
Initial Focus of Models

• Reference (Core Model) representing common data entities encompassing most P&C business processes and lines of business (LOB)
  – Personal Lines such as Auto, Homeowners;
  – Commercial Lines such as Commercial Property and Workers Comp
  – Reinsurance Entity, subtype (Facultative & Treaty)
  – Processing data for Rate, Quote, Issue, Endorse, and Renew

• Policy Model referencing data entities used for policy processing

• Claims Model referencing data entities used for claims processing
Current Scope

- Glossary of P&C terms
- Conceptual Data Model representing P&C business concepts
- Logical Data Model with common attributes
- Model Publications:
  - ERwin definition of data model with domains
  - HTML of model diagrams and definitions
  - Spreadsheet of model definitions and relationships
  - XML Metadata Interchange (XMI) format of models for exchange among data modeling, BI, ETL tools, and metadata repository
Not in Current Scope

- Physical Data Model and database schema
- Dimensional Data Model
- Reinsurance Cession sub-model
- Finance and Billing
- Full Distribution and Producer management
- Full traceability and time management
OMG Submission Status Update

for

OMG Property and Casualty Data Model Update Meeting

May 10, 2012
## Summary of Deliverables Produced

<table>
<thead>
<tr>
<th>Mandatory Component</th>
<th>RFP</th>
<th>2011 Deliverables</th>
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<tr>
<td>Glossary of P&amp;C Business Terms</td>
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<tr>
<td>Conceptual Model</td>
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<td>X</td>
</tr>
<tr>
<td>Logical Data Model</td>
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<td>X</td>
</tr>
<tr>
<td>Traceability of P&amp;C Terms to Model</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>XMI Representation of Model</td>
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</table>

<table>
<thead>
<tr>
<th>Optional Components</th>
<th>RFP</th>
<th>2011 Deliverables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensional Model</td>
<td>X</td>
<td>Draft, not submitted</td>
</tr>
</tbody>
</table>
Recent History

• June 2010
  – Initial submission of draft specification to OMG Finance Domain Taskforce

• June 2010 – September 2011
  – Work Group continues refining model and documentation to meet the standards of the Finance Domain Taskforce and OMG Architecture Review Board

• September 2011
  – Architecture Review Board approves specification to initiate Finalization Task Force

• December 2011
  – Finalization Task Force (FTF) Chartered
Finalization Task Force (FTF) Purpose

- Follow OMG protocol to guide submission from current status (Beta specification) in a Formal specification.
- FTF gathers “Issues” on the specification submitted from OMG Members and others, and to decide whether changes are necessary to specification.
- Anyone can log an issue against the specification here: http://www.omg.org/report_issue.htm
- All issues are formally logged, tracked, and resolved as part of the finalization process.
- For the P&C Data Model FTF this external comment period is through August 27, 2012.
FTF Members and Deadlines

• Members
  – Kevin Kauffman, Penn National Insurance
  – Susan Garza, Garza Data Consulting
  – Randall Molnar, CSC
  – Pete Rivett, Adaptive
  – J. D. Baker, Armstrong Process Group
  – Elisa Kendall, Thematix
  – Tom Ford (Chair), LiquidHub

• Deadlines
  – Comments Due: 27 August, 2012
  – Report Due Date: 12 November, 2012
Next Activities with OMG

• Next OMG Technical Meeting is June 18 – 22 in Cambridge, MA
• Meeting of P&C Data Model FTF will be scheduled to review status and any submitted feedback to specification.
The OMG Property and Casualty Data Model and Artifact Overview

for
OMG Property and Casualty Data Model Update Meeting
May 10, 2012
Using the Data Model Publications

Go to [http://www.omgwiki.org/pcwg/doku.php](http://www.omgwiki.org/pcwg/doku.php). You will find:

Property and Casualty Data Model - Conceptual Data Model
- Web Publication ([P&C-CDM-Web-Pub.zip](http://www.omgwiki.org/pcwg/doku.php)) - view the data model diagrams and definitions in a browser
- Excel Workbook ([P&C-CDM-20111012.xlsx](http://www.omgwiki.org/pcwg/doku.php)) - view, sort, lookup, compare the data model object definitions presented in a set of Excel spreadsheets with links
- Erwin Definition ([P&C-CDM-20110831-erwin.zip](http://www.omgwiki.org/pcwg/doku.php)) - data model definition in the data modeling tool, Erwin, for users of this tool

