**Power to the People**

Major improvements in the API and configuration will give clients considerably more control over the behaviour and performance of their repositories and sessions.

* **Committed**
  + Explicit locking [[247427](http://bugs.eclipse.org/247427)]
  + [UI] Lock objects from CDOEditor (READ/WRITE) [[255094](http://bugs.eclipse.org/255094)]
  + Create save points [[215688](http://bugs.eclipse.org/215688)]
  + Make MEMStore more configurable [[245944](http://bugs.eclipse.org/245944)]
  + [Hibernate] Make it possible to override standard Teneo extensions [[247709](http://bugs.eclipse.org/247709)]
  + Make remote invalidation configurable [[230832](http://bugs.eclipse.org/230832)]
  + [QUERY] Develop Query mechanism [[233273](http://bugs.eclipse.org/233273)]
  + Automatic link persistence objects together [[233277](http://bugs.eclipse.org/233277)]
  + Add CDOTransactionHandler.rollingbackTransaction() [[233314](http://bugs.eclipse.org/233314)]
  + Change Subscription [[233490](http://bugs.eclipse.org/233490)]
  + Add detach object handling to CDOTransactionHandler [[247143](http://bugs.eclipse.org/247143)]
  + Provide a CDOSession.setInitialReferenceChunkSize() [[248017](http://bugs.eclipse.org/248017)]
  + CDOPackageRegistryImpl should offer delegation [[250064](http://bugs.eclipse.org/250064)]
  + Add resource queries [[208689](http://bugs.eclipse.org/208689)]
  + Make timeouts in read-access requests configurable [[241464](http://bugs.eclipse.org/241464)]
  + Add caching properties to CDOSessionConfiguration [[243279](http://bugs.eclipse.org/243279)]
  + Implement shortcut for transaction.getObject(object.cdoId()) [[243287](http://bugs.eclipse.org/243287)]
  + Export resource to XMI [[244801](http://bugs.eclipse.org/244801)]
  + Prefix for EClass names in DBStore [[247428](http://bugs.eclipse.org/247428)]
  + Support CDOAudit.setTimeStamp() [[248325](http://bugs.eclipse.org/248325)]
  + Provide interceptors at the server-side to run validation, filtering, ... [[249278](http://bugs.eclipse.org/249278)]
  + Provide the userID also for CDOProtocolSession through IUserAware [[249297](http://bugs.eclipse.org/249297)]
  + Provide a public view lock to protect clients against remote invalidation [[249536](http://bugs.eclipse.org/249536)]
  + Store resources in a hierarchical structure [[249847](http://bugs.eclipse.org/249847)]
* **Proposed**
  + Implement a way to check the result of getResource() [[247457](http://bugs.eclipse.org/247457)]
  + [DB] Support non-auditing mode [[253110](http://bugs.eclipse.org/253110)]
  + [UI] Provide a user interface for changing the CDOAudit time [[248936](http://bugs.eclipse.org/248936)]
* **Deferred**
  + [UI] Make autoReload in CDOEditor configurable [[205663](http://bugs.eclipse.org/205663)]
  + [DB] Option to generate single-column PK when in auditing mode [[217083](http://bugs.eclipse.org/217083)]
  + [UI] Importing multiple inter-dependant resources [[242155](http://bugs.eclipse.org/242155)]
  + [UI] Specifying new Decorator for CDOLabelProvider [[247281](http://bugs.eclipse.org/247281)]

**Appealing to a Broader Community**

The CDO project has a proven record of robustness and flexibility. However, in the past best results could only be achieved with EMF models specifically generated for the usage with CDO. The upcoming 2.0 release will be less invasive to the client models and applications by being better aligned with EMF and other standards.

* **Committed**
  + Implement detach [[204890](http://bugs.eclipse.org/204890)]
  + Manage the "isLoaded" property of CDOResource [[248296](http://bugs.eclipse.org/248296)]
  + Implement getURIFragment and getEObject [[226778](http://bugs.eclipse.org/226778)]
  + Support containment proxies [[246705](http://bugs.eclipse.org/246705)]
  + Implement Resource.delete() [[246844](http://bugs.eclipse.org/246844)]
  + Support external references [[213402](http://bugs.eclipse.org/213402)]
  + Support distributed transactions [[213403](http://bugs.eclipse.org/213403)]
* **Proposed**
  + Towards a new CDO URI format and handling [[244800](http://bugs.eclipse.org/244800)]
  + CDO Enhanced Editor Generator [[245836](http://bugs.eclipse.org/245836)]
  + CDO Resource Launcher [[246623](http://bugs.eclipse.org/246623)]
  + Manage CDOResource's time stamp [[247865](http://bugs.eclipse.org/247865)]
  + Getting information of a CDO URI. [[247873](http://bugs.eclipse.org/247873)]
  + [Hibernate] Support external references [[249611](http://bugs.eclipse.org/249611)]
  + [DB] Support external references (Implementation) [[249610](http://bugs.eclipse.org/249610)]
  + Support FeatureMap [[249436](http://bugs.eclipse.org/249436)]
  + Transparently support legacy models [[247226](http://bugs.eclipse.org/247226)]
* **Deferred**
  + Commit generated models to the server [[229126](http://bugs.eclipse.org/229126)]
  + [Hibernate] Store to support auditing mode [[244141](http://bugs.eclipse.org/244141)]
  + [Query] Provide OCL query language [[245658](http://bugs.eclipse.org/245658)]
  + Develop EFS provider [[246703](http://bugs.eclipse.org/246703)]
  + [DB] Support SQL as a CDOQuery language [[248933](http://bugs.eclipse.org/248933)]
  + [Hibernate] Store to support Query (HQL) [[244169](http://bugs.eclipse.org/244169)]
  + Provide support for multivalued attributes [[228190](http://bugs.eclipse.org/228190)]
  + [JPA] Standard layer for persistence and Transaction management [[233276](http://bugs.eclipse.org/233276)]
  + Create a lazy self-attaching adapter for CDOObject [[247141](http://bugs.eclipse.org/247141)]

