

Eike Stepper

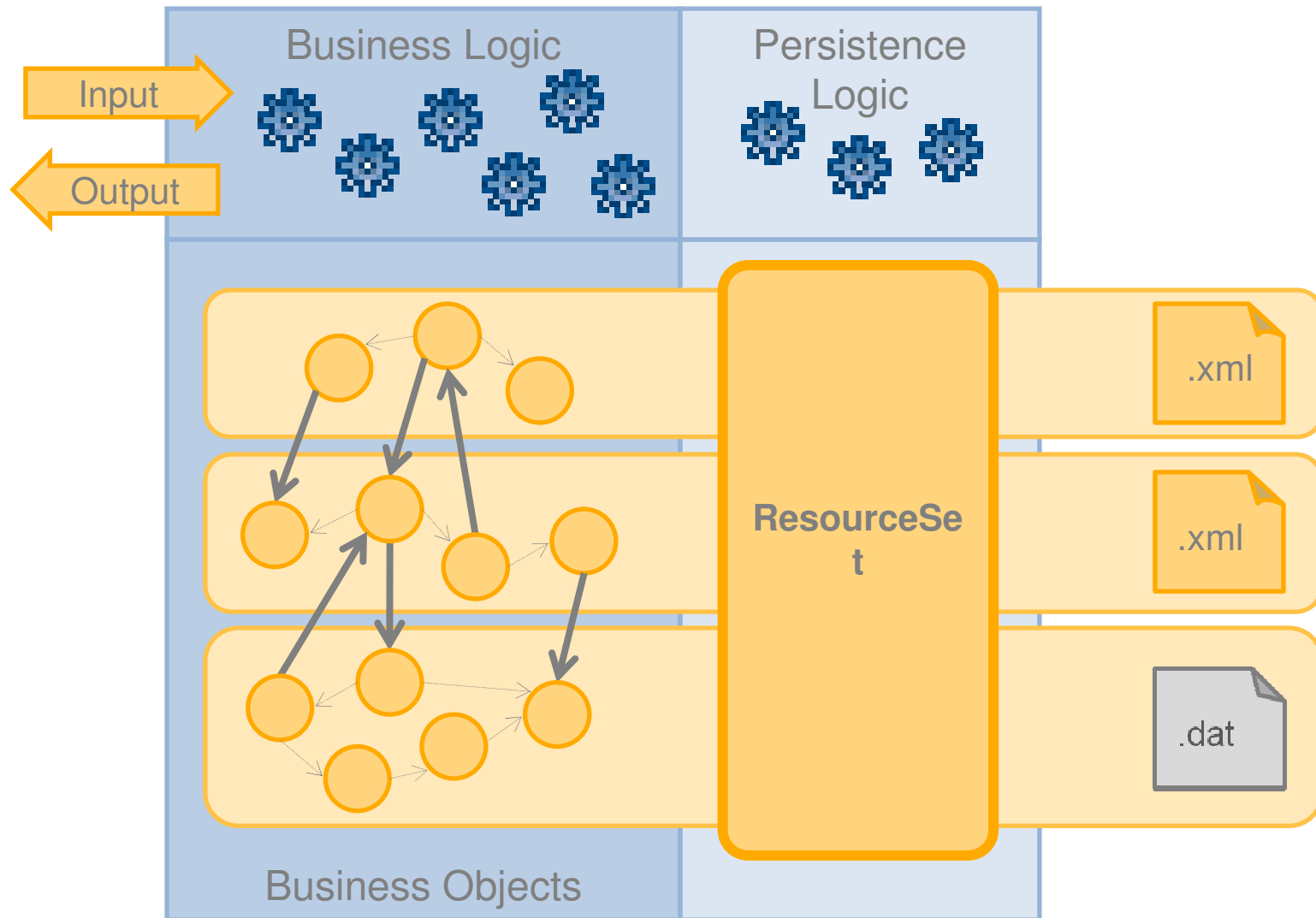
stepper@esc-net.de
<http://www.esc-net.de>
<http://thegordian.blogspot.com>

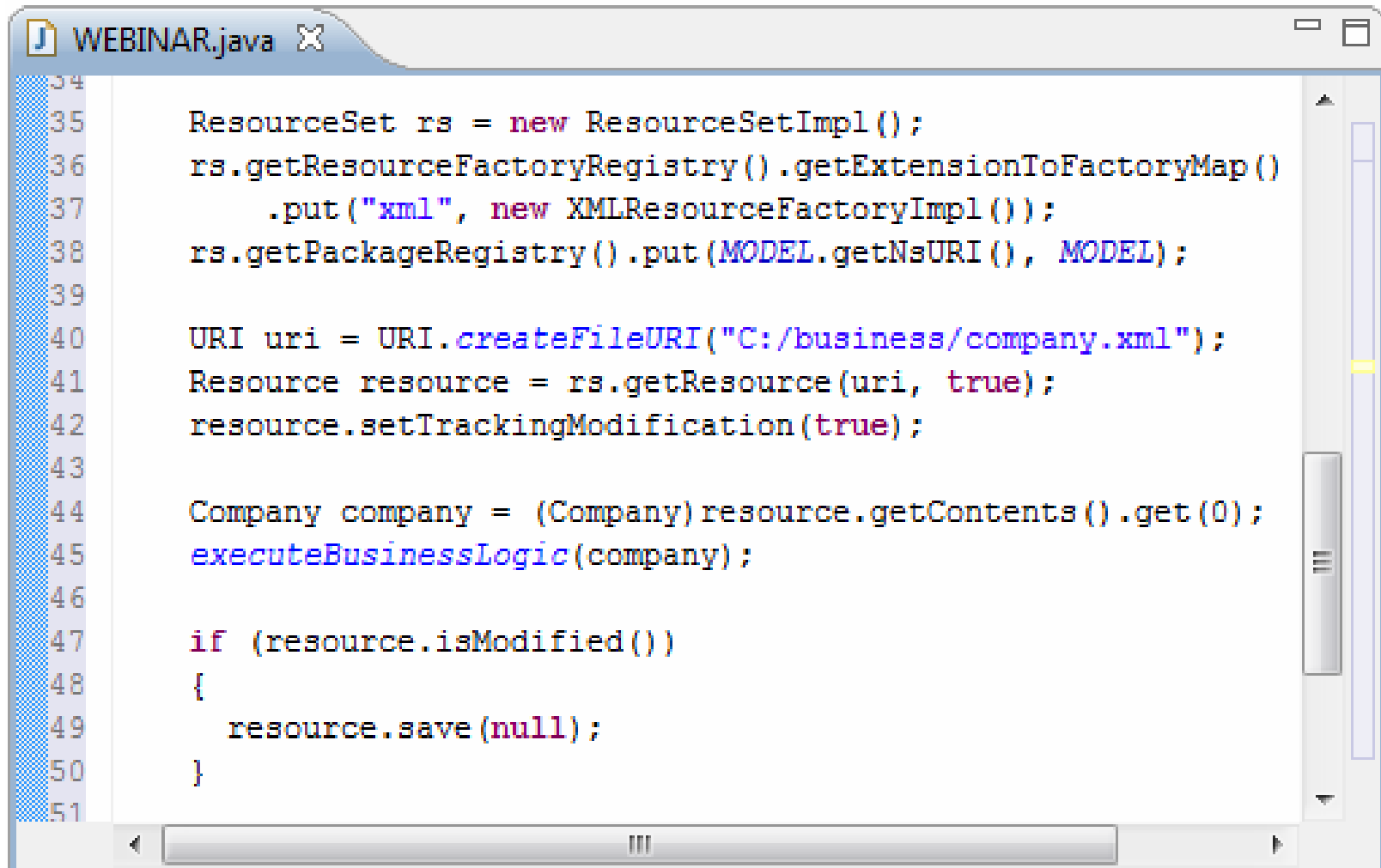
Berlin, Germany



Modeling on an Enterprise Scale

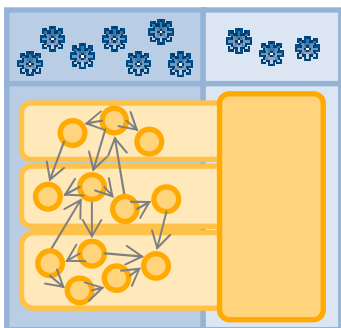
**Eclipse Modeling Day
Monday, November 16, 2009
Credit Suisse Offices, New York, NY**





```
34
35 ResourceSet rs = new ResourceSetImpl();
36 rs.getResourceFactoryRegistry().getExtensionToFactoryMap()
37     .put("xml", new XMLResourceFactoryImpl());
38 rs.getPackageRegistry().put(MODEL.getNsURI(), MODEL);
39
40 URI uri = URI.createFileURI("C:/business/company.xml");
41 Resource resource = rs.getResource(uri, true);
42 resource.setTrackingModification(true);
43
44 Company company = (Company) resource.getContents().get(0);
45 executeBusinessLogic(company);
46
47 if (resource.isModified())
48 {
49     resource.save(null);
50 }
51
```

