

Enabling Contextual Collaboration in Open Ontology Repository

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- Homepage

- <http://oasis-open.org/committees/icom>

- More info on current developments

- <http://wiki.oasis-open.org/icom>

Integrated Collaboration Object Model

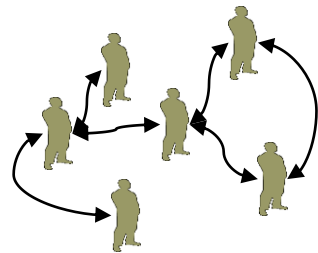
For collaborative creation of global networked knowledge to

- *assist humans, organizations, and systems*
- *augment individual or collective learning and problem solving*
- *encompass multidisciplinary contributions*
- *increase innovation and knowledge production on individual, organizational, and global levels*

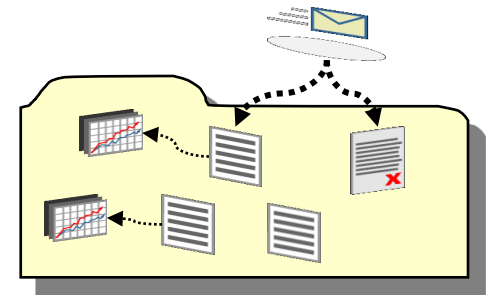
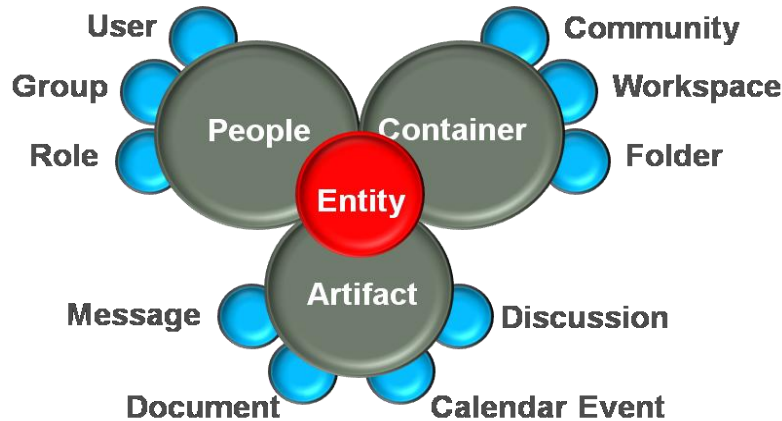
Network of Collaboration Entities

