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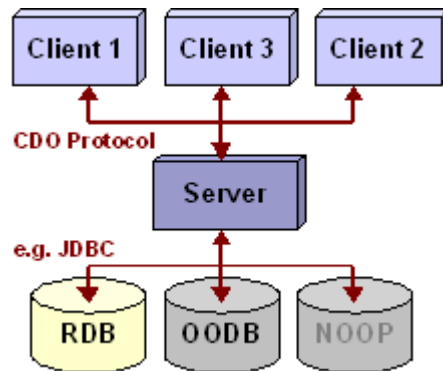


# CDO Model Repository

## 4.0 Release Review



# 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 4.0

- **SSL connections**
- **MongoDB database integration**
- **DB4O database integration**
- **DB2 database integration**
- **Remote cross referencing**
- **Thread-safe views and transactions**
- **Commit handlers and loggers**
- **Notifications for branch switch / rollback**
- **Mapping of EModelElements**
- **Remerging of branches**



New features:  
111 total

# Major New Features in 4.0 (cont'd)

- **Generic backup / restore with XML format**
- **Direct XML export from CDOResources**
- **CDO Server Browser through HTTP**
- **URLs with connection info**
- **Fail-over monitors / agents**
- **Load balancing**
- **Streaming of large objects**
- **Containment cycle detection**
- **Referential integrity enforcement option**

# Major New Features in 4.0 (cont'd)

- **Sticky views and transactions**
- **Fault tolerant sessions**
- **Server-side views and Eobjects**
- **Scalable EContentAdapter**
- **Scalable ModificationTrackingAdapter**
- **OCL query language handler**
- **Dawn: EcoreTools diagramming support**
- **Dawn: EMF tree editing support**

# Other Release Highlights

- **Net4j is now a component of CDO**
- **Quality of APIs**
  - 4.0 API is partly incompatible with 3.0
  - API Tooling has been used consequently
- **IP**
  - IP Log URL:  
[http://www.eclipse.org/projects/ip\\_log.php?projectid=modeling.emf.cdo](http://www.eclipse.org/projects/ip_log.php?projectid=modeling.emf.cdo)
- **Committer Diversity**
  - 10 committers from 9 different companies (+1)
  - One addition to the team is pending

# Project Activity Since 3.0

- **Bugzilla**
  - 111 of 274 enhancements done (163 left open)
  - 172 of 229 bugs fixed (57 left open)
- **Source repository**
  - Successful migration from CVS to SVN
- **Communication**
  - 1283 newsgroup posts over last year
  - Talks at EclipseCon, ESE, JAX, several demo camps

# Schedule

- **Indigo**

- All release train schedules were met
- Continuous integration builds on Hudson

- **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>