Business Objects



CDO Model Repository Framework

Scalability

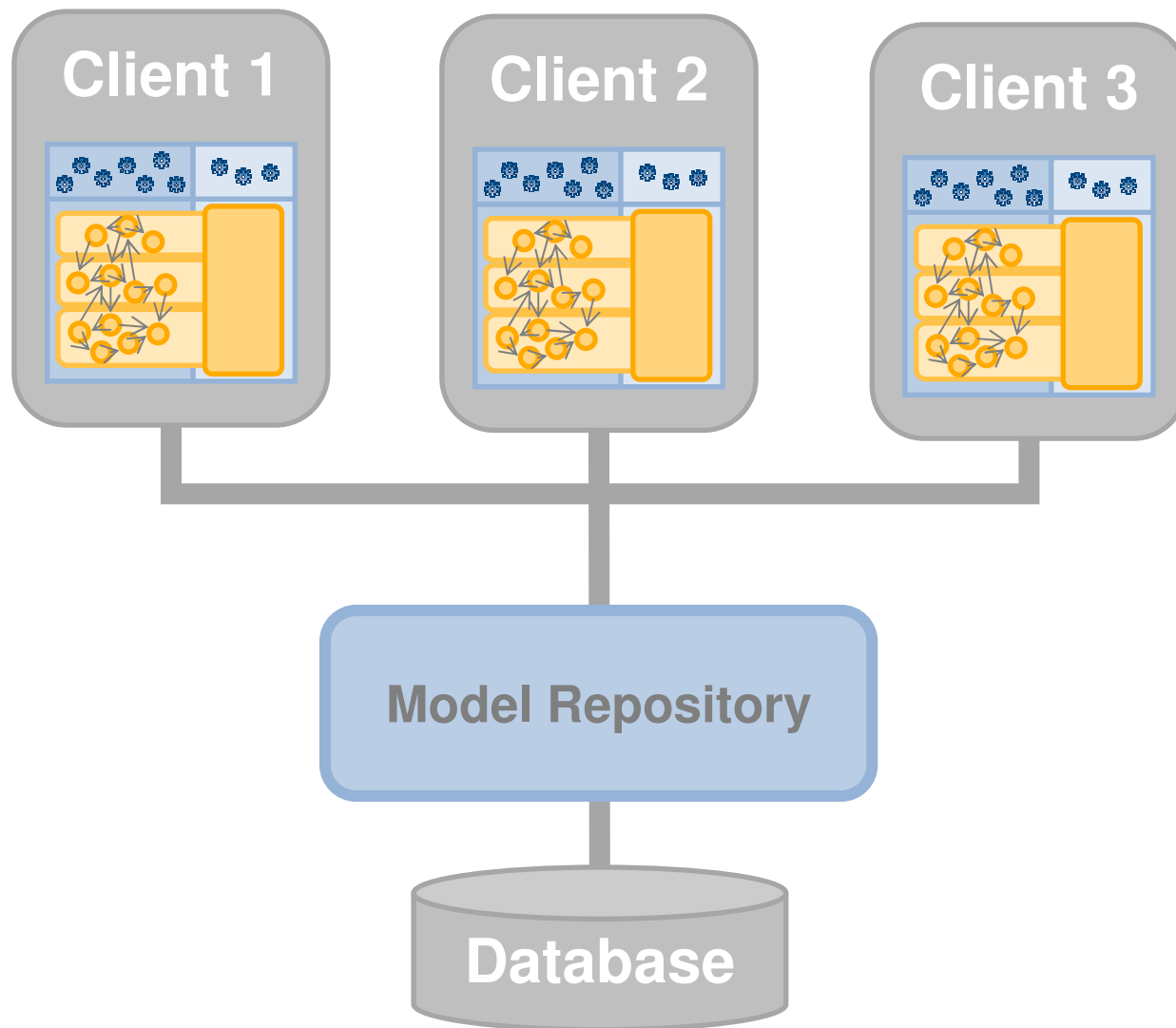
Distribution

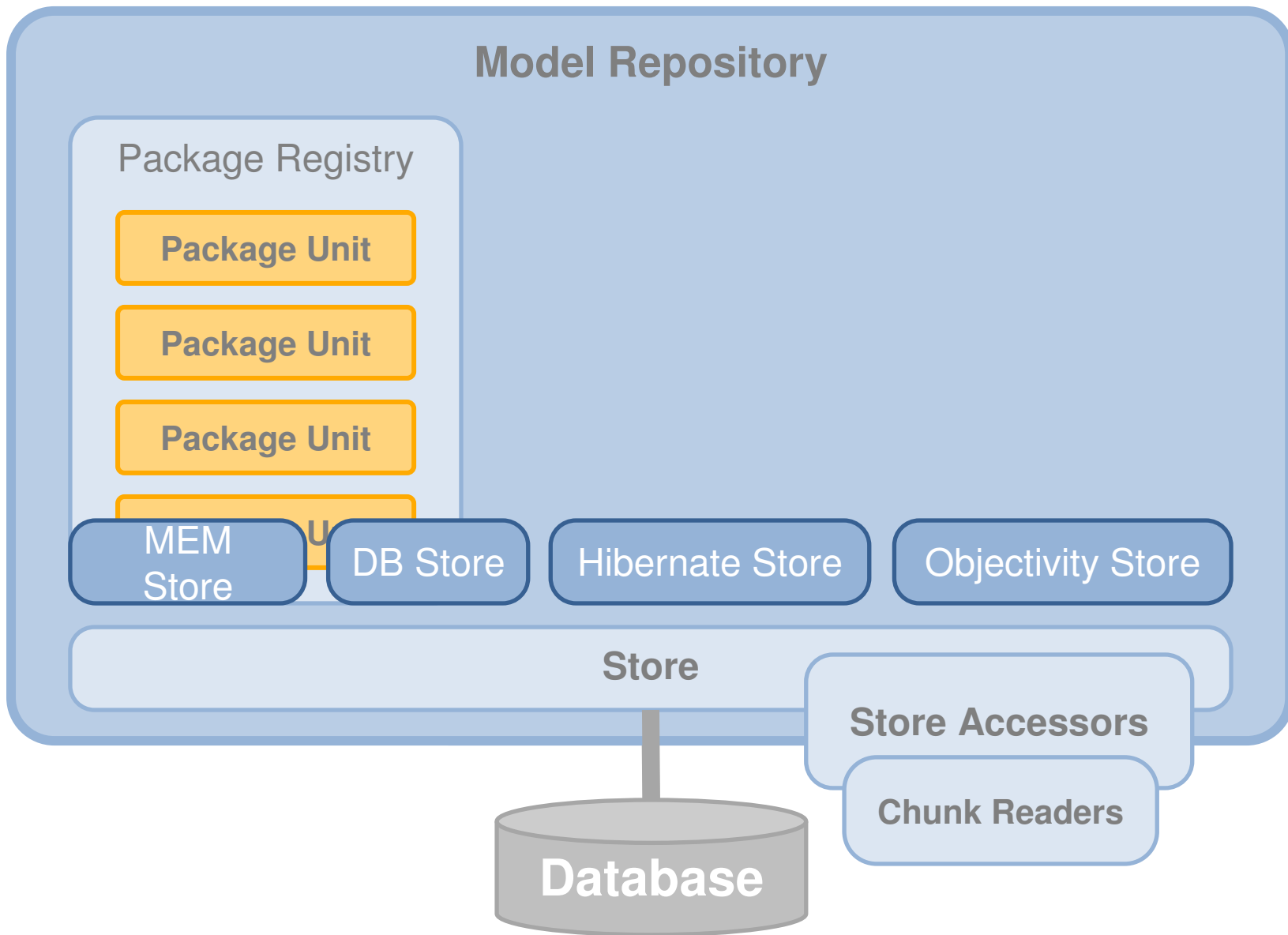
Transactions

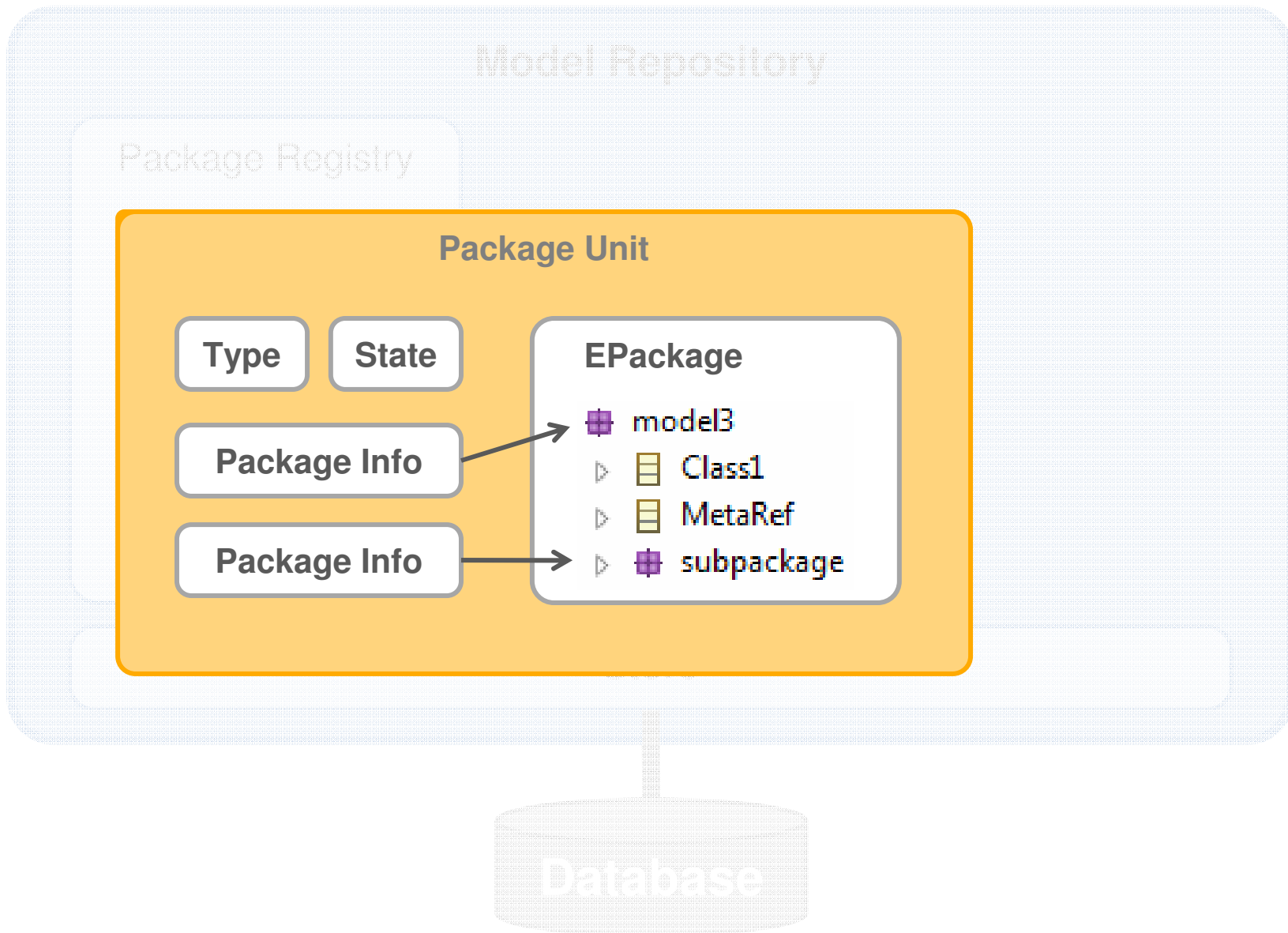
Queries

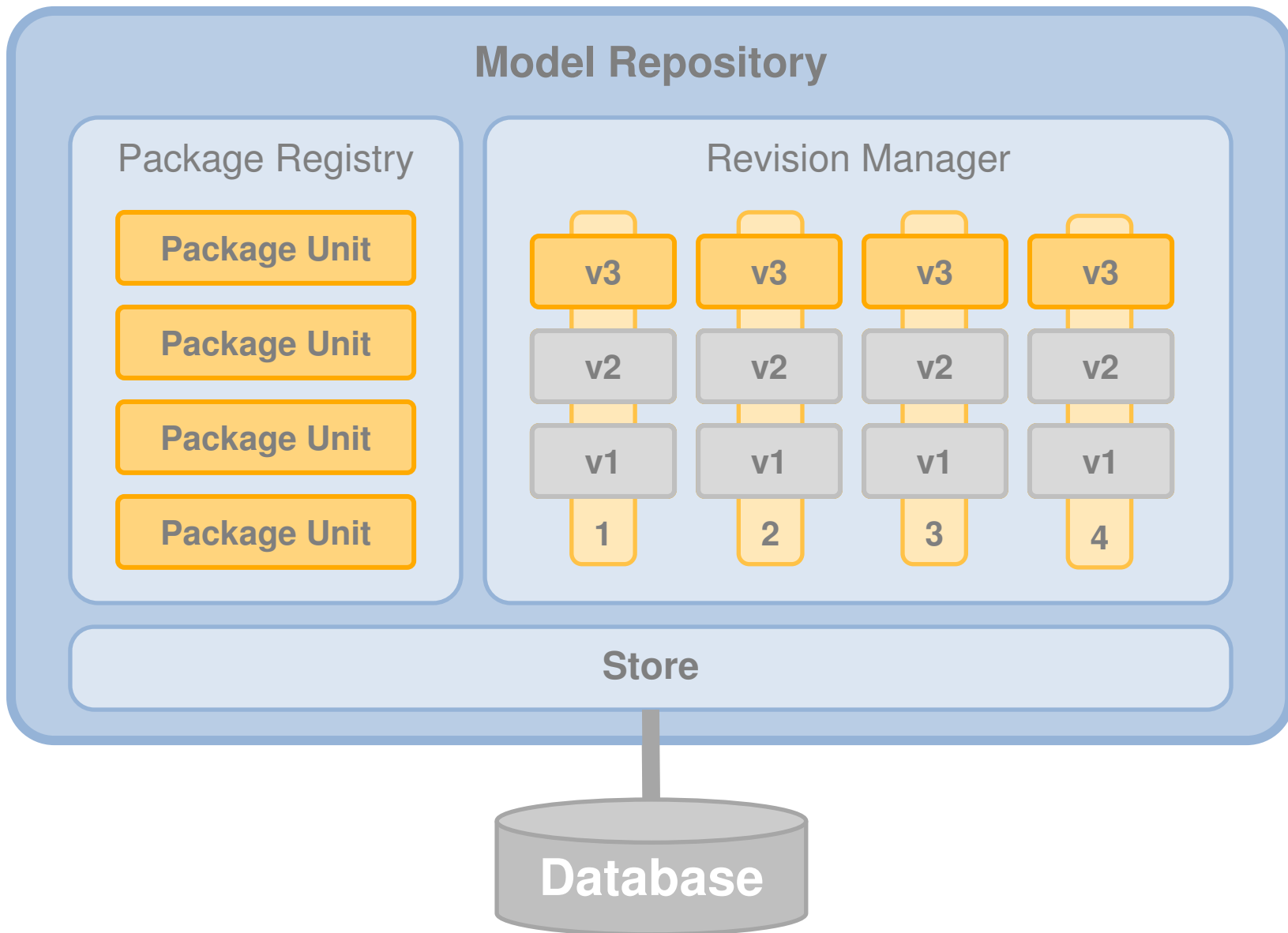
Persistence

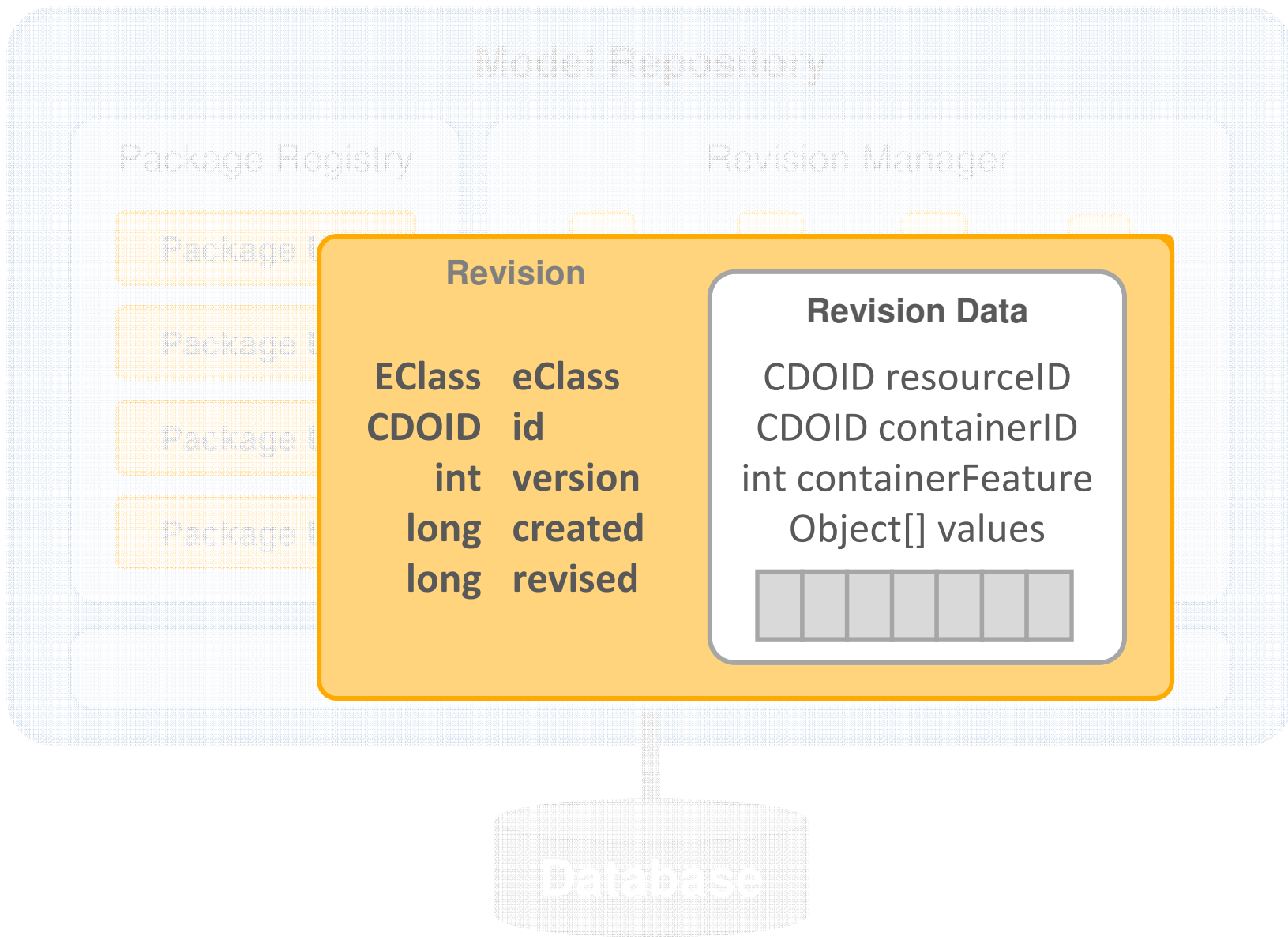
Versioning

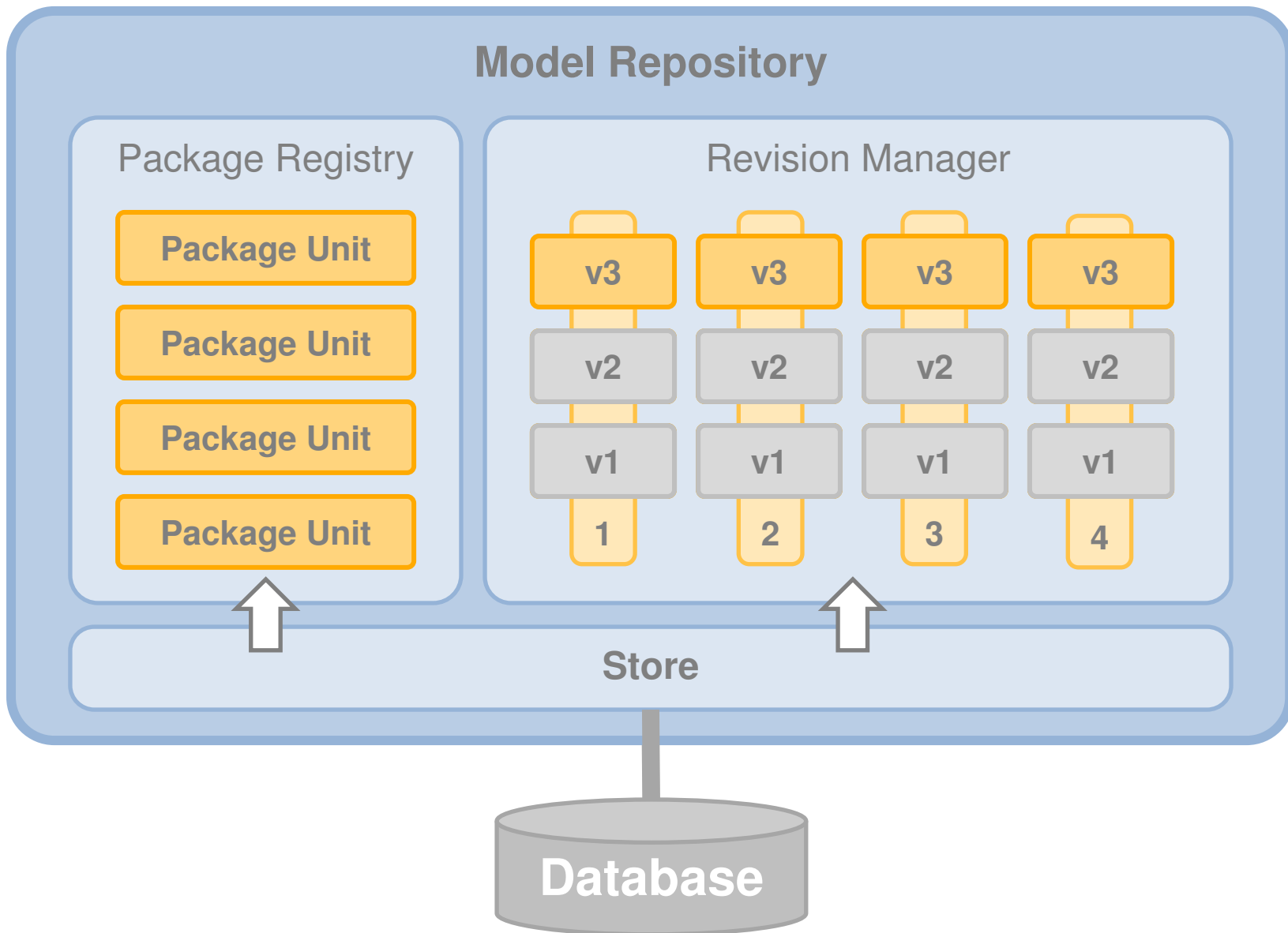