An ontology of user interests and expertise can permeate OOR

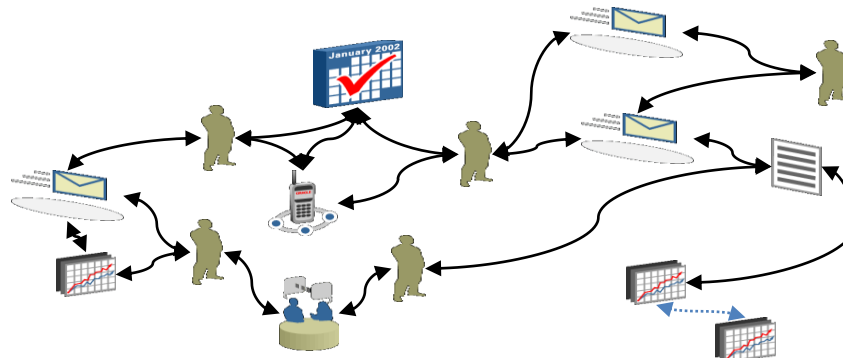
Entity Class Hierarchy



Social Network



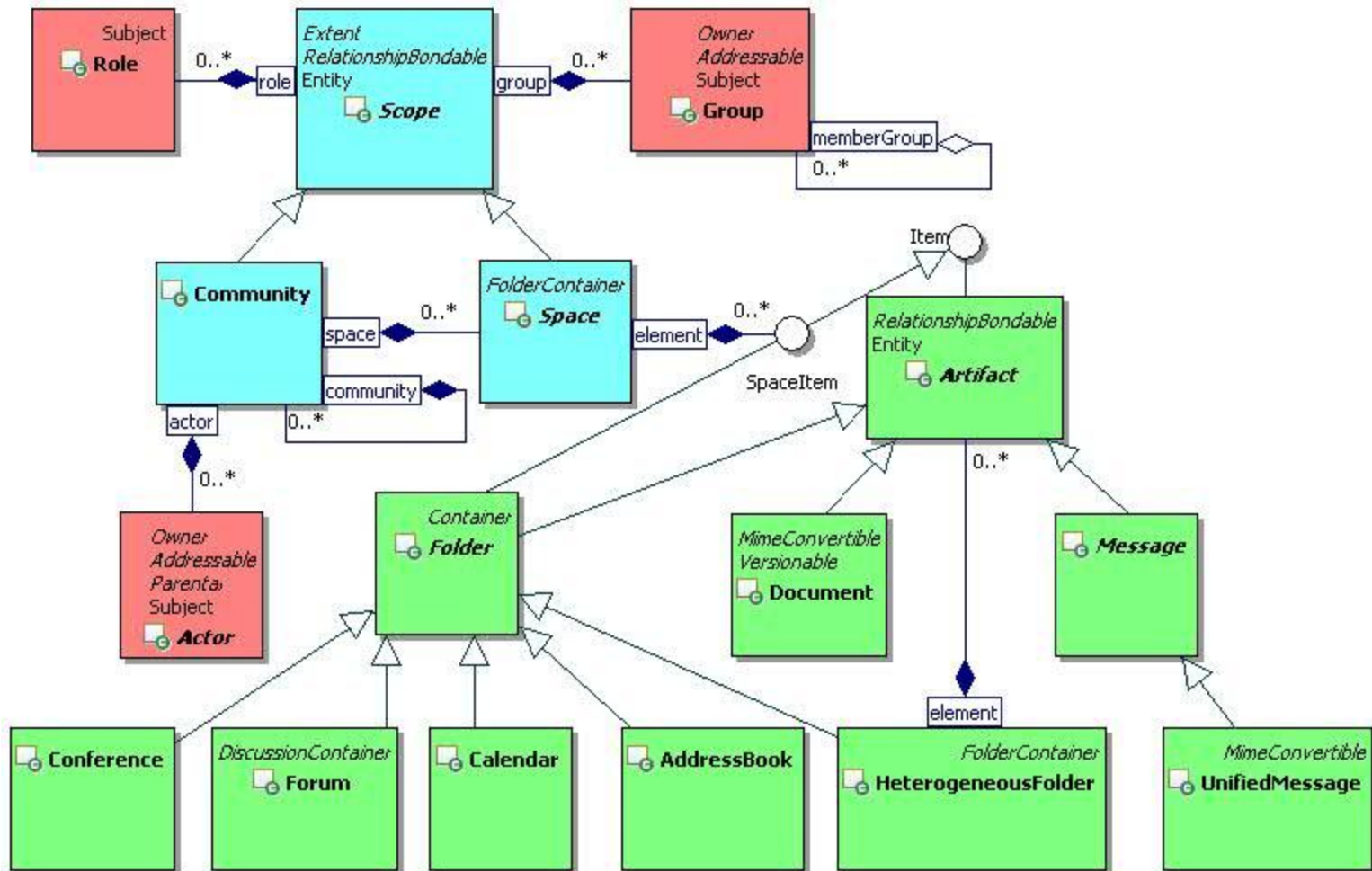
