

Working with Eclipse-Ingres



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Topics



- ⊗ Introduction
- ⊗ Installation
- ⊗ Connect to Ingres
- ⊗ Database development features
- ⊗ Alternatives
- ⊗ Discussion

Eclipse

- An integrated development environment (IDE) framework
- Open source platform (Eclipse Public License)
- Plug-ins
 - supply the IDE functionality of functional areas
 - Must conform to both the framework requirement and overall “look & feel”
- See <http://www.eclipse.org> or <http://www.eclipse.org/home/newcomers.php>

❁ Ingres 2006

- ➡ An intelligent relational database management system
- ➡ Open source platform (GNU general public license)
- ➡ Support multi-tier environment using a variety of connectivity tools or drivers
 - .NET, JDBC, Perl DBI, PHP driver, Python driver, etc.
- ➡ See <http://www.ingres.com>

⚙ System requirements

➡ O/S

- MS/Windows, Linux, Unix, or Mac

➡ Windows widgets

- Win32, GTK, Motif, or Carbon

➡ Java VM 1.4.2 or higher

- Sun Java 2, IBM Java 2, or MS BEA JRockit

➡ Ingres 2006

- Database Server, Data Access Server, Ingres JDBC driver

❁ Installation methods

➡ Ingres Eclipse bundle

- The first time with Eclipse
- Download Ingres Eclipse DTS bundle from <http://www.ingres.com/download/prod-comm-dev-tools-download.php>
- Uncompress the bundle to the local HDD
- Run <install dir>\eclipse\eclipse.exe

➡ Plug-in module only

- Have already Eclipse and familiar with it

Installation

- Plug-in component module (continued)
 - Verify the following Eclipse components installed
 - Software Development Kits (SDK) v3.2.1
 - Modeling Framework (EMF) v2.2.1
 - Graphical Editing Framework (GEF) v3.2.1
 - Data Tools Platform (DTP) v1.0
 - Download Ingres Eclipse DTP plug-in module from <http://www.ingres.com/download/prod-comm-dev-tools-download.php>
 - Uncompress the file to the eclipse plug-ins directory:
<installation dir>\eclipse\plugins

Connect to Ingres

❁ Steps to follow:

- ➡ Open Database Development Prospective
- ➡ Create a Connection Profile
- ➡ Define an Ingres driver
- ➡ Create a new database connection
- ➡ Connect to a database
- ➡ Create an SQL scratch file

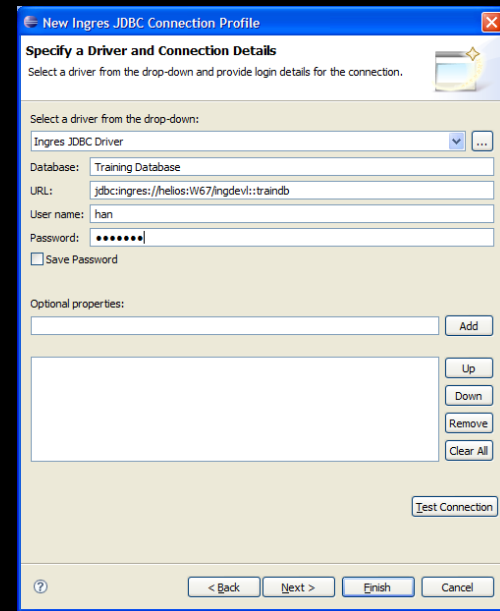
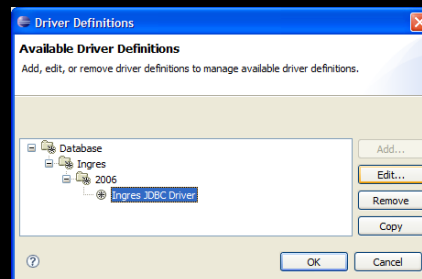
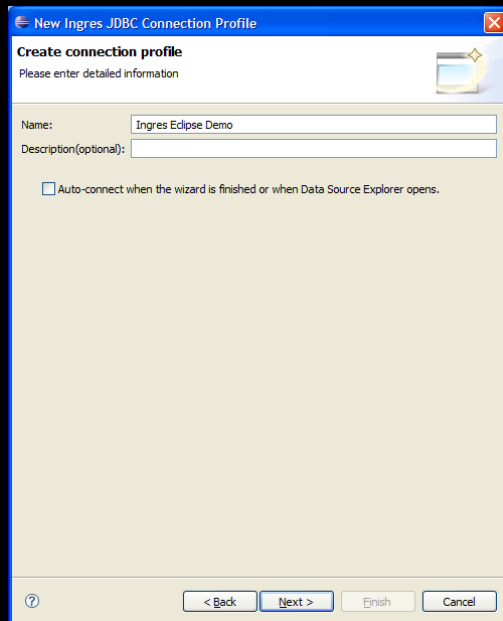
Connect to Ingres

⚙ Connection profile

- ➡ Repository that stores connection information for a given database
 - Database name
 - DAS listening address (installation ID + "7")
 - JDBC driver location (%II_SYSTEM%/ingres/lib)
 - Userid & Password
- ➡ Some examples of connection URL
 - jdbc:ingres//localhost:z87/demodb
 - jdbc:ingres//demeter:x17/testdb
 - jdbc:ingres//demeter:x17/ingdevl::demodb

