		MODISCO TOOL BOX "RELATIONAL DATABASE INFORMATION" DISCOVERY TOOL	Hugo Bruneliere Hugo.Bruneliere@ {univ-nantes.fr, gmail.com}
INRIA		**Install & Use**	Date : 2007/02/21

1. "Relational Database Information" Discovery Tool: Install & Use

"Relational Database Information" discovery tool is a complete plug-in, part of the MoDisco component Tool Box [1] [2], which has been designed and developed in order to build models from concrete relational databases. The models that are produced describe the schema (i.e. the structure) or the tuples (i.e. the content) of the processed databases.

The development of this tool, realized by INRIA ATLAS [3], has been supported by the IST European MODELPLEX project (MODELing solution for comPLEX software systems, FP6-IP 34081) [4].

Within this short document, we will simply present how to install and execute the "Relational Database Information" discovery tool in order to produce schema and content models from a given database.

1.1. Get & Install the Tool

The tool is directly downloadable from [5]. The provided Zip file contains the *org.eclipse.gmt.modisco.dbinfodiscoverer* plug-in which has to be copied in the "plugins" directory of your Eclipse platform's installation.

This plug-in only requires the *org.eclipse.gmt.modisco.core* MoDisco base plug-in to be also installed (it is directly available from [6]). However, in order to be able to effectively use it, you also have to install at least one model handler implementation (such as the EMF implementation provided by the *org.eclipse.gmt.modisco.modelhandler.emf* plug-in [6]).

IMPORTANT NOTE: the MySQL JDBC driver has to be included into the plug-in "lib" folder. You can freely download it from http://dev.mysql.com/downloads/connector/j/5.0.html. Then, you have to add it to the build path of the plug-in by adding the line *<classpathentry path="lib/mysql-connector-java-5.0.x-bin.jar" kind="lib"/>* to the ".classpath" file located at the root of the plug-in folder. If you want to use other DBMS, you first have to include the corresponding drivers using the same way as previously described.

1.2. Use the Tool
Now that you have installed all the required items, you are ready to use the discoverer.

The *RelationalDBSchema* and *RelationalDBContent* metamodels, which make up the core of the tool, are available in KM3, Ecore and MOF1.4 formats from the plug-in "resources" package.

The plug-in also provides some sample models (into the "samples" folder) that have been discovered using the tool, from the open-source "Classic Models" sample database which is available from the Eclipse/BIRT project [7].

The "TestDiscovery.java" Java file (also provided within the "samples" folder) shows how to programmatically call the tool (using the EMF model handler implementation [6]) in order to discoverer schema and content models from a given database.

References

[1]   The Eclipse/GMT **MoDisco** Component: http://www.eclipse.org/gmt/modisco/

[2]   **MoDisco** Tool Box: http://www.eclipse.org/gmt/modisco/useCases/

[3]   **INRIA ATLAS** Team: http://www.inria.fr/recherche/equipes/atlas.en.html

[4]   The **MODELPLEX** IST European Project: http://www.modelplex-ist.org

[5]   The **Relational Database Information** discovery tool, **MoDisco Toolbox**:
      http://www.eclipse.org/gmt/modisco/toolBox/RelationalDBInformation/

[6]   The **MoDisco base plugins** from the Eclipse **MoDisco CVS**:
      http://dev.eclipse.org/viewcvs/indextech.cgi/org.eclipse.gmt/MoDisco/plugins/

[7]   The **Eclipse/BIRT Project Sample Database** MoDisco use case:
      http://www.eclipse.org/gmt/modisco/useCases/BIRTSampleDB/