Implicit Relations



Explicit Relations

ICOM Framework

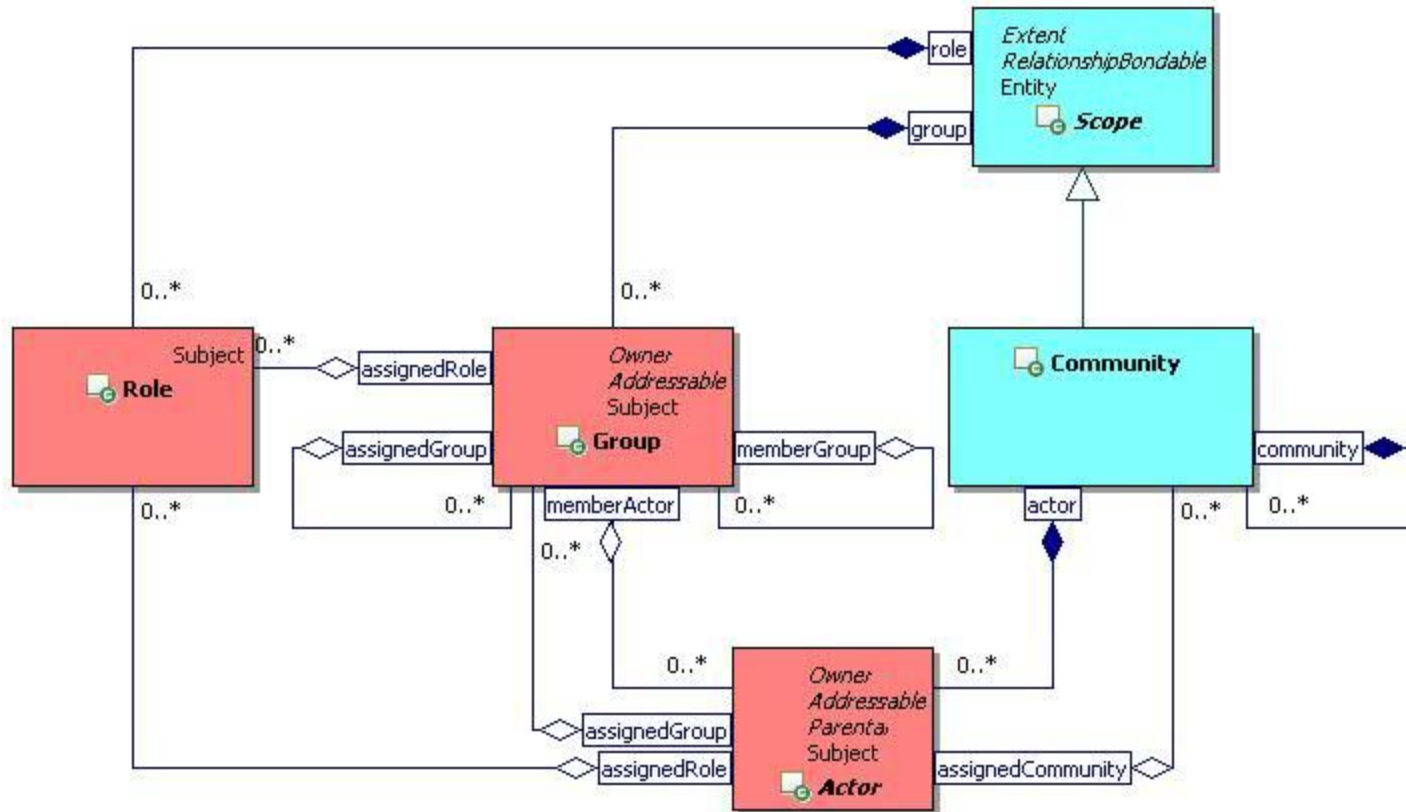
For integrating a broad range of domain models