Connection Profile Wizard

Screenshots



Database Development Perspective

❁ Database Source Explorer (DSE)

- ➡ Shows database objects in a tree
 - Schemas, synonyms, sequences, stored procedures, tables & associated triggers, views
- ➡ DSE tree has an active context menu
 - General DLL on all objects
 - Edit, Run, Drop on Stored procedure
 - Data edit, load/extract, sampling for table & view

Database Development Perspective

⚙ SQL Editor

- ➡ Simple text editor with syntax highlight
- ➡ Execute all or selected SQL statement
- ➡ Associated with a connection profile
- ➡ Associated with outline dialog
- ➡ Stores the contents in a general project

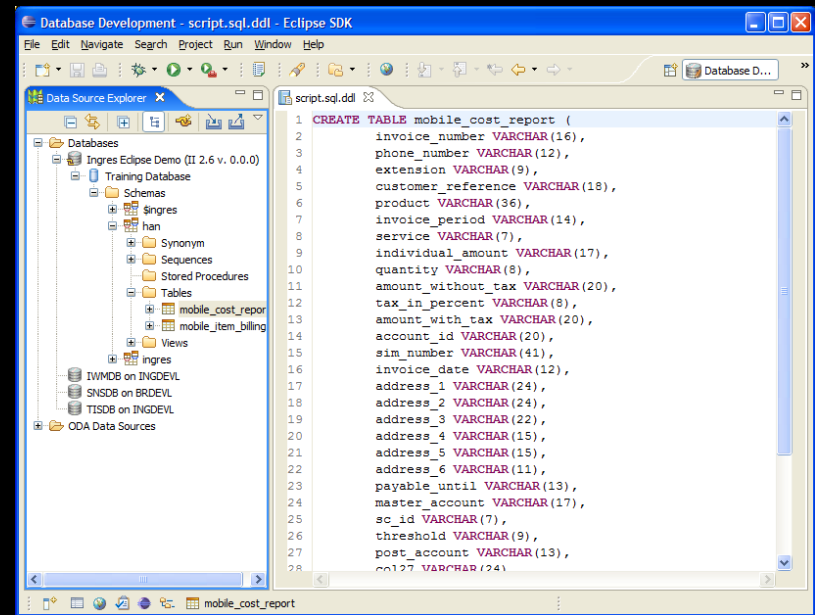
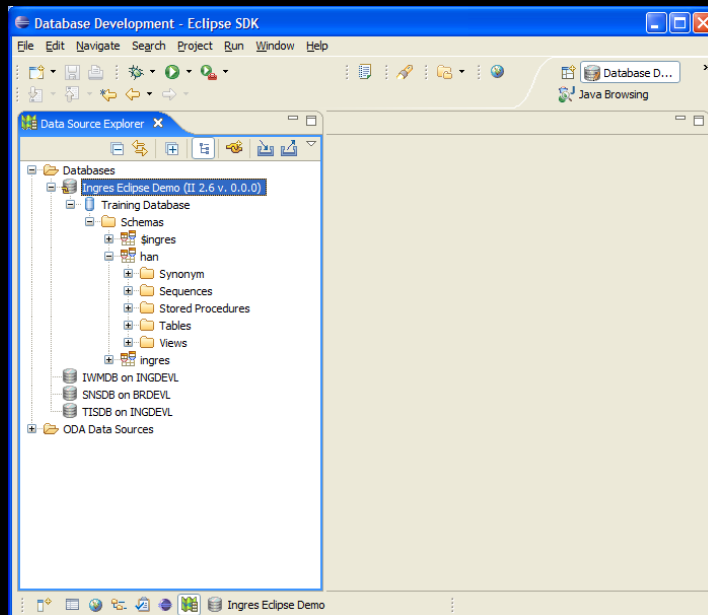
⚙ Outline dialog

- ➡ Outlines the individual SQL

⚙ SQL results, Tasks, Problems dialogs, etc

Database Development Perspective

Screen shots



Alternatives

⚙️ Aquafold DataStudio

- ➡ Commercial but free for OSS developer
- ➡ Through generic JDBC support
- ➡ <http://www.aquafold.com/>

⚙️ Visual DBA

- ➡ Included in the Ingres 2006 installation
- ➡ Requires the native networking

⚙️ Home-grown tools

- ➡ OpenROAD tools, Web based tools, etc.

Pros & Cons

⊗ Pros

- ➔ Based on well-established OSS project
- ➔ Supported by Ingres
- ➔ DB procedure editor

⊗ Cons

- ➔ Some SQL editor features are still primitive & not yet stable
- ➔ Need some more popular features, such as Query Builder, QBF, QEP, etc.

Conclusion

- ❁ One of long standing criticism on Ingres
 - ➡ No good GUI database tools for developers
 - ➡ if they exist, then we have resolve a lot of issues:
 - Deployment, running platform, and very least license
- ❁ Can we take this eclipse plug-in for Ingres as the answer for the criticism?