**Lighter, Faster and Better**

The CDO project has a proven track record of quality, reliability, and extensibility but all these aspects can be continuously improved. Existing and new clients often desire more functionality from the framework while long established clients generally desire mostly improvements in performance. Often these two are at odds since additional extensibility often has a performance cost and any changes, even performance boosting ones, potentially impact reliability. Every effort will be made to introduce new capabilities so that they have negligible impact on established clients based on the guiding principle: if you don't use it, you don't pay for it. Because service and support has and always will take priority over new development work, development commitments and schedules are subject to arbitrary change, slippage, or even deferral. Be sure to establish direct communication to ensure that any hard commitments are seen as that by the development team itself!

* **Committed**
  + [DB] Use prepared statements if appropriate [[214487](http://bugs.eclipse.org/214487)]
  + Provide a two level revision cache [[245947](http://bugs.eclipse.org/245947)]
  + Change the default revision cache to TwoLevelRevisionCache [[245950](http://bugs.eclipse.org/245950)]
  + [PERF] Optimize CDOTransactionImpl.AnalyzeNewPackage [[246465](http://bugs.eclipse.org/246465)]
  + [POLISH] Remove uniqueResourceContents [[247174](http://bugs.eclipse.org/247174)]
  + [PERF] ModelUtil.getCDOFeature(eFeature, packageManager) [[247764](http://bugs.eclipse.org/247764)]
  + Refactor CDOView.setLoadRevisionCollectionChunkSize [[248062](http://bugs.eclipse.org/248062)]
  + Provide optional pooling of store accessors [[216586](http://bugs.eclipse.org/216586)]
  + [Hibernate] Hide internal code [[238889](http://bugs.eclipse.org/238889)]
  + Provide memory sensitive revision cache [[245794](http://bugs.eclipse.org/245794)]
  + Remove unnecessary traversals in CompletePackageClosure [[245795](http://bugs.eclipse.org/245795)]
  + Optimize transfer of Package URIs [[246454](http://bugs.eclipse.org/246454)]
  + Remove NOOPStore [[247117](http://bugs.eclipse.org/247117)]
  + Protect closed sessions and their views against illegal usage [[248997](http://bugs.eclipse.org/248997)]
  + [DB] Create DB indexes for mapped tables [[250411](http://bugs.eclipse.org/250411)]
  + Enhance the way stores express their capabilities [[250809](http://bugs.eclipse.org/250809)]
  + [POLISH] Consolidate IStoreAccessor SPI [[252311](http://bugs.eclipse.org/252311)]
* **Proposed**
  + Objects are GC'ed out of a view even when adapters are attached [[250486](http://bugs.eclipse.org/250486)]
  + Make CDORevisionDelta <--> CDOFeatureDelta bidirectional [[246629](http://bugs.eclipse.org/246629)]
  + More client-side intelligence (SmartReadAhead Thread) [[202064](http://bugs.eclipse.org/202064)]
  + Better CDORevision list implementation for UNINITIALIZED data [[214477](http://bugs.eclipse.org/214477)]
  + [DB] Decrease amount of database queries [[249681](http://bugs.eclipse.org/249681)]
* **Deferred**
  + Implement a new EMAP to have better performance for big collection [[233495](http://bugs.eclipse.org/233495)]
  + Optimize CDOTransaction.rollback(SavePoint) [[240247](http://bugs.eclipse.org/240247)]
  + Remove connector dependency from CDOSessionImpl [[214476](http://bugs.eclipse.org/214476)]
  + Multiple CDO Servers (failover+loadbalancing) [[203167](http://bugs.eclipse.org/203167)]
  + LoadRevisionIndication should stream the revision [[203182](http://bugs.eclipse.org/203182)]