Application of MyCoRe with Tamino4 on Windows XP Professional

User Guide

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1 Introduction

This user guide tells you how to perform Mycore-Sample-Apllication combined with the implementation of Tamino4 on Windows XP Professional. It is written for open source project “MILESS/ MyCoRe" (http://www.mycore.de)”, and especially for those who want to implement XML native database to the mycore sample application. Tamino4 is a software product for XML: DB native database, which developed by Software AG (http://www.softwareag.com/tamino/default.htm). It enables XML documents to be stored, queried, and managed in native XML format.

This guide includes four parts: Introduction, Organizing Mycore Environment, Peparing Mycore Codes, and Implementation Steps for Mycore Application.

2 Organizing Mycore Environment

To perform Mycore application on WinXP, the following software is required:

- Tamino4: for the MyCoRe XML persistence. S. the separate installation guide
- MySql: for the Storage of Mycore Classification.

  MySql: Download, Installation and Usage

  Download mysql zip file from

  http://www.mysql.com/downloads/mysql-3.23.html

  Install it with default.

  Usage:

  - PathToMysql: *bin/mysqld_safe$*
  - PathToMysql: *bin/mysql*
  - Connect to Mysql: → mysql> *connect* yourdatabasename;
  - Delete Table: → mysql> *drop table* yourtablename;

  You have to input ”;” at the end of each command line. For MyCoRe Project developers, it is often to delete the following tables for new loading of classification:

  → mysql> *drop table mcrcateg*;

  → mysql> *drop table* mcrcategabel*;*

  → mysql> *drop table mcrclass;*

  → mysql> *drop table mcrcalsslabel;*

→ mysql> *drop table mcrfsnodes;*

→ mysql> *drop table mcrlinclass;*

→ mysql> *drop table mcrlnkhref;*

- Exit Mysql: → mysql> *exit;*
- You can also install "Mysql Control Center" to have a overlook about the content of the tables (s. Figure 1: Mysql Control Center)

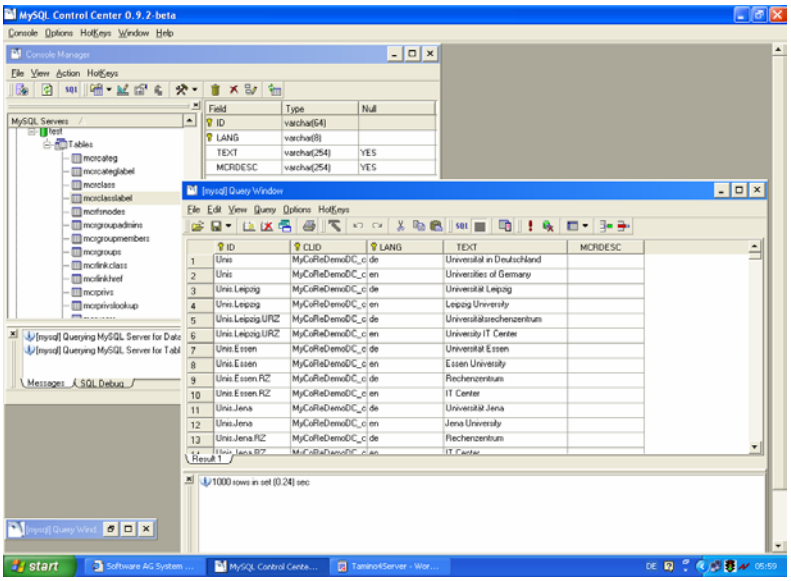

Figure 1: Mysql Control Center

- Ant Build: to do Ant Build about Mycore codes. Download Ant: 1.5.3-1, installation and usage can be referred to: http://www.apache.org/dist/ant/binaries/.

  Make sure you set the ANT_HOME and path in your system environment variables.
- JDK 1.4: Download, installation and usage can be referred to: http:java.sun.com.

  Make sure you set the JAVA_HOME and path in your system environment variables.
- Useful Command line Usage: e.g.: s. http://www-rohan.sdsu.edu/~corpora/corpus_course/unix-commands.html

3 Preparing Mycore Codes

3.1 Check out/Download Mycore Codes:

Mycore zip file can be downloaded from http://www.mycore.de. If you are from a development's team and have to communicate with your community, you should checkout out mycore codes from CVS repository from http://www.mycore.de. You can choose one of the following methods to check out:

- Download Ant from http://www.apache.org/dist/ant/binaries/ and install it. Check out mycoreby, e.g.,:
  cvs-1.11.5 –d: pserver: anoncvs@server.mycore.de:/cvs checkout mycore
- CVS Checkout from JBuilder (s. Figure 2: CVS Checkout from JBuilder)