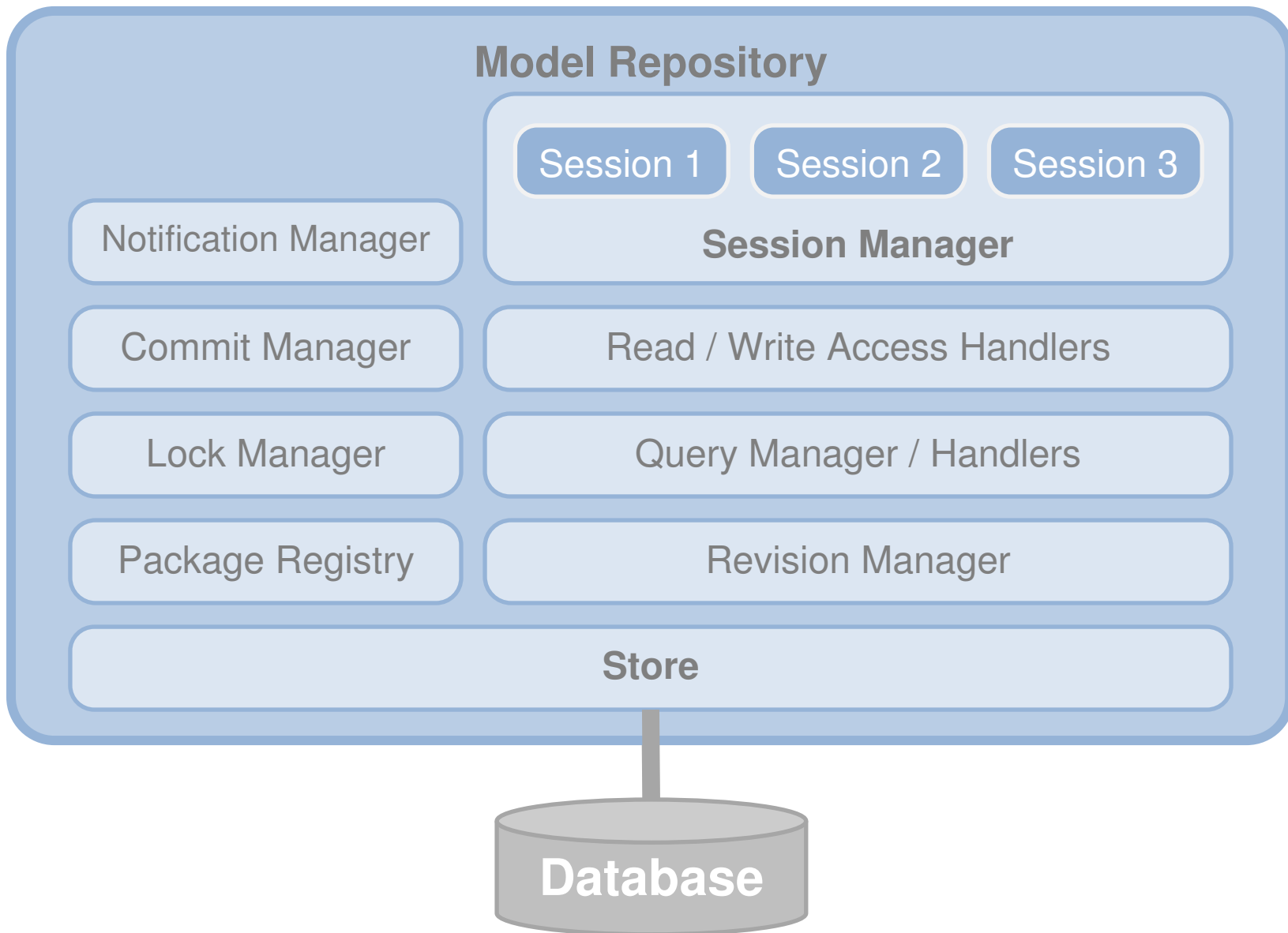












```
IMappingStrategy mappingStrategy = CDODBUUtil.createHorizontalMappingStrategy();
IDBAdapter dbAdapter = new EmbeddedDerbyAdapter();

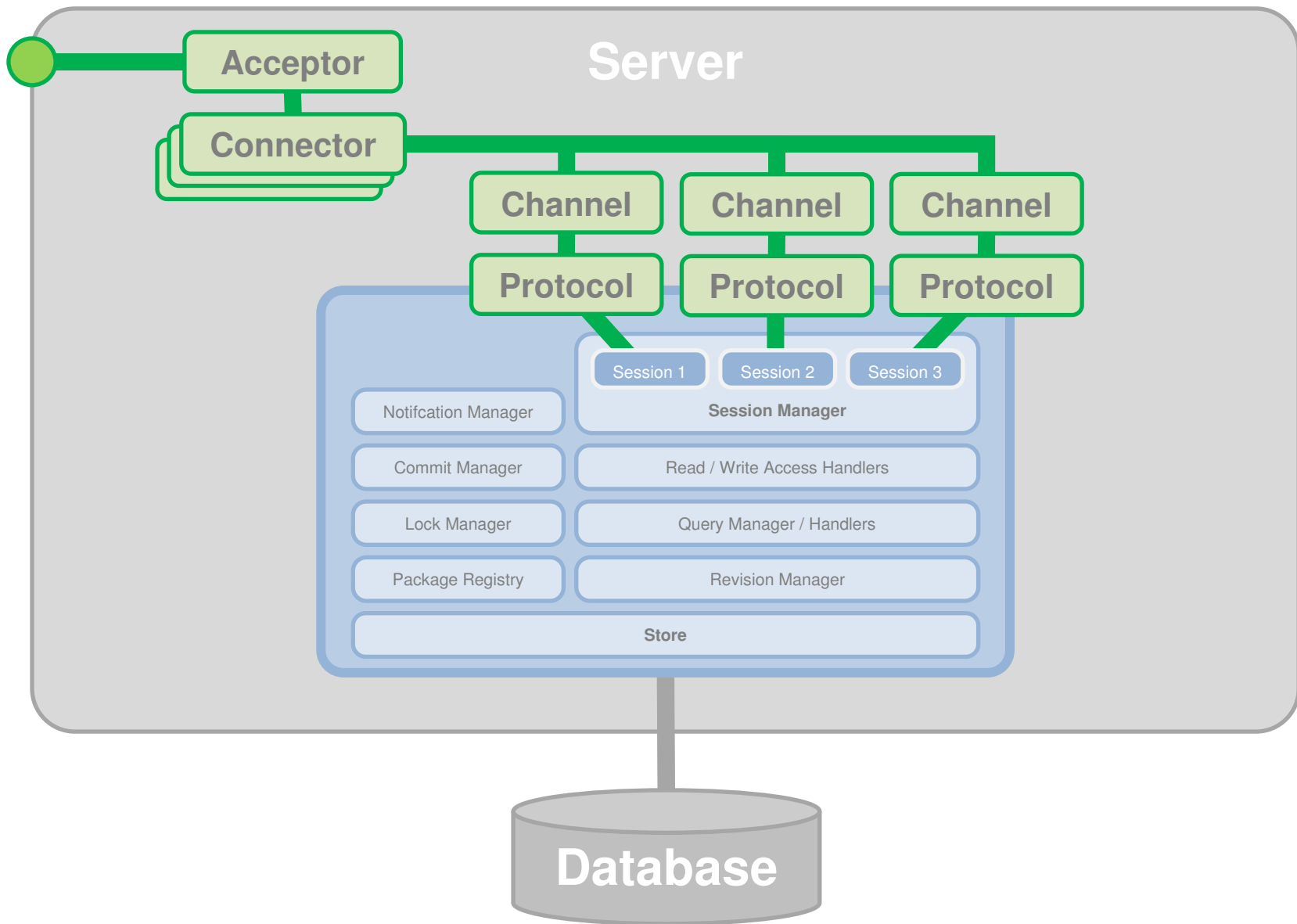
EmbeddedDataSource dataSource = new EmbeddedDataSource();
dataSource.setUser("sa");
dataSource.setDatabaseName("cdo");
dataSource.setCreateDatabase("create");
IDBConnectionProvider dbConnectionProvider = DBUtil.createConnectionProvider(dataSource);

IStore store = CDODBUUtil.createStore(mappingStrategy, dbAdapter, dbConnectionProvider);

Map<String, String> props = new HashMap<String, String>();
props.put(IRepository.Props.CURRENT_LRU_CAPACITY, "100000");

IRepository repository = CDOServerUtil.createRepository(REPOSITORY_NAME, store, props);
```

