

Hurtownie danych - przegląd technologii

Robert Wrembel
Politechnika Poznańska
Instytut Informatyki

`Robert.Wrembel@cs.put.poznan.pl`
`www.cs.put.poznan.pl/rwrembel`





Oracle Data Integrator - tutorial

- 1. Tworzenie kontekstów (Topology Mgr)**
 - 2. Tworzenie serwerów danych (Topology Mgr)**
 - 3. Tworzenie schematów fizycznych dla serwerów danych (Topology Mgr)**
 - 4. Tworzenie schematów logicznych (Topology Mgr)**
 - 5. Odwzorowanie schemat logiczny \Rightarrow schemat fizyczny (Topology Mgr)**
 - 6. Tworzenie nowego projektu (Designer)**
 - 7. Importowanie modułów wiedzy (Designer)**
 - 8. Tworzenie modelu (Designer)**
 - 9. Definiowanie transformacji (Designer)**
 - 10. Uruchomienie transformacji (Designer)**
 - 11. Definiowanie procedury (Designer)**
 - 12. Definiowanie pakietu (Designer)**
 - 13. Definiowanie własnej funkcji konwersji (Designer)**
-

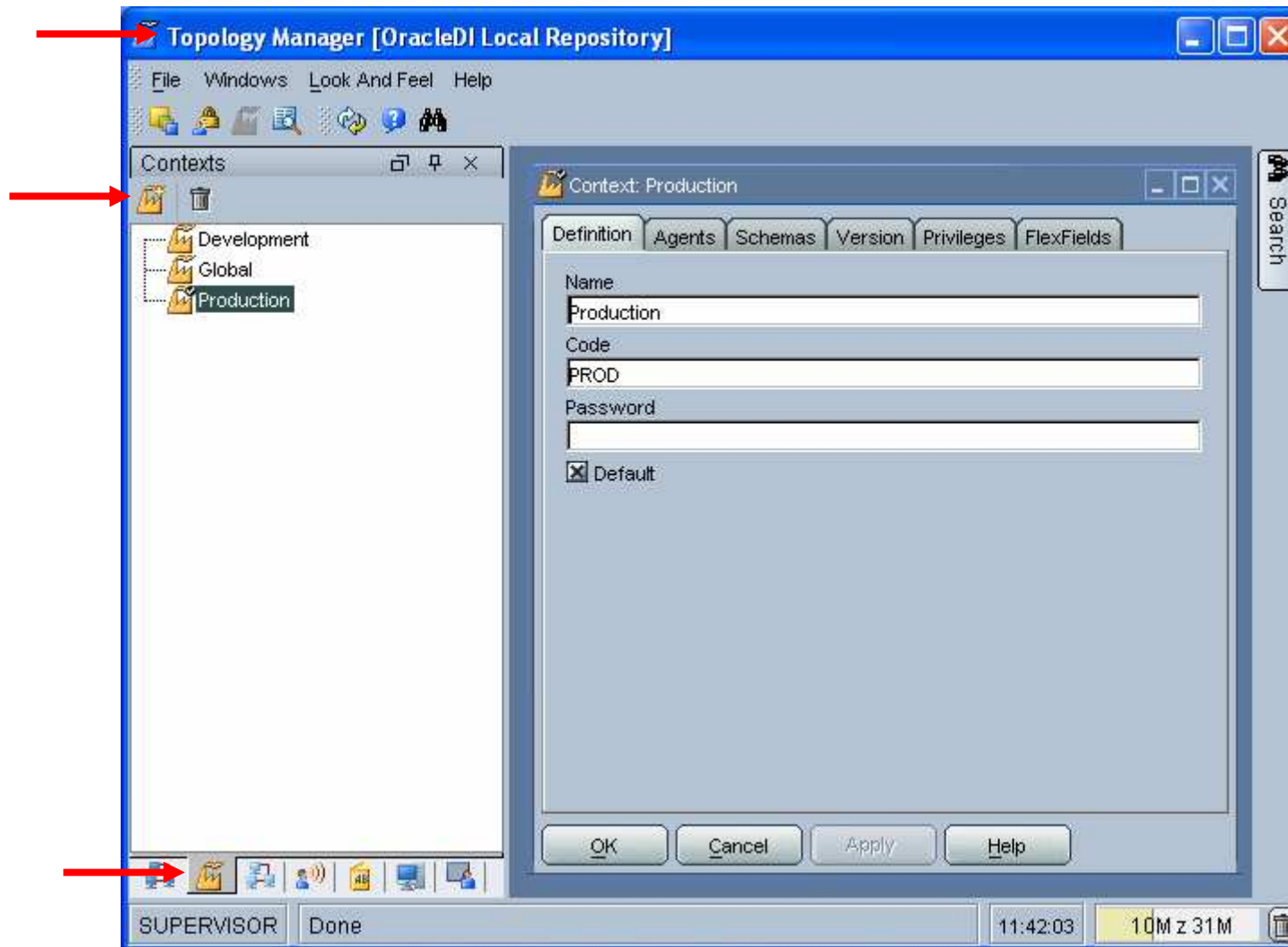


Oracle Data Integrator - tutorial

- ⇒ Przygotowany w oparciu o przykładowe środowisko demonstracyjne dostarczone z instalacją ODI, zawierające
- plik txt
 - plik xml
 - bazę danych HypersonicSQL

