

COINED Server

Required prerequisites: Servlet Container and SQL-Database (Tomcat and MySQL recommended).

Preparing the database

The COINED Server in its default configuration requires a MySQL-Database (version ≥ 5.0). If other SQL-Databases are to be used, the config files (META-INF/context.xml, WEB-INF/coidConfig.xml) and the db driver have to be changed accordingly.

The following steps are required for setting up the database for COINED:

1. Create a schema `coid`
2. Create user `coid` with password `coid`, grant all privileges on schema `coid` to user `coid`
3. Create COINED's table structure by executing the script `CoinedTables.sql`

Preparing the servlet container

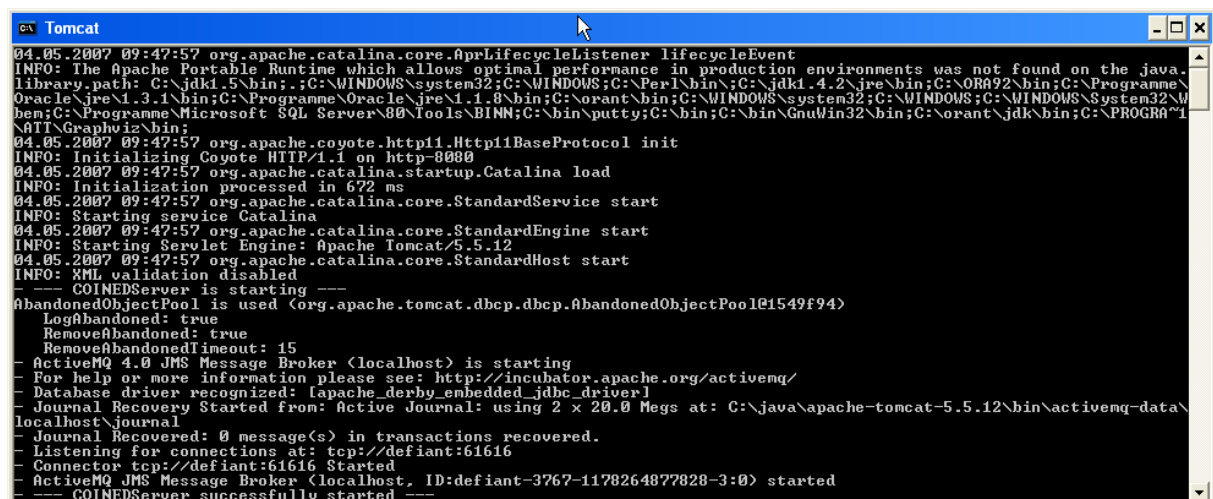
The COINED Server was developed for deployment in Apache's servlet container Tomcat (version $\geq 5.5.12$), COINED specifically makes use of Tomcat's db connector pooling ability for accessing the SQL database. Therefore it is required to install the appropriate db driver into the Tomcat server context – an installation within web application context is insufficient. Add `mysql-connector-java-3.1.11-bin.jar` to `<Path-to-your-Tomcat-Installation>/common/lib`.

Installing the COINED Server

The COINED Server has the form of a web application so installing it means deploying it into a servlet container

1. Make sure you have the required source file: `COINEDServer.war`
2. Deploy the web application to your servlet container, e.g. in Tomcat you simply add the archive `COINEDServer.war` to folder `<Path-to-your-Tomcat-Installation>/webapps/`. Tomcat should automatically detect and extract the application. It might be necessary to stop Tomcat and to delete old versions of the `COINEDServer` (.war-file and extracted application folder) first.

Figure 1 shows the Tomcat console messages for a successfully and correctly starting COINED Server.



```
Tomcat
04.05.2007 09:47:57 org.apache.catalina.core.AprLifecycleListener lifecycleEvent
INFO: The Apache Portable Runtime which allows optimal performance in production environments was not found on the java.library.path: C:\jdk1.5\bin; ;C:\WINDOWS\system32;C:\WINDOWS;C:\Per1\bin;C:\jdk1.4.2\jre\bin;C:\ORA92\bin;C:\Programme\Oracle\jre\1.3.1\bin;C:\Programme\Oracle\jre\1.1.8\bin;C:\orant\bin;C:\WINDOWS\system32;C:\WINDOWS;C:\WINDOWS\System32\Wben;C:\Programme\Microsoft SQL Server\80\Tools\BINN;C:\bin\putty;C:\bin;C:\bin\GnuWin32\bin;C:\orant\jdk\bin;C:\PROGRAM1\ATI\Graphviz\bin;
04.05.2007 09:47:57 org.apache.coyote.http11.Http11BaseProtocol init
INFO: Initializing Coyote HTTP/1.1 on http-0000
04.05.2007 09:47:57 org.apache.catalina.startup.Catalina load
INFO: Initialization processed in 672 ms
04.05.2007 09:47:57 org.apache.catalina.core.StandardService start
INFO: Starting service Catalina
04.05.2007 09:47:57 org.apache.catalina.core.StandardEngine start
INFO: Starting Servlet Engine: Apache Tomcat/5.5.12
04.05.2007 09:47:57 org.apache.catalina.core.StandardHost start
INFO: XML validation disabled
--- COINEDServer is starting ---
AbandonedObjectPool is used (org.apache.tomcat.dbcp.dbcp.AbandonedObjectPool@1549f94)
  LogAbandoned: true
  RemoveAbandoned: true
  RemoveAbandonedTimeout: 15
- ActiveMQ 4.0 JMS Message Broker (localhost) is starting
- For help or more information please see: http://incubator.apache.org/activemq/
- Database driver recognized: [apache_derby_embedded_jdbc_driver]
- Journal Recovery Started from: Active Journal: using 2 x 20.0 Megs at: C:\java\apache-tomcat-5.5.12\bin\activemq-data\localhost\journal
- Journal Recovered: 0 message(s) in transactions recovered.
- Listening for connections at: tcp://defiant:61616
- Connector tcp://defiant:61616 Started
- ActiveMQ JMS Message Broker (localhost, ID:defiant-3767-1178264877828-3:0) started
--- COINEDServer successfully started ---
```

Figure 1 – Tomcat console logging: COINED Server successfully started

The default configuration of the COINED Server assumes that database and server are running on the same host. This configuration can be changed by editing the config files `META-INF/context.xml` and `WEB-INF/coidConfig.xml`. These files also contain the parameters for changing the default db user, the db connection URL, etc.