Database



TestServer.java

```
IManagedContainer container = ContainerUtil.createContainer();
Net4jUtil.prepareContainer(container);
TCPUtil.prepareContainer(container);
CDOServerUtil.prepareContainer(container);
CDOServerUtil.addRepository(container, repository);

IAcceptor acceptor = (IAcceptor)container.getElement("org.eclipse.net4j.acceptors", "tcp", null);

System.out.println("Press any key to shutdown");
while (System.in.read() == -1)
{
    Thread.sleep(200);
}

container.deactivate();
```

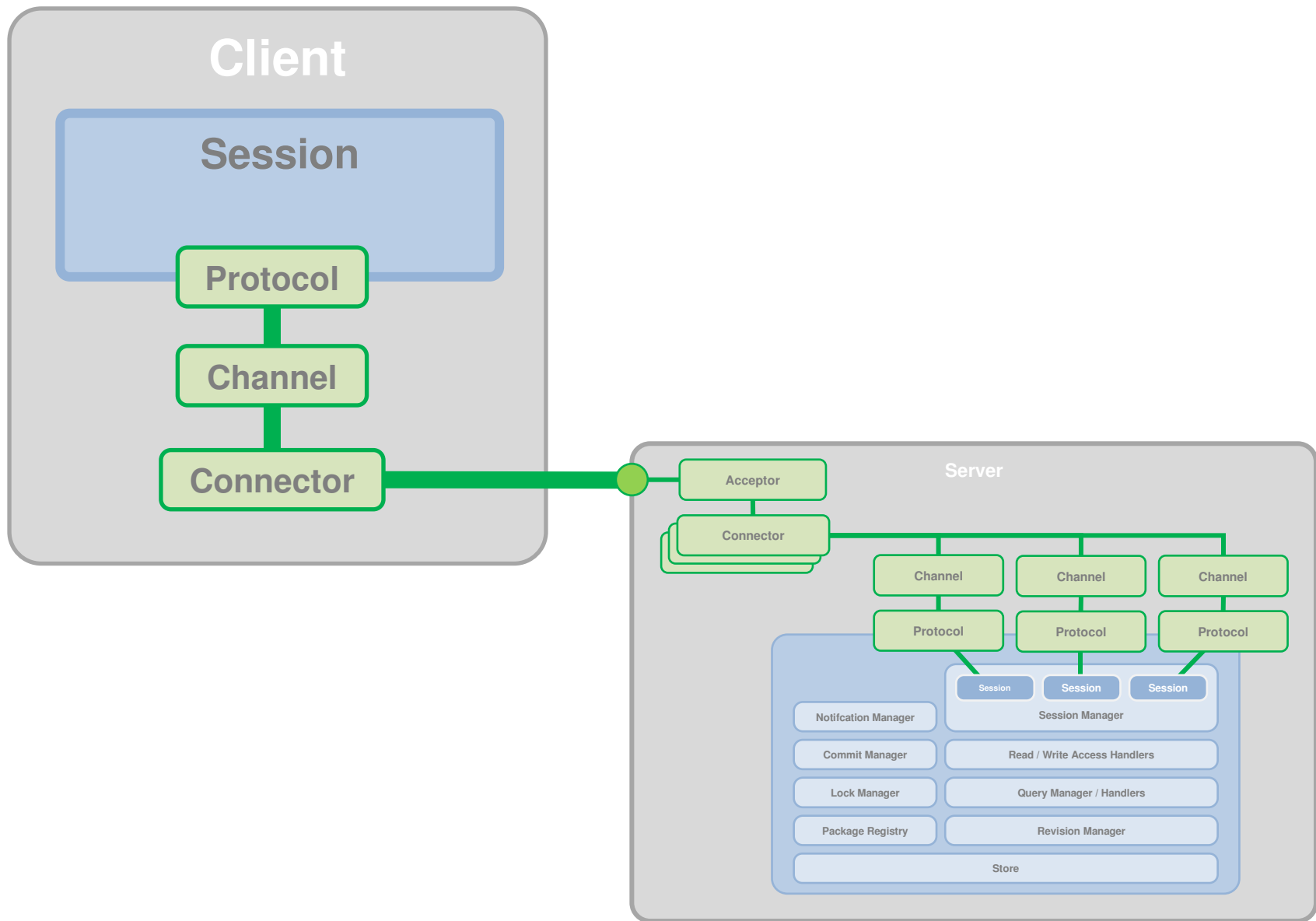
Database

cdo-server.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<cdoServer>
  <repository name="repo1">
    <property name="currentLRUCapacity" value="100000"/>