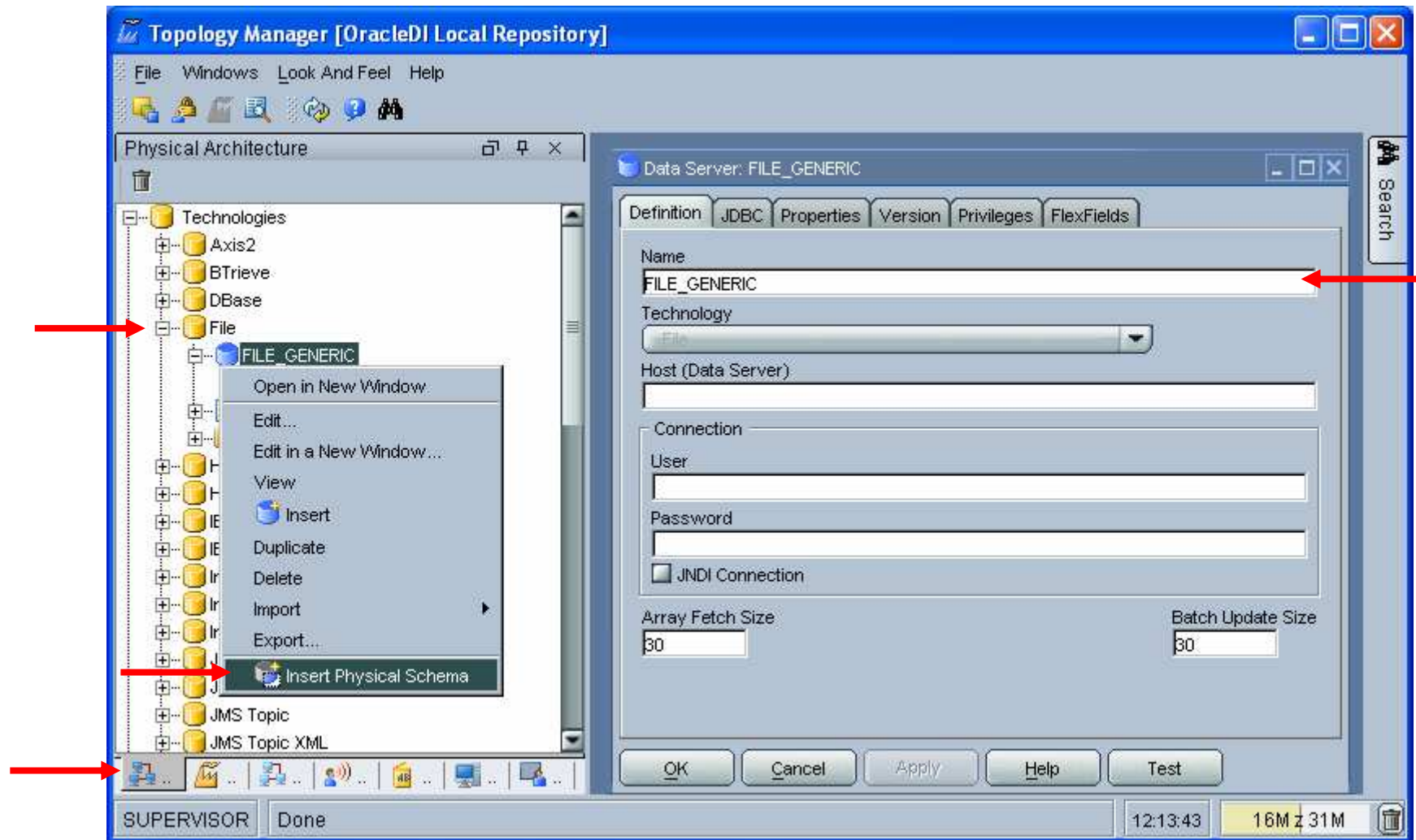


1. Tworzenie kontekstów



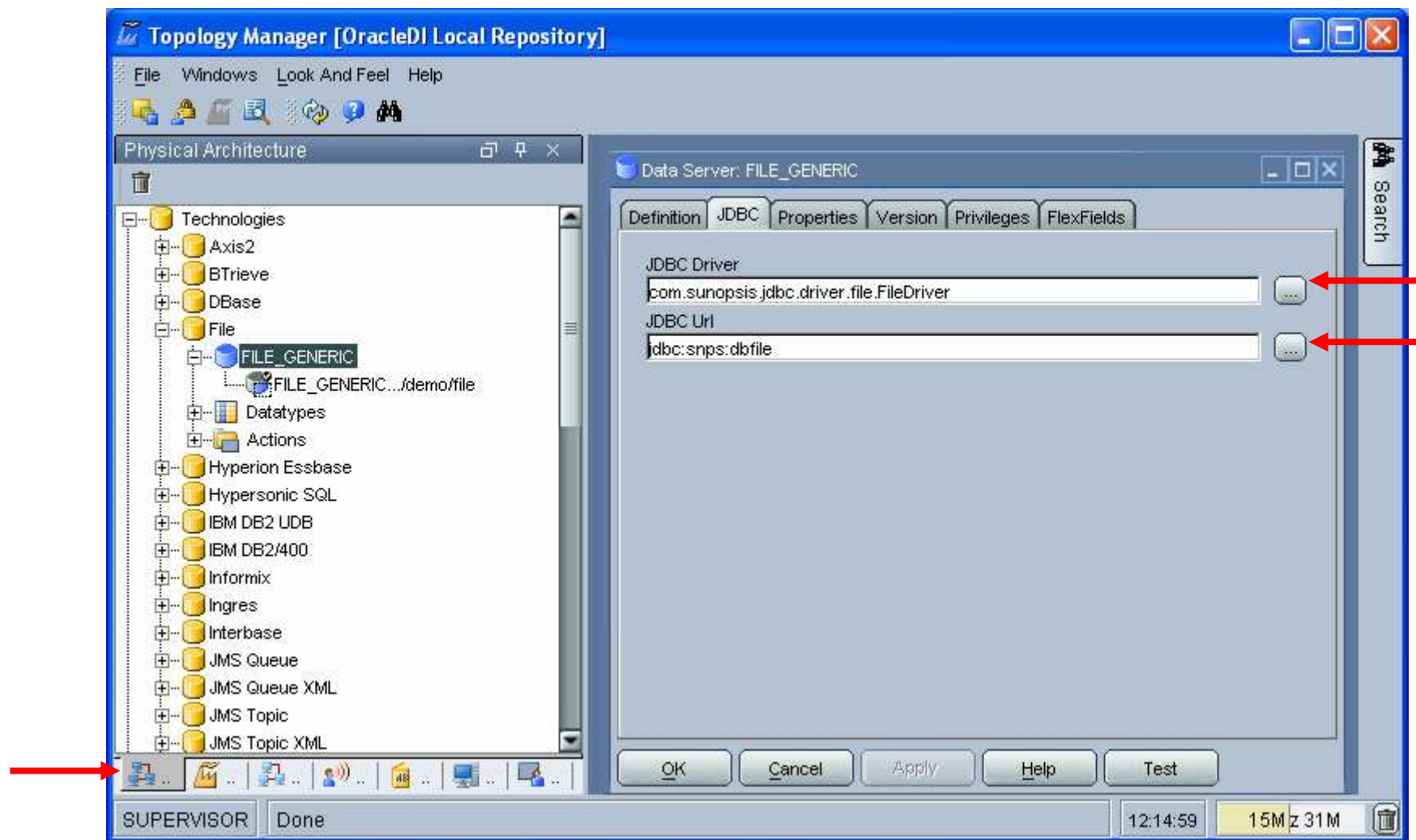


2. Tworzenie serwera danych - txt





2. Tworzenie serwera danych - txt





2. Tworzenie serwera danych - txt

The screenshot shows the 'Topology Manager [OracleDI Local Repository]' window. On the left, the 'Physical Architecture' tree shows a hierarchy: Technologies > File > FILE_GENERIC > FILE_GENERIC.../demo/file. The right pane shows the configuration for 'Data Server:FILE_GENERIC'. The 'Definition' tab is active. The 'Name' field is 'FILE_GENERIC.../demo/file'. The 'Directory (Schema)' and 'Directory (Work Schema)' fields both contain '..demo/file'. Red arrows point to these fields with the text 'wpisać ścieżkę do katalogu z plikami'. The 'Default' checkbox is checked. Below, there are sections for 'Work Tables Prefix' (Errors, Loading, Integration), 'Journalizing elements prefixes' (Datastores, Views, Triggers), and 'Naming Rules' (Local Object Mask, Remote Object Mask). The status bar at the bottom shows 'SUPERVISOR', 'Done', '12:17:12', and '15M z 31M'.

Physical Architecture

Technologies

- Axis2
- BTrieve
- DBase
- File
 - FILE_GENERIC
 - FILE_GENERIC.../demo/file
 - Datatypes
 - Actions
- Hyperion Essbase
- Hypersonic SQL
- IBM DB2 UDB
- IBM DB2/400
- Informix
- Ingres
- Interbase
- JMS Queue
- JMS Queue XML
- JMS Topic
- JMS Topic XML
- Java BeanShell
- JavaScript
- Jython
- LDAP
- Microsoft Access

