Eike Stepper

stepper@esc-net.de
http://www.esc-net.de
http://thegordian.blogspot.com
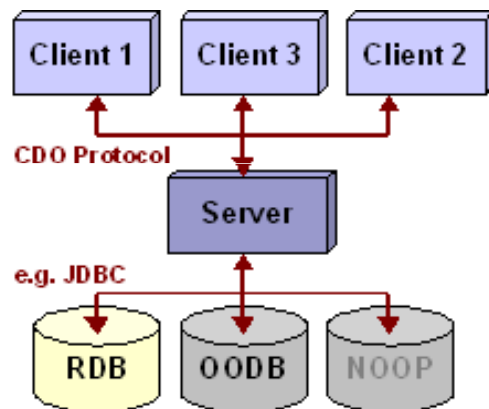
Berlin, Germany

CDO Model Repository

2.0 Release Review

Planned Review Date: **June 10th, 2009**
Project Newsgroup: **eclipse.tools.emf**

Introduction

The CDO (Connected Data Objects) Model Repository is a distributed shared model framework for EMF models and meta models. CDO is also a model runtime environment with a focus on orthogonal aspects like model scalability, transactionality, persistence, distribution, queries and more.

CDO has a 3-tier architecture supporting EMF-based client applications, featuring a central model repository server and leveraging different types of pluggable data storage back-ends like relational databases, object databases and file systems. The default client/server communication protocol is implemented with the Net4j Signalling Platform.

Project URL: http://www.eclipse.org/cdo
old: http://wiki.eclipse.org/CDO

Major New Features in 2.0

§ **Distributed transactions (XA)**

§ **Save points in transactions**

§ **Change subscription policies**

§ **Query framework**

§ **External references and containment proxies**

§ **Support for arrays, feature maps and default values**

§ **Memory sensitive and fixed size caching**

§ **Nestable resource folders in the repository**

§ **Resources and folders can be moved and deleted**

§ **EPackages on the repository server**

New features:
129 **total**

Major New Features in 2.0 (cont'd)

§ **Partial collection loading and adaptive prefetching**

§ **Progress monitoring for commit operations**

§ **Configurable passive updates and session re-synchonization**

§ **Import and export of resources**

§ **Optional explicit locking**

§ **Pluggable authentication**

§ **Server-side hooks for read and write access**

§ **Improved protocol timeout handling**

§ **Integrations with EFS, Team, CNF and GMF**

Other Release Highlights

§ **Quality of APIs**
   § 2.0 API is partly incompatible with 1.0
   § API Toling has been used consequently

§ **End of Life**
   § None

§ **IP**
   § IP Log URL: http://www.eclipse.org/modeling/emf/cdo/project-info/eclipse-project-ip-log.csv
   § No issues

§ **Committer Diversity**
   § 7 committers from 7 different companies
   § Several additions to the team are pending

Project Activity Since 1.0

§ **Bugzilla**

   § 127 of 254 enhancements done (106 left open)

   § 121 of 173 bugs fixed (16 left open)

§ **CVS**

   § 44187 changed lines of code committed (incl. Net4j)

§ **Communication**

   § More than 2000 newsgroup posts

   § Talks at EclipseCon, ESE, JAX, several demo camps

   § Webinar and several magazine articles

Schedule

§ **Galileo**

  § All release train schedules were met
  § Weekly integration builds on modeling update site

§ **Ganymede**

  § 9 maintenance builds were delivered
  § Including SR1 and SR2

§ **Plan URL**

  § http://www.eclipse.org/projects/project-plan.php?planurl=http://www.eclipse.org/modeling/emf/cdo/project-info/plan.xml&component=CDO+Model+Repository