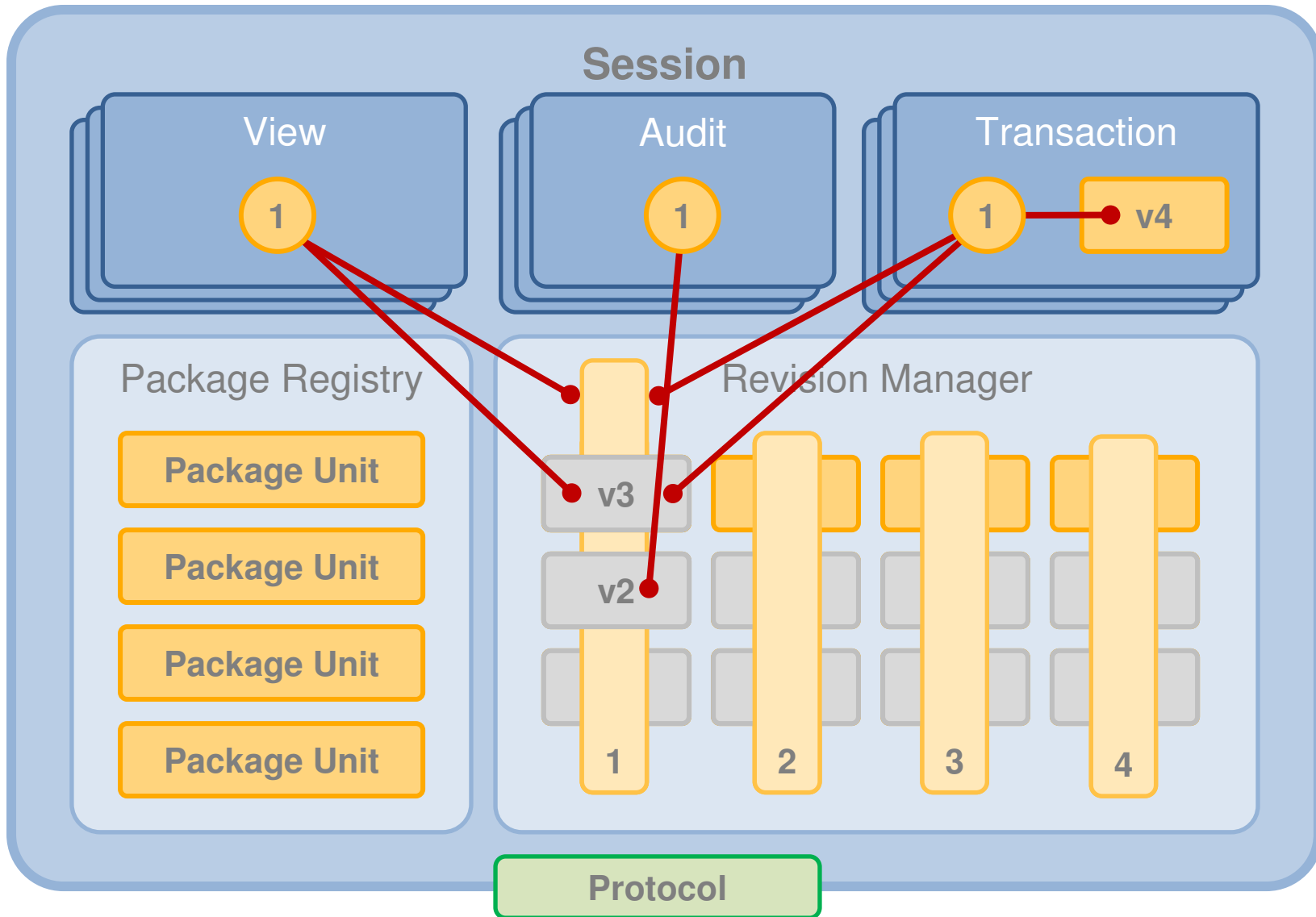
    <store type="db">
      <mappingStrategy type="horizontal"/>
      <jdbcDelegate type="preparedStatement"/>
      <dbAdapter name="derby-embedded"/>
      <dataSource class="org.apache.derby.jdbc.EmbeddedDataSource"
        databaseName="/temp/cdodb1" createDatabase="create"/>
    </store>
  </repository>