Physical Schema:FILE_GENERIC.../demo/file

Definition Context Version Privileges FlexFields

Data Server:FILE_GENERIC

Name
FILE_GENERIC.../demo/file

Directory (Schema)
..demo/file

Directory (Work Schema)
..demo/file

☒ Default

Work Tables Prefix

Errors	Loading	Integration
E\$	C\$	I\$

Journalizing elements prefixes

Datastores	Views	Triggers

Naming Rules

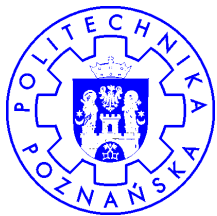
Local Object Mask
%SCHEMA/%OBJECT

Remote Object Mask
%SCHEMA/%OBJECT

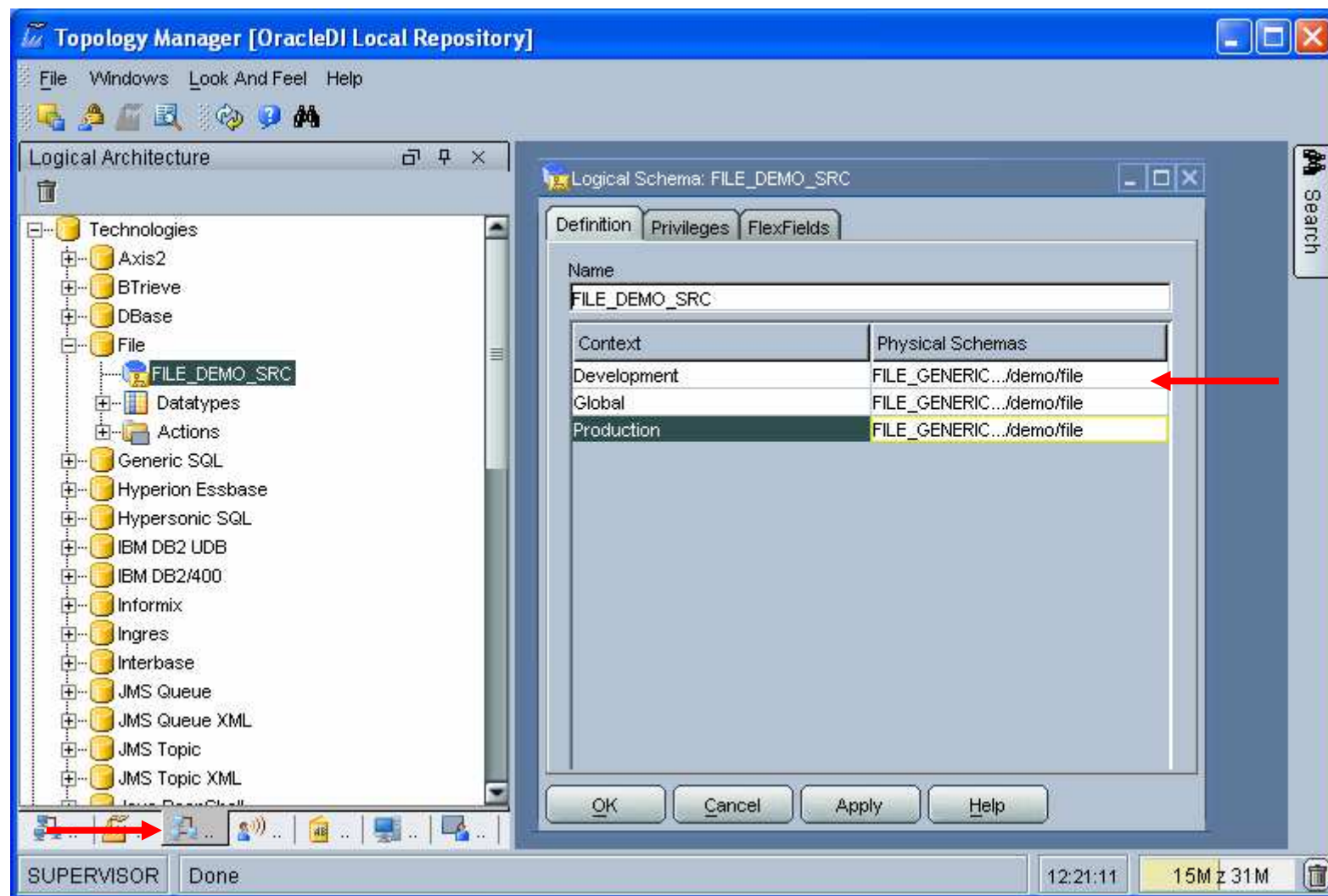