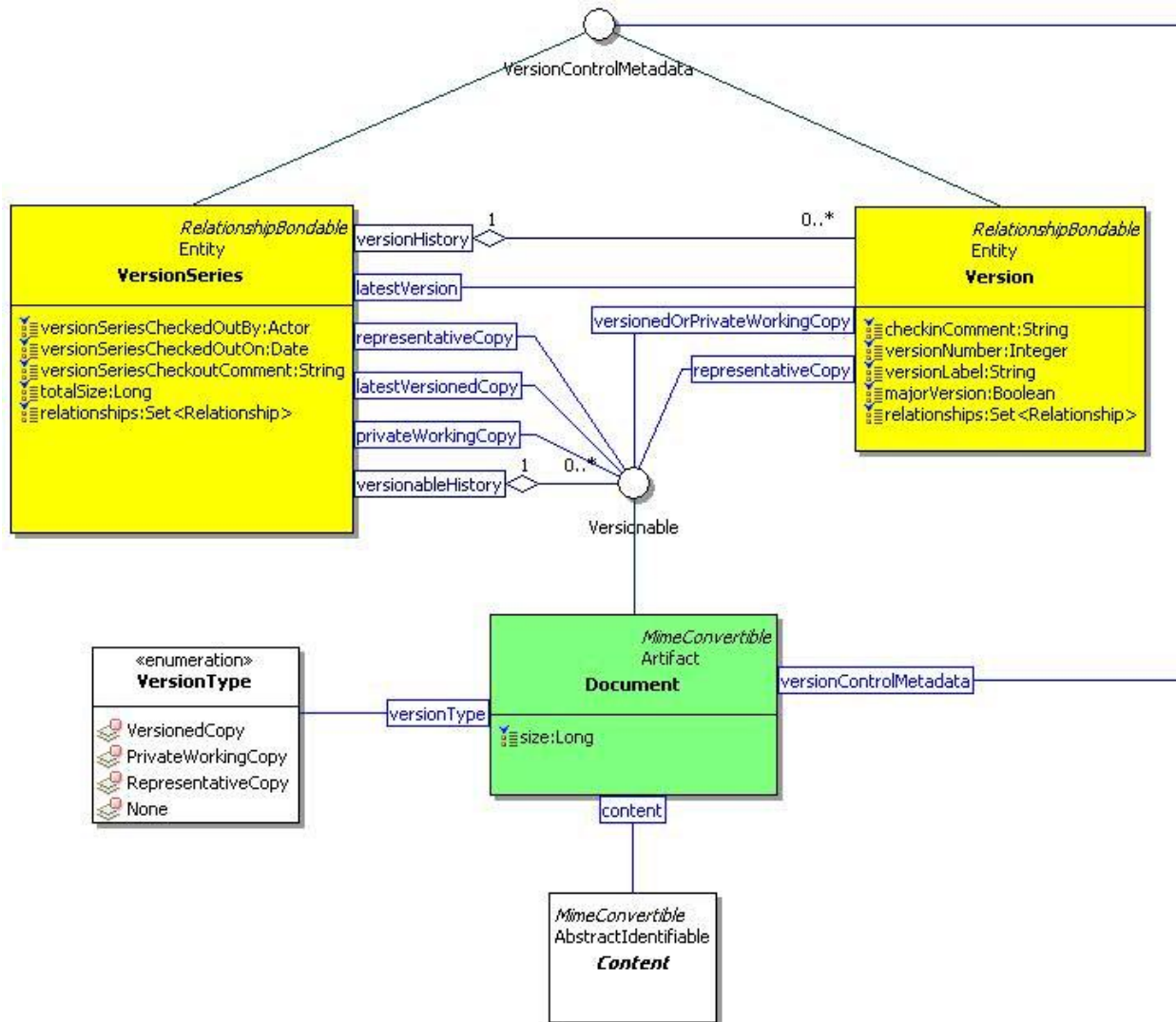
ICOM Encompasses and Improves on Existing Standards