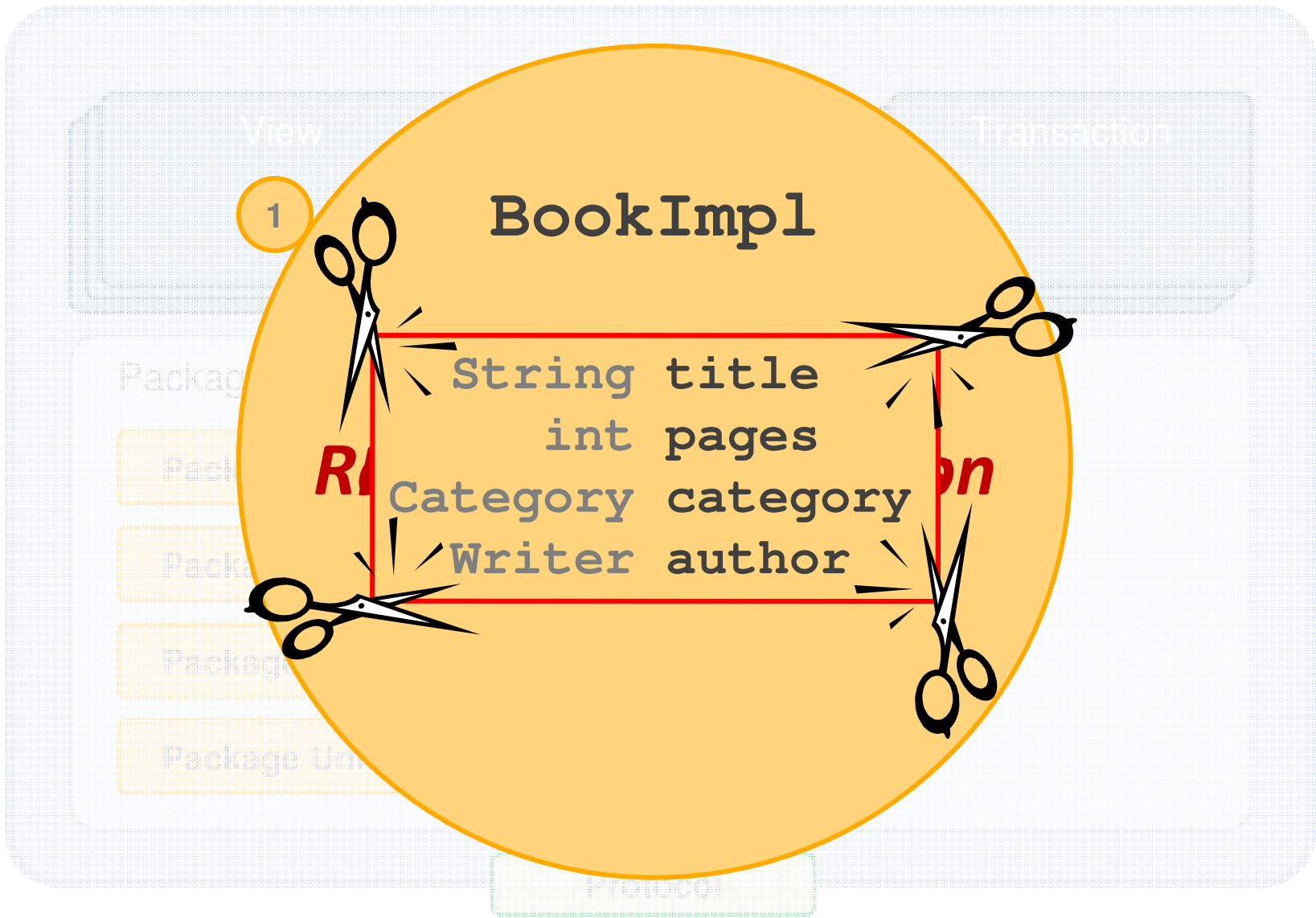
  <acceptor type="tcp" listenAddr="0.0.0.0" port="2036"/>
</cdoServer>
```

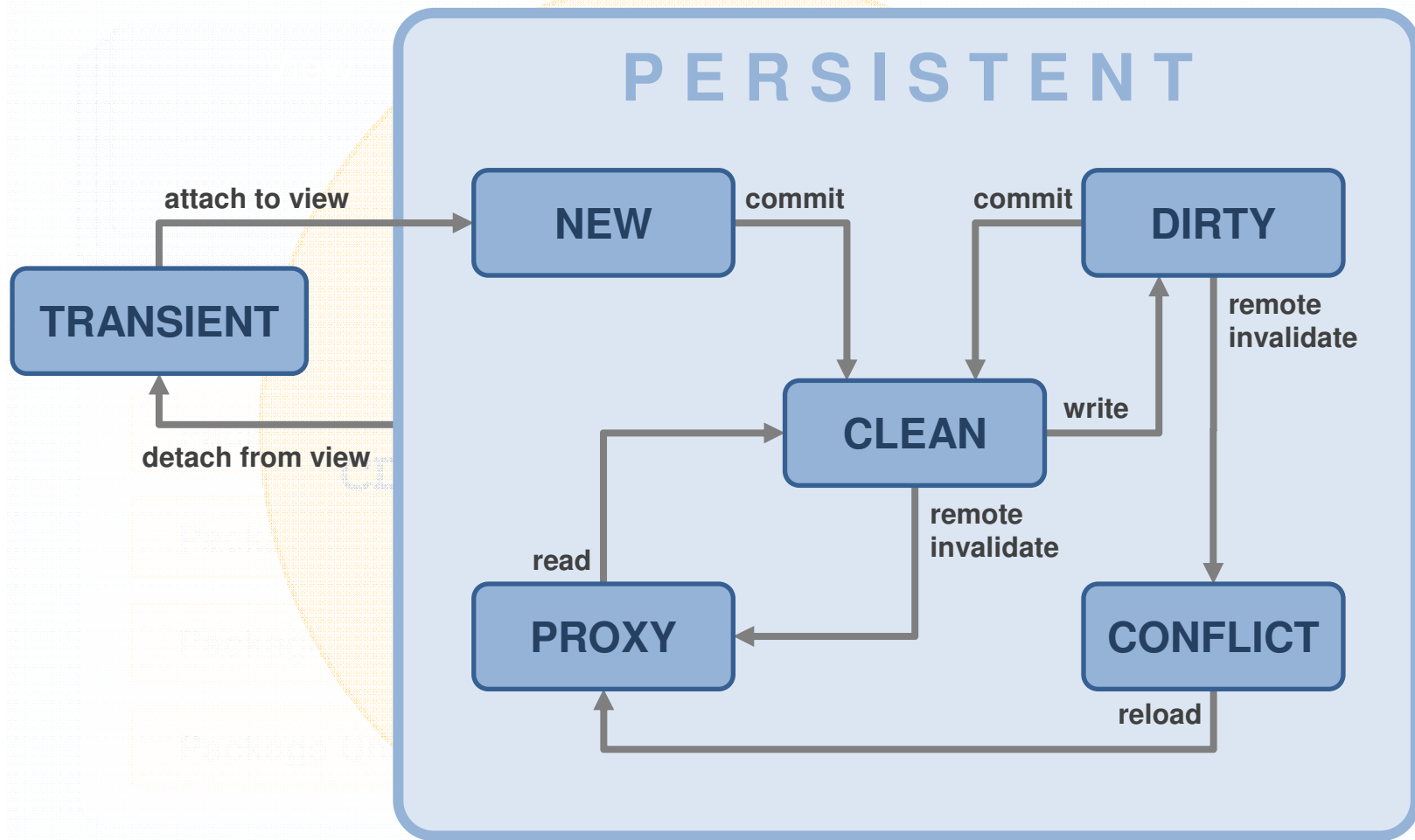


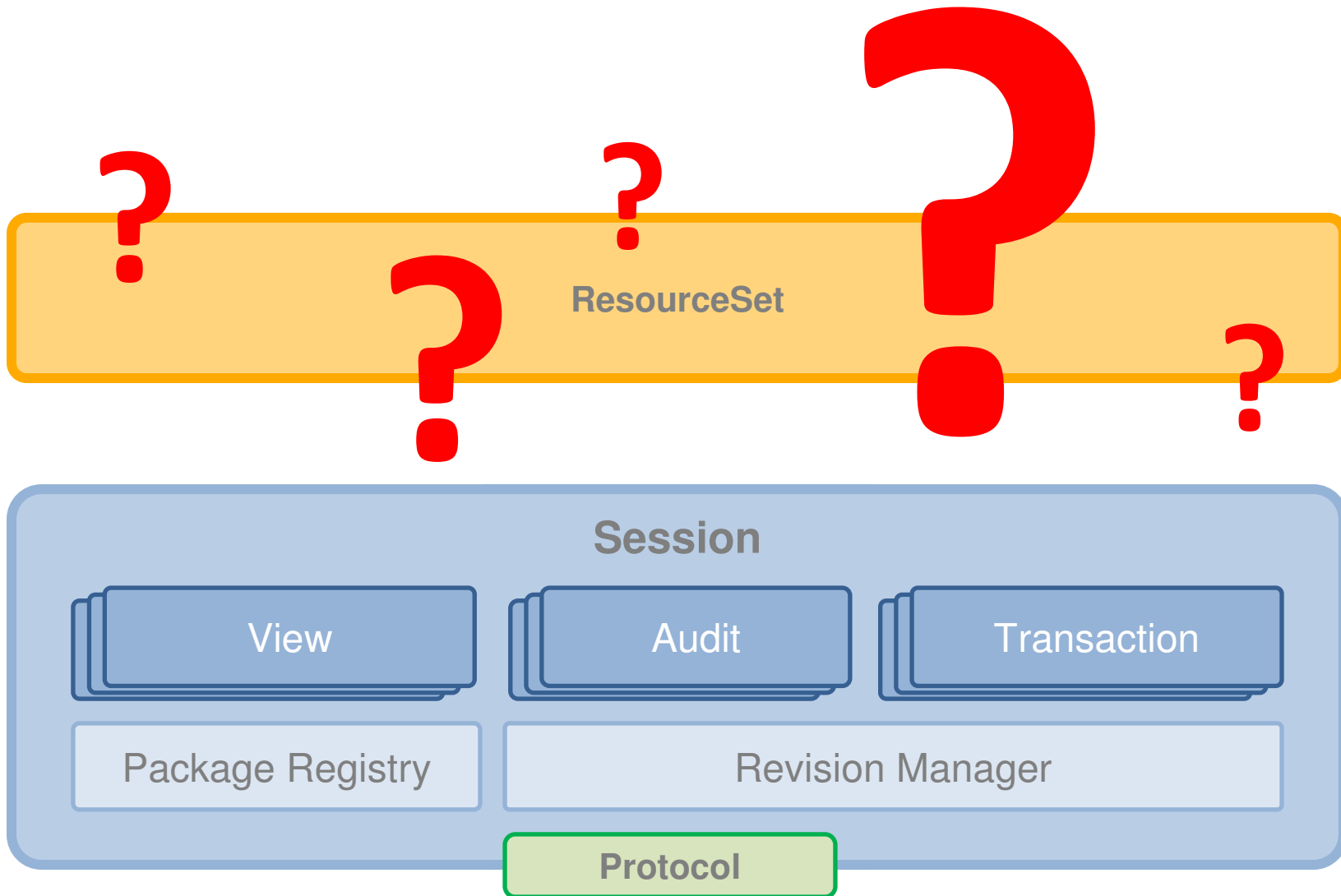
 TestClient.java 

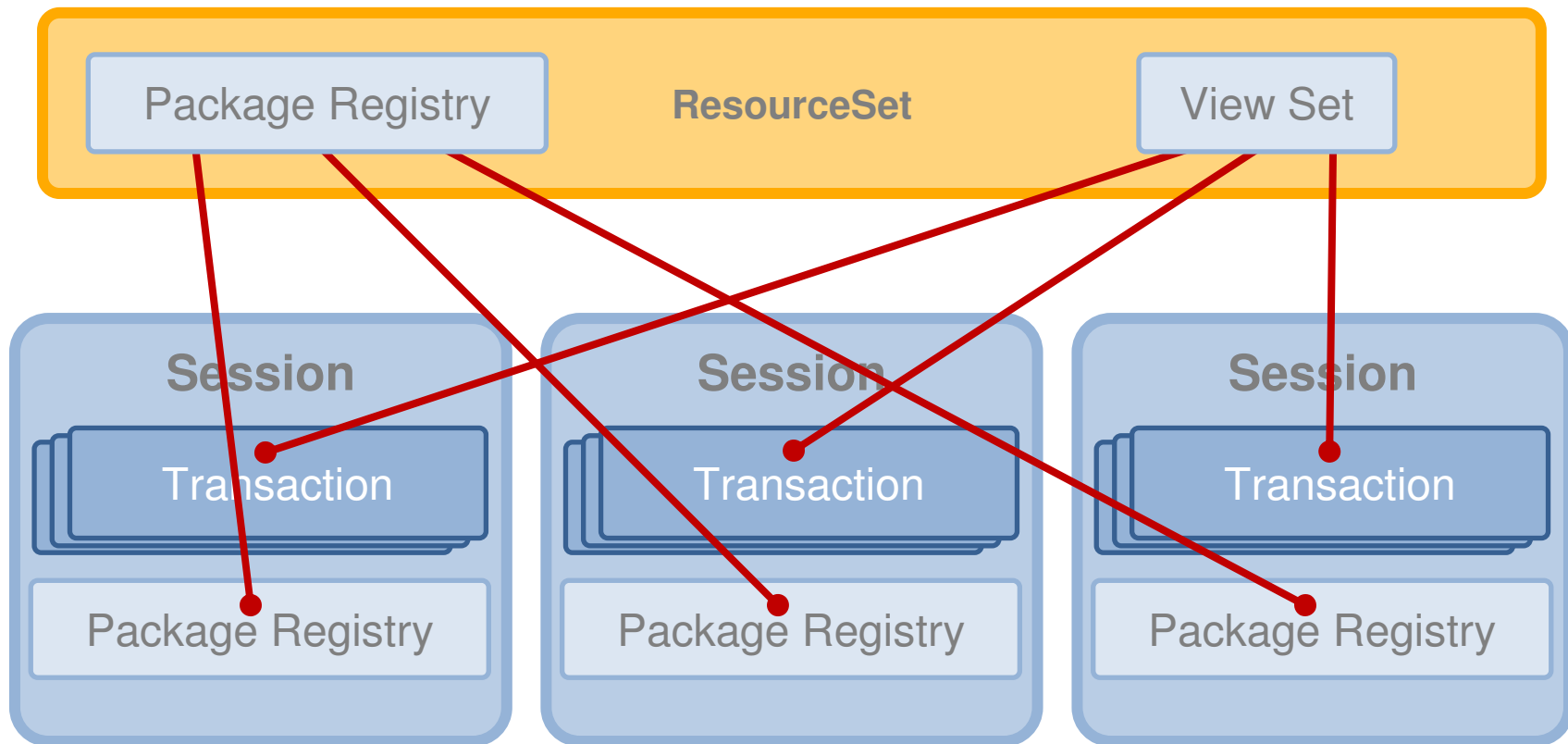
```
IManagedContainer container = ContainerUtil.createContainer();  
Net4jUtil.prepareContainer(container);  
TCPUtil.prepareContainer(container);  
  
IConnector connector = TCPUtil.getConnector(container, "localhost:2036");  
  
CDOSessionConfiguration configuration = CDONet4jUtil.createSessionConfiguration();  
configuration.setConnector(connector);  
configuration.setRepositoryName("repo1");  
  