OK Cancel Apply Help

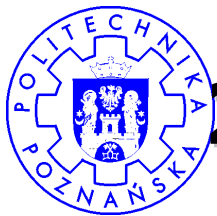
SUPERVISOR Done 12:17:12 15M z 31M

wpisać ścieżkę do katalogu z plikami

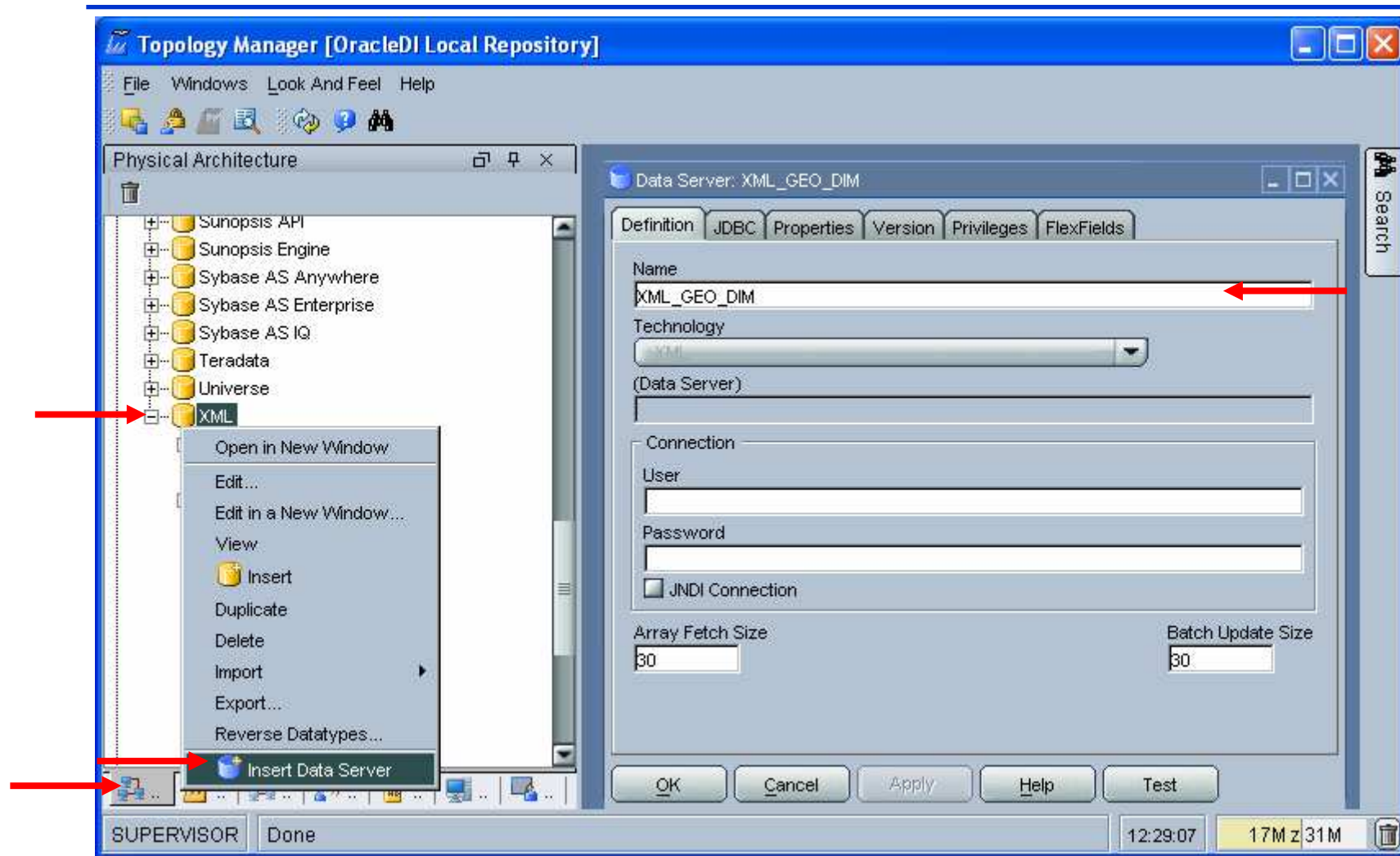


2. Tworzenie serwera danych - txt



