OMG Introduction

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OMG’s Mission

• Focused on *rapidly developing markets* based on open, international, rapidly-developed standards

• Develop an architecture, using appropriate technology, for modeling & distributed application integration, guaranteeing:
  – reusability of components
  – interoperability & portability
  – basis in commercially available software

• Specifications *freely available*

• Implementations exist

• Member-controlled not-for-profit
One Standard?

And the cost of adaptation must be low.

Never let the engineers bring out solution N+1
OMG’s Best-Known Successes

- Common Object Request Broker Architecture/DDS
  - CORBA® (and the DDS™ high-performance Publish/Subscribe model) remain the only language- and platform-neutral interoperability standards
- Unified Modeling Language
  - UML®, the world’s mostly widely adopted standard modeling language
- Common Warehouse Metamodel
  - CWM™, the integration of the last two data warehousing initiatives
- Business Process Modeling Notation
  - BPMN™ widely adopted for business analysis
- Meta-Object Facility
  - MOF™, the language-defining language
- XML Metadata Interchange
  - XMI™, the XML-UML standard
OMG Business Modeling Activity

• Semantics of Business Vocabulary and Rules
  – Consistent rules at the business level
• Case Management Modeling Notation
  – For case-driven business processes
• Business Motivation Metamodel
  – Capturing business focus at the strategy level
• Business Process Modeling Notation
  – World standard for process description
• Business Process Definition Metamodel
  – Connecting BPMN to metamodeling frameworks
• Production Rule Representation
  – Low level rule descriptions
• Business Process Maturity Model
  – Consistent five-level metric for organizational maturity
Flow Notation for the Rest of Us

- BPMN 1.0 originally released by BPMI in May, 2004
- Designed for the business analyst, rather than the programmer
- Now a fully-supported, MOF-defined modeling notation
- Currently supported by more than 40 vendor tools
OMG’s Focus Areas

• Three key “infrastructure” standards foci:
  – Modeling
  – Middleware
  – Real-time & other specialized systems

• More than 20 “vertical market” foci:
  – Civil & Military Government
  – Financial Services
  – Healthcare
  – etc.

• Focused working groups
  – Business Architecture
  – Cloud Computing
  – Software Quality Initiative
Liaison Relationships

- ISO
- OASIS
- IEEE
- W3C
- THE Open Group
- STAR
- Open Health Tools
- AIIM International
- HL7
- INCOSE

PAS Provider
Some of Our Domains

- OMG C4I
- OMG Government
- OMG Finance
- OMG Healthcare
- OMG Business Modeling & Integration
- OMG Space
- OMG Systems Engineering
- OMG Robotics
- OMG Telecom
Some Specific Vertical Efforts

• Civil Government (http://gov.omg.org/)
  – Records Management, NIEM development, Performance Government (procurement)
• Financial Services (http://finance.omg.org/)
  – FIBO business ontology, SMART Regulation, MDMI message interoperability
• Healthcare Services (http://healthcare.omg.org)
  – HL7-integrated health records management, clinical
• Military/Emergency (http://c4i.omg.org/)
  – Situational awareness, tactical analysis, logistics
• Shared Semantics & Business processes
• BUT IT’S NOT JUST ABOUT STANDARDS
Consortium for IT Software Quality

• Evangelize and formalize software quality metrics (including security) to increase software quality in the industry

• Executive Forum with CMU/SEI & OMG oversight

• More than 600 companies to date, important new standards for measuring and reporting software quality, industry focus changing to quality of *artifacts* rather than *processes*
Joint Development & Promotion

Carnegie Mellon Software Engineering Institute

Co-sponsorship

IT Executives → CISQ → Technical experts

www.it-cisq.org
Cloud Council

• Help organizations transition to cloud computing, understand risks (and mitigation) as well as opportunities

• Steering Committee composed of major cloud end-user organizations

• 460+ companies to date; 900+ active individuals with well-regarded white papers on topics from cloud migration to vendor negotiation
Cloud Council: Now 460+ Members

- Provide customer-lead guidance to multiple cloud standards-defining bodies
- Establishing criteria for open standards based cloud computing
- *The Customers’ Voice for Cloud Computing Standards*

2011/2012 Deliverables
- Practical Guide to Cloud Computing
- Practical Guide to Cloud SLAs
- Security for Cloud Computing
- Impact of Cloud Computing on Healthcare

2013 Deliverables
- Convergence of Social, Mobile & Cloud
- Analysis of Public Cloud SLAs
- Cloud Security Standards Landscape
- Migrating Applications to Public Cloud Services

2014 Projects
- Social Business in the Cloud: Achieving Measurable Success
- Practical Guide for Big Data in the Cloud
- DevOps in the Cloud
- Updates to original Practical Guides

http://cloud-council.org/
Resources

- Tremendous free resources:
  - Social Business in the Cloud: Achieving Measurable Business Results
  - Migrating Applications to Public Cloud Services: Roadmap for Success
  - Cloud Security Standards: What to Expect & What to Negotiate
    - http://www.cloud-council.org/security.htm
  - Security for Cloud Computing: 10 Steps to Ensure Success
    - http://www.cloud-council.org/security.htm
  - Convergence of Social, Mobile & Cloud: 7 Steps to Ensure Success
  - Practical Guide to Cloud Computing V1
    - http://www.cloud-council.org/10052011.htm
  - Practical Guide to Cloud SLAs V1
    - http://www.cloud-council.org/04102012.htm
  - Public Cloud Service Agreements: What to Expect & What to Negotiate
    - http://www.cloud-council.org/publiccloudSLA.pdf
  - Impact of Cloud Computing on Healthcare
    - http://www.cloud-council.org/healthcare.htm
OMG is....

• Nearly 25 years of adopted, implemented, worldwide standards with strong liaisons to ISO and other standards organizations
• Vertical-market focus in government, military communications, healthcare, finance, manufacturing, life sciences, ...
• Community of cloud computing adopters willing to share experiences
• Software quality, model-driven integration, certification, support for training, books, magazine articles & blogs, events...