CDOSession session = configuration.openSession();
```

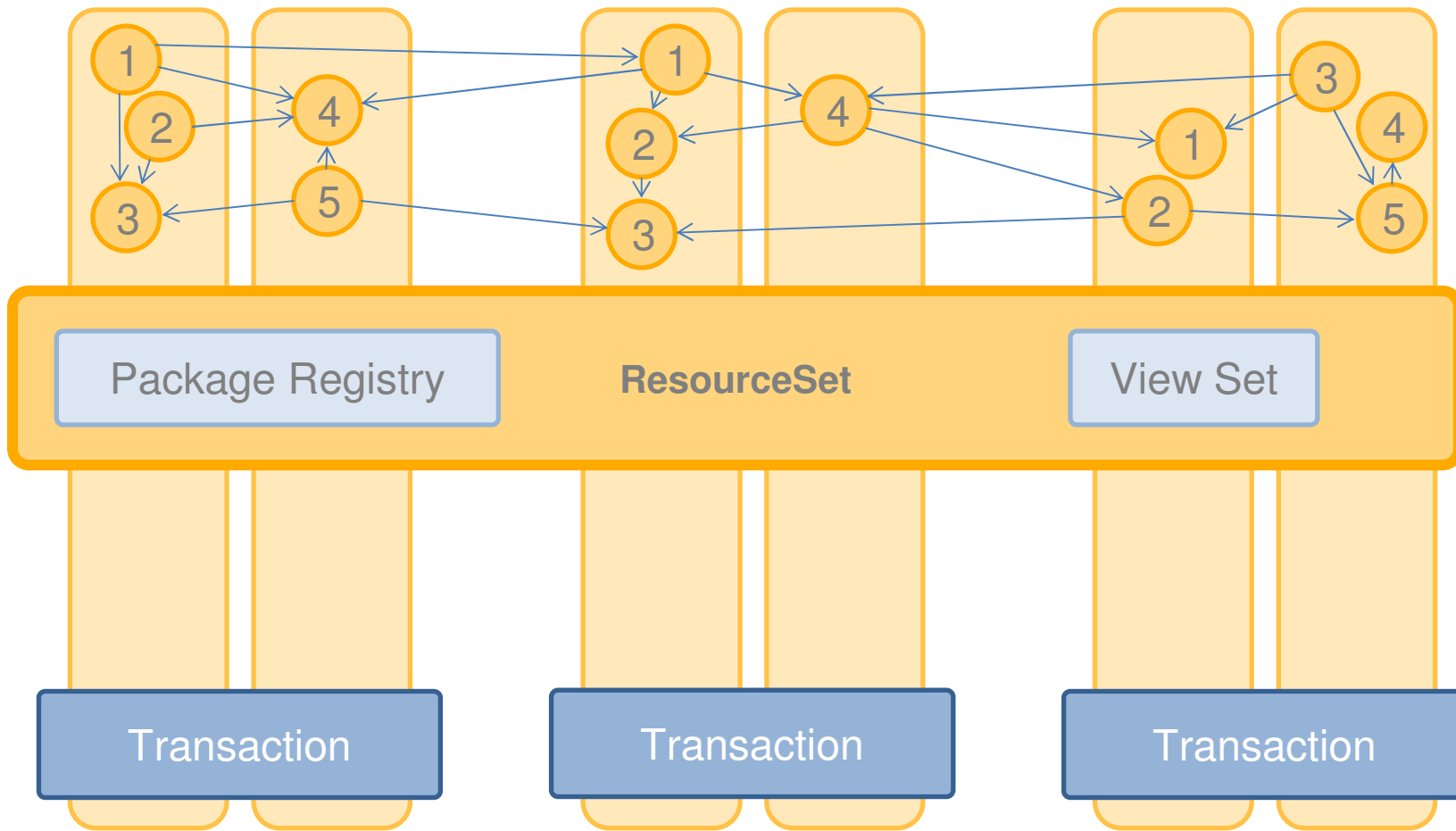


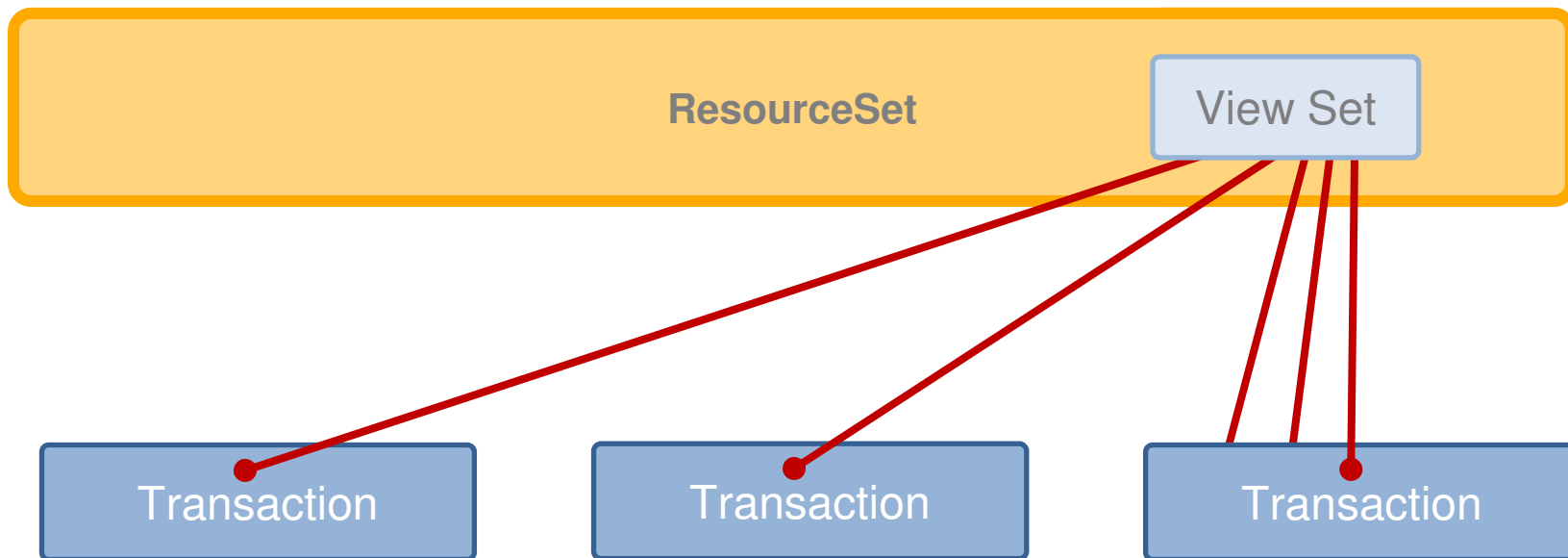


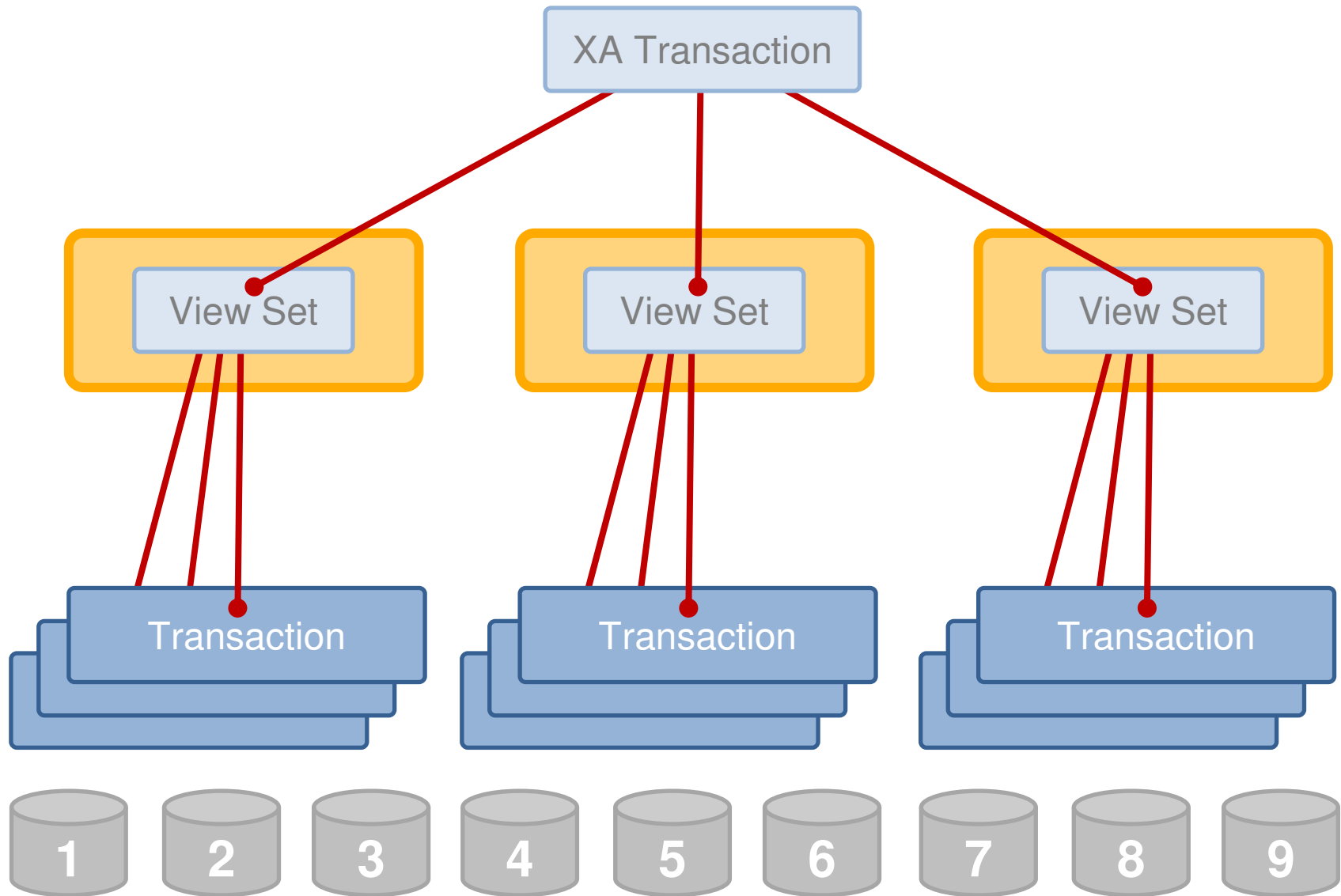












THE END

Vision of a Coherent Tooling Landscape

Integrated through a Model Repository