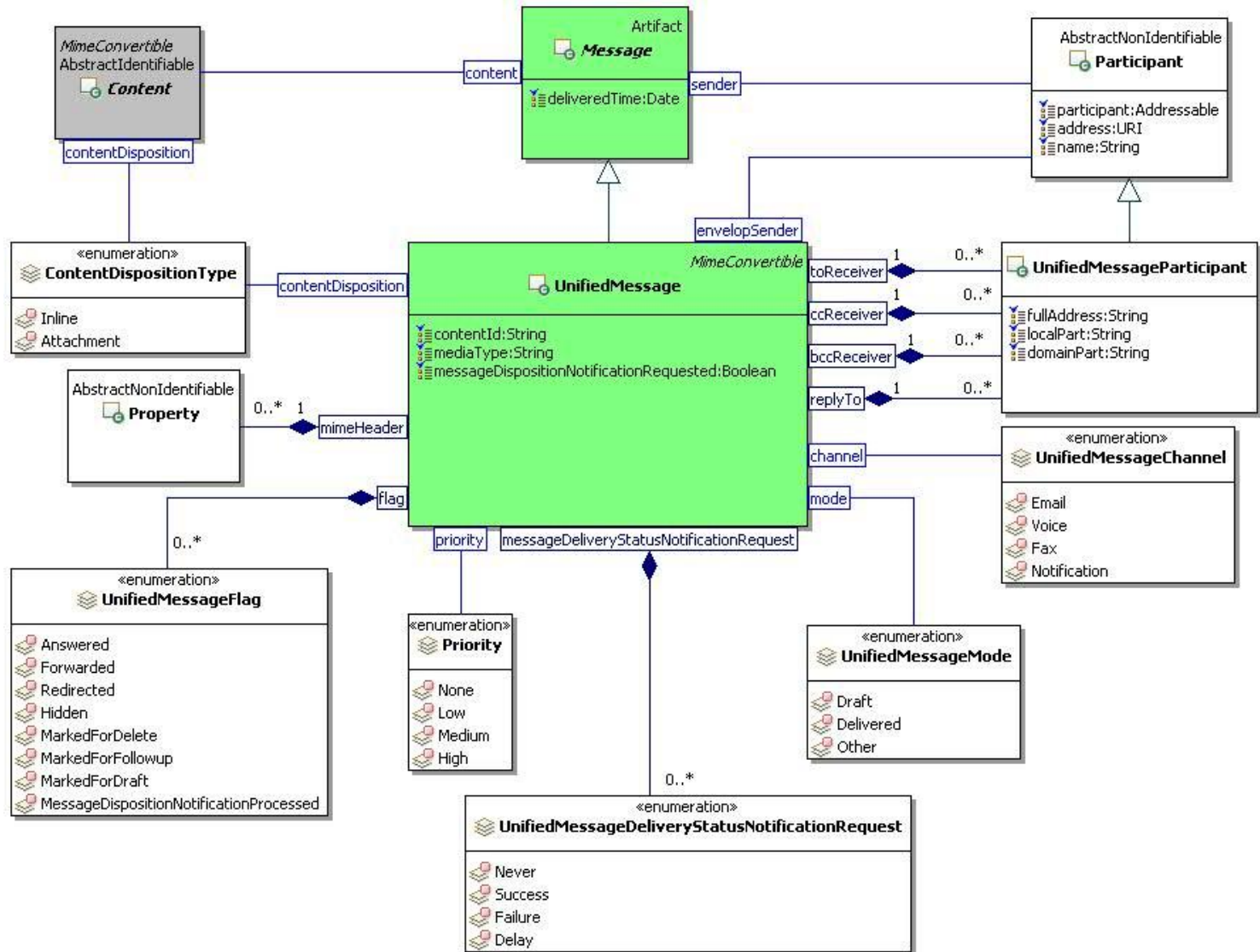
Encompass LDAP Directory



Encompass CMIS Document, Version Control



Encompass MIME, IMAP, SMTP



Collaboration Ontology Permeates OOR

- Collaboration ontology is not just the Tbox concepts but also a dynamic collection of Abox statements
 - Discussion threads are related to ontological resources
 - Ontological resources are related to data, publication, evidence in general content repository
- Knowledgebase for a dynamic Abox ontology of participants' interests and expertise (see [Ontolog OWL-2 panel](#) and [ICOM presentation](#))