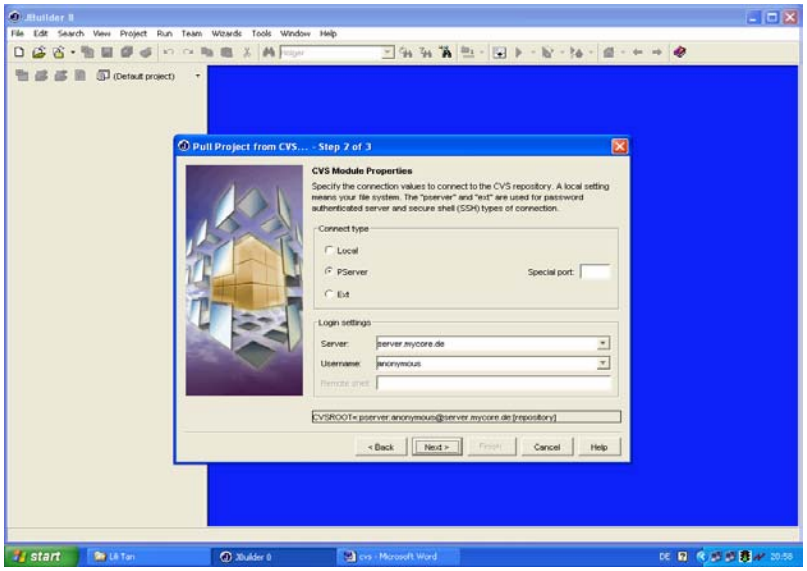

Figure 2: CVS Checkout from JBuilder

- CVS Checkout from SunOneStudio (s. Figure 3: CVS Checkout from SunOneStudio)

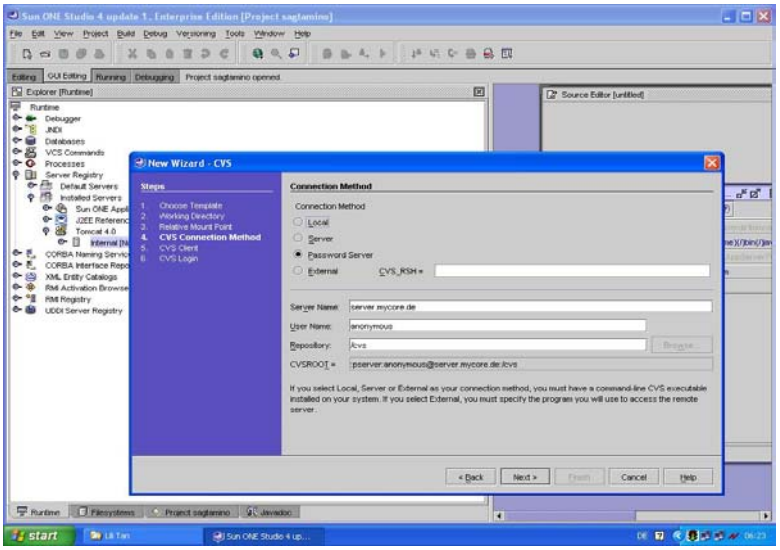

Figure 3: CVS Checkout from SunOneStudio

3.2 Configuration of Mycore Codes

- Point out XML store type and their path and name of Jar files in "build.properties" of the folder mycore/bin/, e.g.:

```
# Tamnio under Windows and Sun Solaris
MCR.XMLStore.Type=taminoxmldb
MCR.XMLStore.BaseDir=/sag/sun1/LibTaminoAddedtoMycore
MCR.XMLStore.Jars=tamino_xmldb.jar TaminoAPI4J.jar
```

- Point out your schema path in "mycore.propertities" , e.g. :

```
MCR.parser_schema_path=/sag/sun1/dlwww/mycore-sample-
application/schema
```

- Switch the persistence configuration to XML Tamino DB features in "mycore.propertities.privates" file: e.g.:

```
#############################################################################
# The persistence configuration for Tamino XML:DB
#############################################################################

#The name of the Java class of the persistence layer
MCR.persistence_taminoxmldb_class_name=org.mycore.backend.taminoxmldb.MCRXMLDBPers
istence
MCR.persistence_taminoxmldb_query_name=org.mycore.backend.taminoxmldb.MCRXMLDBQuer
y
MCR.persistence_taminoxmldb_encoding=ISO-8859-1


MCR.persistence_taminoxmldb_driver=com.softwareag.tamino.xmldb.api.base.TDatabase

#####  on WinXP, plesase set your host name, port name and Tamino Database Name
MCR.persistence_taminoxmldb_database_url=xmldb:tamino://localhost/tamino/Mycore_Sa
mple_Application
MCR.persistence_taminoxmldb_TaminoDATABASE_URI=http://localhost/tamino/Mycore_Samp
le_Application
#####

##### on Sun Solaris, plesase set your host name, port name and Tamino Database
Name
```

```
#MCR.persistence_taminoxmldb_database_url=xmldb:tamino://sunfire2.hrz.uni-
essen.de:8080/tamino/Mycore_Sample_Application
#MCR.persistence_taminoxmldb_TaminoDATABASE_URI=http://sunfire2.hrz.uni-
essen.de:8080/tamino/Mycore_Sample_Application
#####


MCR.persistence_taminoxmldb_database=tamino
```