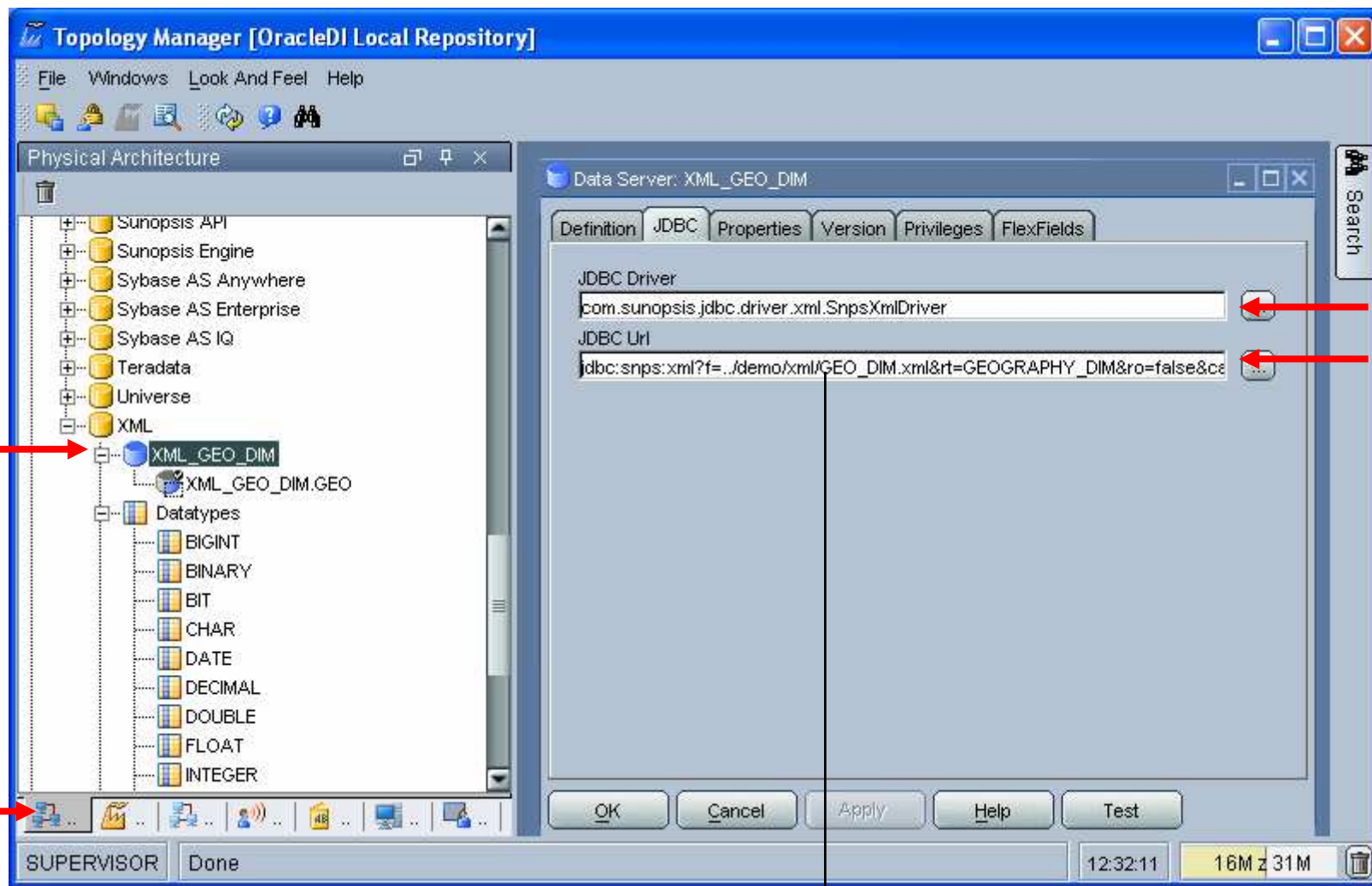


2. Tworzenie serwera danych - XML





2. Tworzenie serwera danych - XML

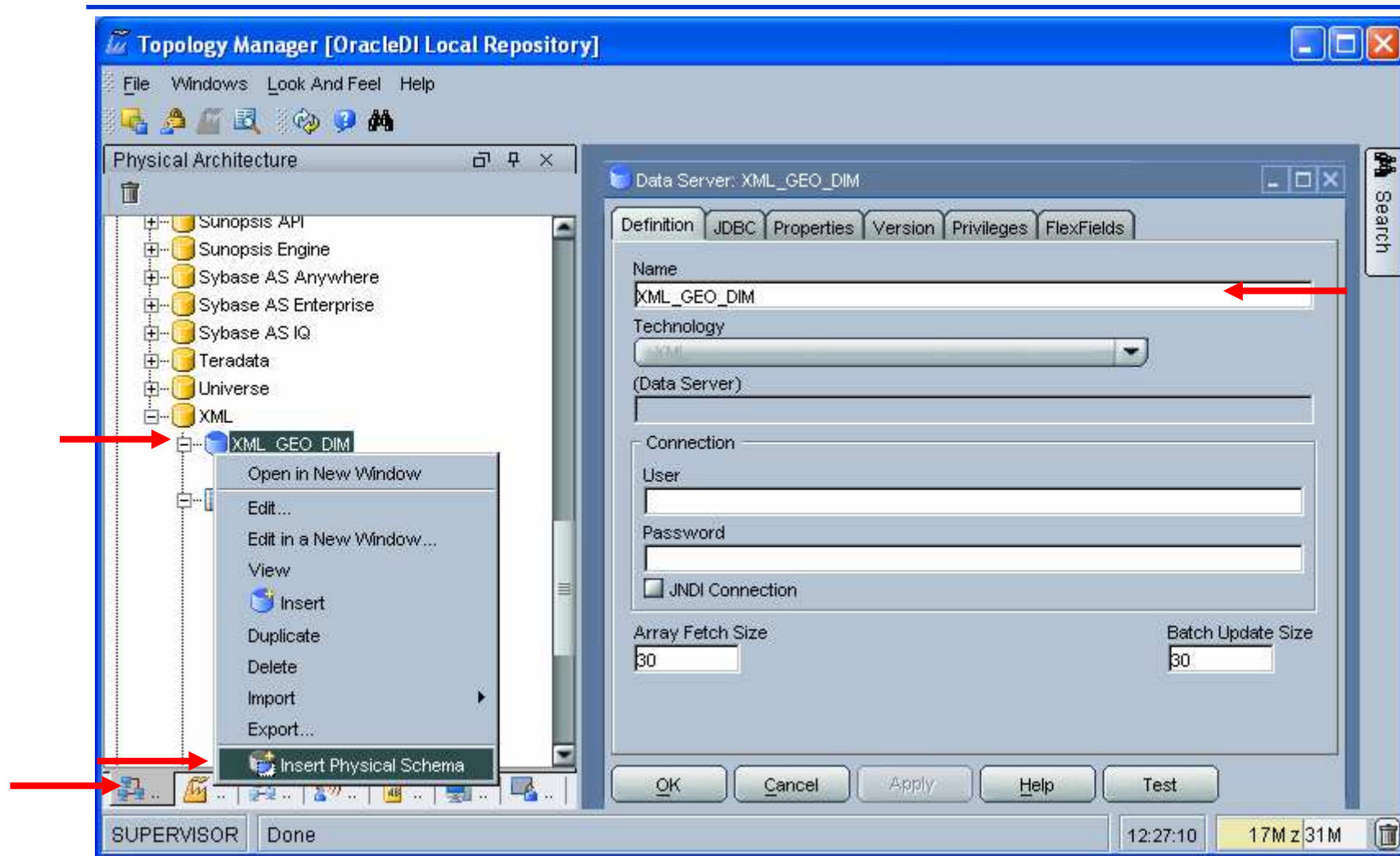


Robert Wren

`jdbc:snps:xml?f=../demo/xml/GEO_DIM.xml&rt=GEOGRAPHY_DIM&ro=false&case_sens=true&s=GEO`