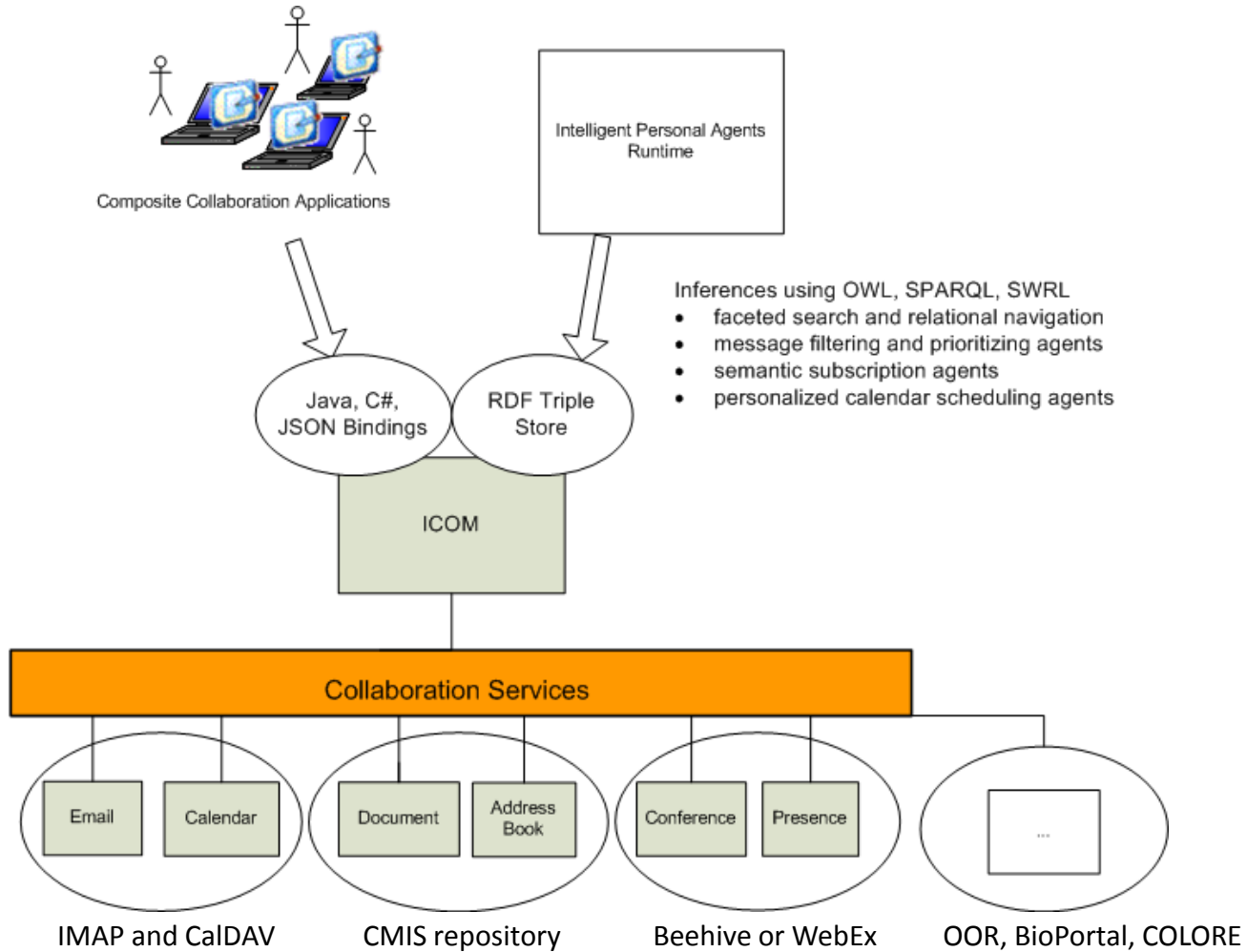
ICOM Containers are active/reactive entities

- Outbox, Calendar, Task List, Forum are reactive entities
 - A unified message created in an Outbox will be delivered into recipient Inboxes.
 - An occurrence created in a Calendar will be delivered into participant Calendars.
 - An announcement in a Forum will be posted or retracted at specified times.
- Conference and Chat Room are highly active entities
- Support rule-based policies and workflows on events in a Container

Policy and Workflows in Containers Induce Business Logics

- ICOM integrates collaboration services which support business logics for well-defined collaboration activities, such as messaging, scheduling, coordination, etc.
- Various rule engines and workflow engines can provide the business logics for OOR containers
- Model of Containers with events, policies, and workflows can supplement the behavioral aspects in OOR