Property and Casualty Data Model - Logical Data Model
- Web Publication ([P&C-LDM-Web-Pub.zip](http://www.omgwiki.org/pcwg/doku.php)) - view the data model diagrams and definitions in a browser
- Excel Workbook ([P&C-LDM-20110901.xlsx](http://www.omgwiki.org/pcwg/doku.php)) - view, sort, lookup, compare the data model object definitions presented in a set of Excel spreadsheets with links
- Erwin Definition ([P&C-DM-20110901-erwin.zip](http://www.omgwiki.org/pcwg/doku.php)) - data model definition in the data modeling tool, Erwin, for users of this tool
- XMI Definition ([P&C-LDM-20110901-xmi.zip](http://www.omgwiki.org/pcwg/doku.php)) - data model definition in standard technical interchange XMI, usable for import into other tools
- SQL Definition for SQL Server ([P&C-RDM-sql.zip](http://www.omgwiki.org/pcwg/doku.php)) - data model definition in Structured Query Language (SQL) to create a SQL Server database
Using the Data Model Publications

- For overall understanding, use Word doc
- For visualization: use html or ERwin publication
- For inventory and definition lists and comparisons in machine-readable format: use Excel workbook.
- For metadata interchange, use xmi
- For database generation, use sql file

Hint: some files that end in “.zip” are not really zip files. Try removing the “.zip” from the ERwin, xmi, and sql files and then they should open successfully. Sorry for inconvenience!
Insurance Industry Models:
ACORD and OMG

An overview and comparison for
OMG Property and Casualty Data
Model Update Meeting
May 10, 2012
Organization Compare

ACORD
- Non-profit
- Membership based
- Membership: mid to large carriers - international
- Standards
  - XML Messages Available to All
  - Framework (Models) for members only or by purchase
- Standards by insurance work group

OMG
- Non-profit
- Community based
- Membership: small to mid size carriers with US Centric focus
- Standards available to all
- Standards by insurance work group and recognized standards body
## Model Approach Compare

<table>
<thead>
<tr>
<th>ACORD</th>
<th>OMG</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Information Model</td>
<td>• Relational Model set:</td>
</tr>
<tr>
<td>• For sale to members or separately (high</td>
<td>conceptual, logical, physical,</td>
</tr>
<tr>
<td>cost)</td>
<td>dimensional</td>
</tr>
<tr>
<td>• Implementation requires adaptation for</td>
<td>• For industry sharing at no cost</td>
</tr>
<tr>
<td>physical implementation</td>
<td>(e.g. open source)</td>
</tr>
<tr>
<td></td>
<td>• Database Implementation-ready</td>
</tr>
<tr>
<td></td>
<td>goal</td>
</tr>
</tbody>
</table>
Model Comparison: Similarities

- Use of “Party” model for all persons and organizations.
- Use of “relationships” and “roles” to put components together
- Common terms, definitions, and concepts reflect some common heritage
- Both lack reinsurance (from Cedant perspective), billing, and financial subject areas
Model Comparison: Differences

- ACORD 2.0 (latest) is an object model and has no relational model.
- OMG 1.0 (in finalization) is a relational model and database-ready.
- ACORD has centralized “role relationship” whereas OMG has specific relationships with role context.
- ACORD publication is in MagicDraw; OMG is published using ERwin with html publication and reports.
Model Usage

• Companies can leverage both models:
• As Reference Models
• Reuse Portions to jump-start efforts
• ACORD Information Model for object technologies
• OMG Data Model for application, data warehouse, data mart databases, and associated metadata.
Future of the Models

• The OMG model is an open standard that is available to the industry with no membership/licensing fees.
• The quality and evolution of the OMG model will be determined by those who see the value and want to participate.
• Will OMG and ACORD ever reconcile to a single standard?
  – there have been conversations between the OMG and ACORD work groups, but at the moment there is no clear path forward to do this.
Next Steps

OMG Property and Casualty Data Model Update Meeting

May 10, 2012
Next Steps

• Communications Team
  – Mobilizing a Communication Team to raise awareness and usage of the model

• Extending the Model
  – Anticipate selecting two of the following 3 domain areas (in order of preference):
    1. Distribution
    2. Billing
    3. Reinsurance
  – Will work as a joint team to ensure consistency, but have specific domain focus for modeling activity

• Call to Action
Call to Action

• Key to progress is the commitment of the participants involved. Several ways to get involved:
  – Review and feedback on existing model
  – Use the model and provide feedback on experience (successes and lessons learned).
  – Volunteer time to participate in development of model extensions

• We rely on (non-monetary) donations
  – Existing artifacts that can “jump start” our work such as existing data models, process models, etc.
  – Subject Matter Experts in insurance data and data modeling
Key Contacts

• P&C Modeling Effort (General Questions)
  – Bill Jenkins (wburrelljenkins@gmail.com)
  – Tom Ford (tom.ford@liquidhub.com)

• Questions/Feedback on existing model
  – Sue Garza (sjgarza@mindspring.com)
  – Tom Ford (tom.ford@liquidhub.com)

• Reporting Issues on existing model
  – Contact Sue and Tom

• Volunteer for Model Extension Team
  – Helena Gordon (hgordon@pnat.com)
  – Sue Garza (sjgarza@mindspring.com)
Q&A