- Point out your JDBC parameter to connecting to Mysql in "mycore.propertities.privates" file, e.g. :

```
MCR.persistence_sql_database_url=jdbc:mysql://localhost/test?user=ODBC
```

- Point out your internal file system filestore path in "mycore.propertities.privates" file, e.g. :

```
MCR.IFS.ContentStore.FS.BaseDirectory=/sag/sun1/mycore-sample-
application/filestore
```

4 Implementation Steps of Mycore Appication

It is supposed that your Mycore application's environment are good prepared and mycore source code are ready configured. Implementation Steps show you how to use Ant build to compile sources codes and more until you get the web application of Mycore sample.

4.1 Ant Build MyCore Jar for Tamino DB

- Check and build Jar file in mycore path by:

  ant info

  ant clean

  ant usage

  ant JAR

4.2 Clean up Mysql and Tamino DB if needed

- Clean up Mysql and Tamino databse. If you are at the first time to buid Tamino Mycore sample application, skip this part and go directly to the next part.

  Clean up Mysql:

  cd SunSoarsisMachineName/ PathToMysql: *bin/mysql*

  Connect to Mysql: → mysql> *connect* yourdatabasename;

  Delete Table: → mysql> *drop table* yourtablename;

  You have to input ";" at the end of each command line. For MyCoRe

  Project developers, it is often to delete the following tables for new loading

  of classification:

  → mysql> *drop table mcrcateg*;

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→ mysql> *drop table mcrcalsslabel;*

→ mysql> *drop table mcrfsnodes;*

→ mysql> *drop table mcrlinclass;*

→ mysql> *drop table mcrlnkhref;*

- Exit Mysql: → mysql> *exit;*

Clean up Tamino database, need only to perform:

ant clean.taminocollection.

Because a Java class has been developed, which plays special attention for convenience of the Mycore developers, allowing without going every once and while between mysql and ant.

- Create databases for Mysql and Tamino with the names, which you have specified in your private property file. Also you have to start the database in MySql and Tamino before loading documents.

4.3 Loading Documents for Mycore Sample Application

Go to directory mycore-sample-application, perform:

ant info, check if paths OK

ant usage

ant schema

ant users

ant load.classifications

ant tamino, then all of the XML contents for persistence are to be loaded into Tamino.

You can also perform the followings to see every loading step in detail:

ant taminoschema

ant load.taminoschema

ant load.legalentities

ant load.documents

ant load.derivates.

4.4 Building and Deploy Web Application

- Build Web application / War File by:

ant webapp / ant war

You can either excute the web application with Sun One Studio. Or you can copy the war file “mycoresample” into a Tomcat directory “webapps”. By stop and new

start the Tomcat, you can achieve the Mycore sample application Mask via a browser in corresponding address, e.g., http://localhost:8080/mycoresample (s.Figure 3 Mycore-Sample-Application Search Mask).

Figure 4: Mycore-Sample-Application Search Mask

- Perform Search and Found Test:

  e.g., Document search in Tamino (s. Figure 4: Mycore-Sample-Application with Tamino)

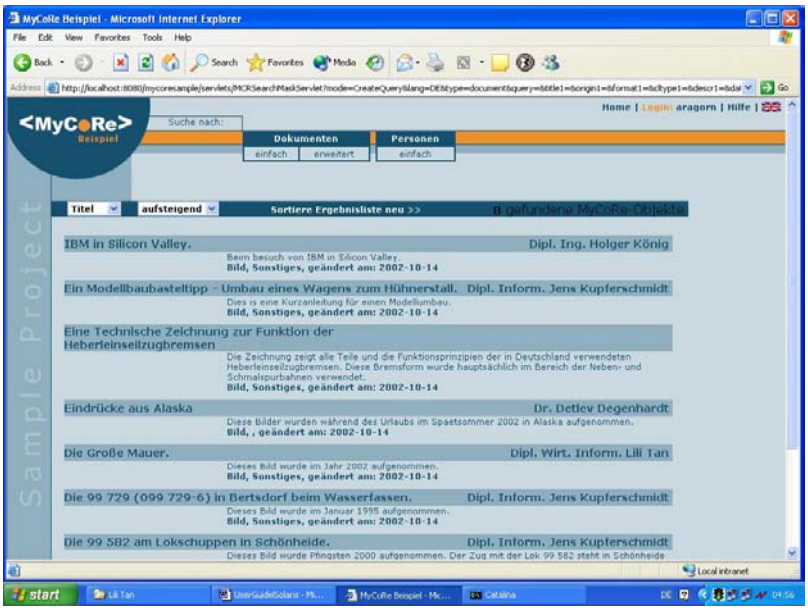

Figure 5: Mycore-Sample-application with Tamino