Integration of Services for ICOM



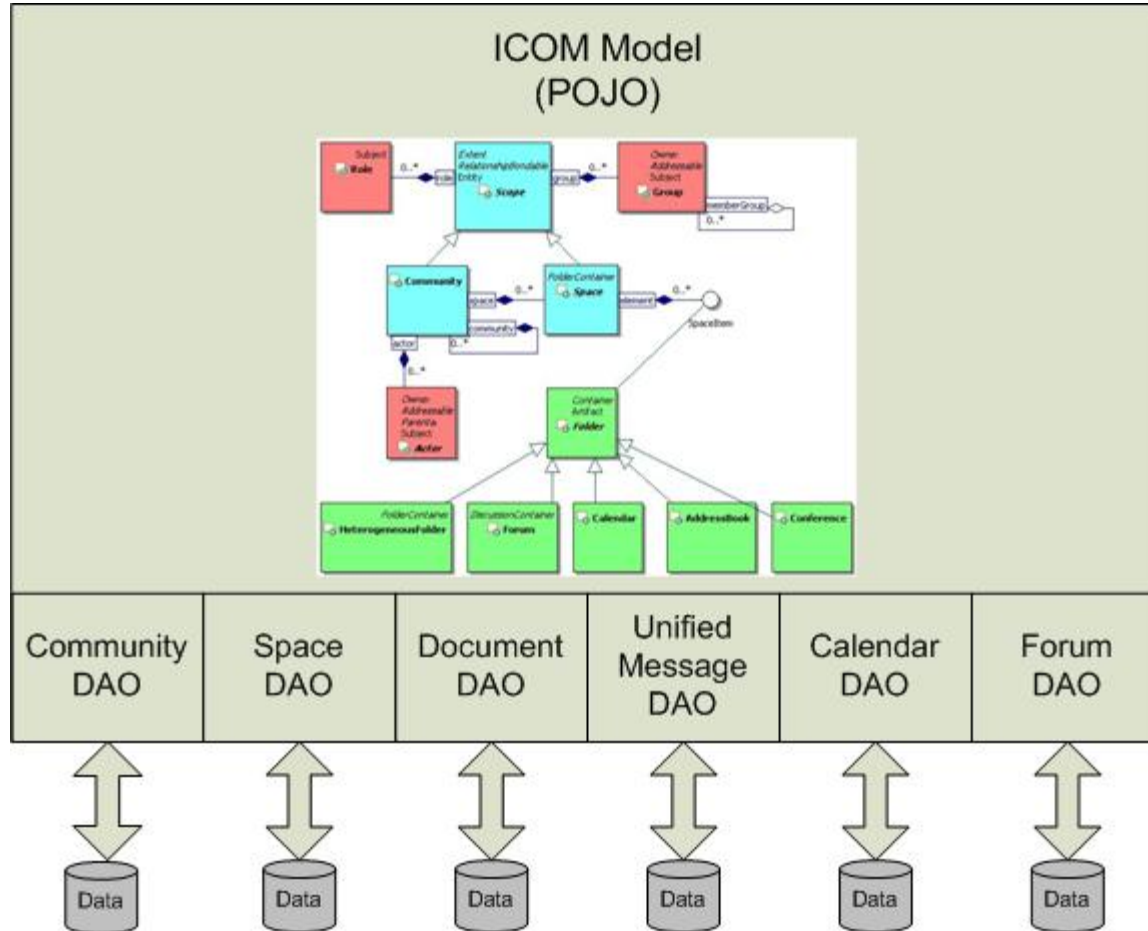
Status of ICOM JPA Source Code Contribution

- Oracle is contributing the JPA prototype framework source code to the ICOM TC for proof of concept of interoperability.
- ICOM TC proposes to incubate the source code under the GlassFish¹ umbrella, which adopts CDDL² V1 or GPL V2 licenses.
- ICOM POJO classes, portable to any JPA runtime, should be released under Library GPL license.

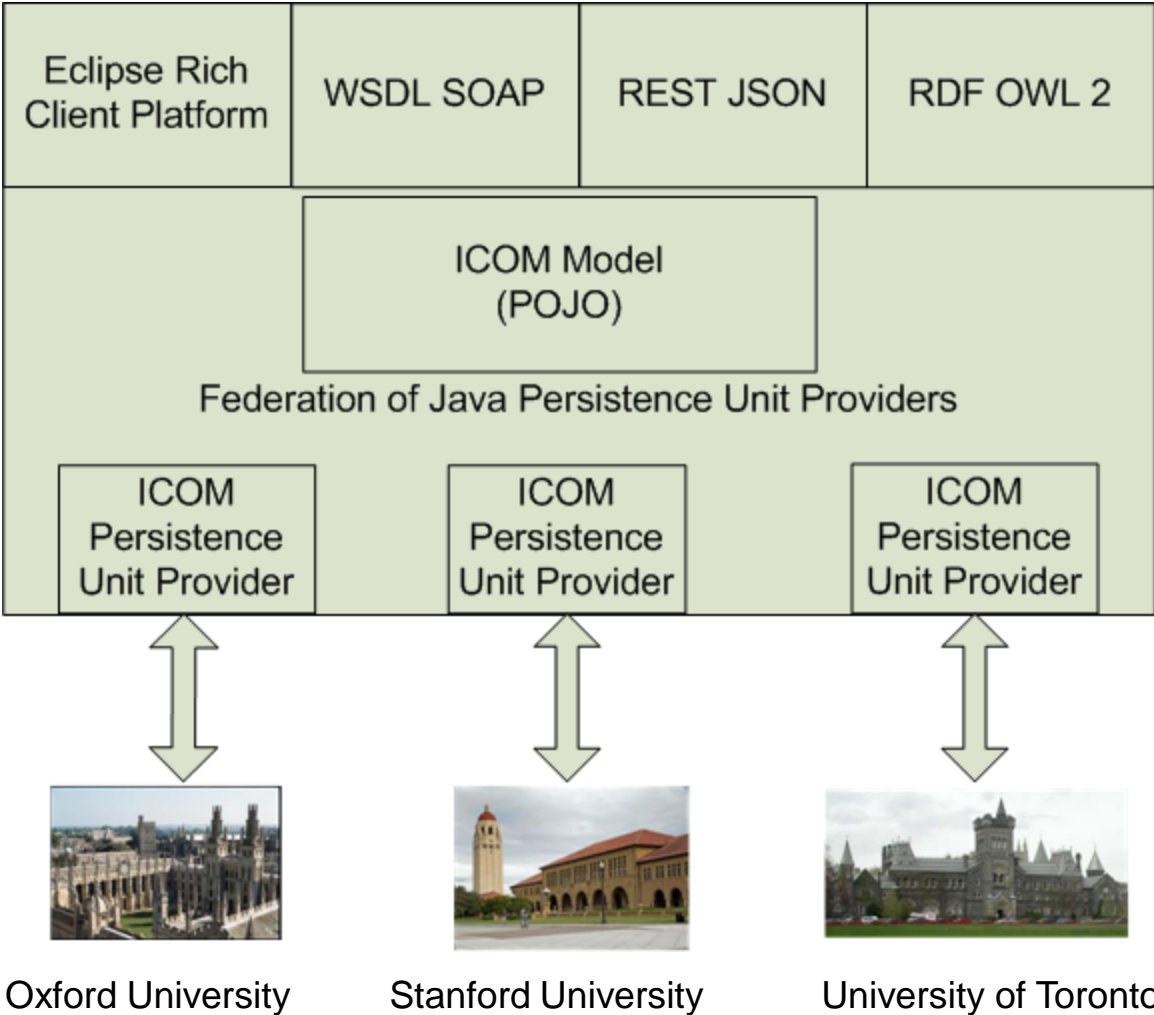
¹ <https://glassfish.dev.java.net/>

² Common Development and Distribution License

Java Persistence API for ICOM



Federation of ICOM Persistence Unit Providers



Summary

- ICOM builds upon existing content management and collaboration solutions
- ICOM is a common bridge between diverse applications
- ICOM leads to more effective collaboration on ontologies at local, enterprise, and international levels.

Acknowledgements

Peter Yim and Patrick Durusau provided valuable comments for the preparation for this presentation.