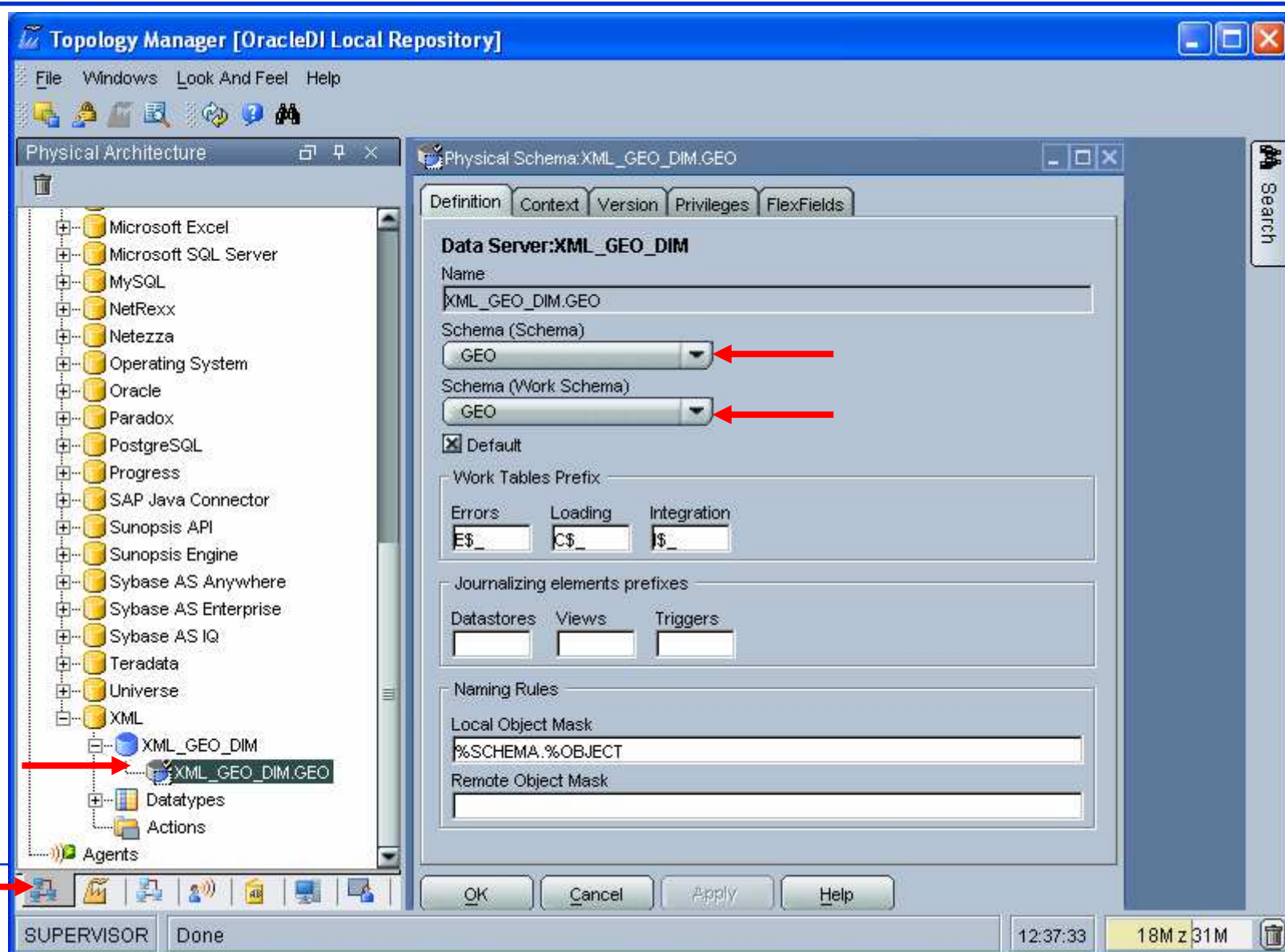


2. Tworzenie serwera danych - XML



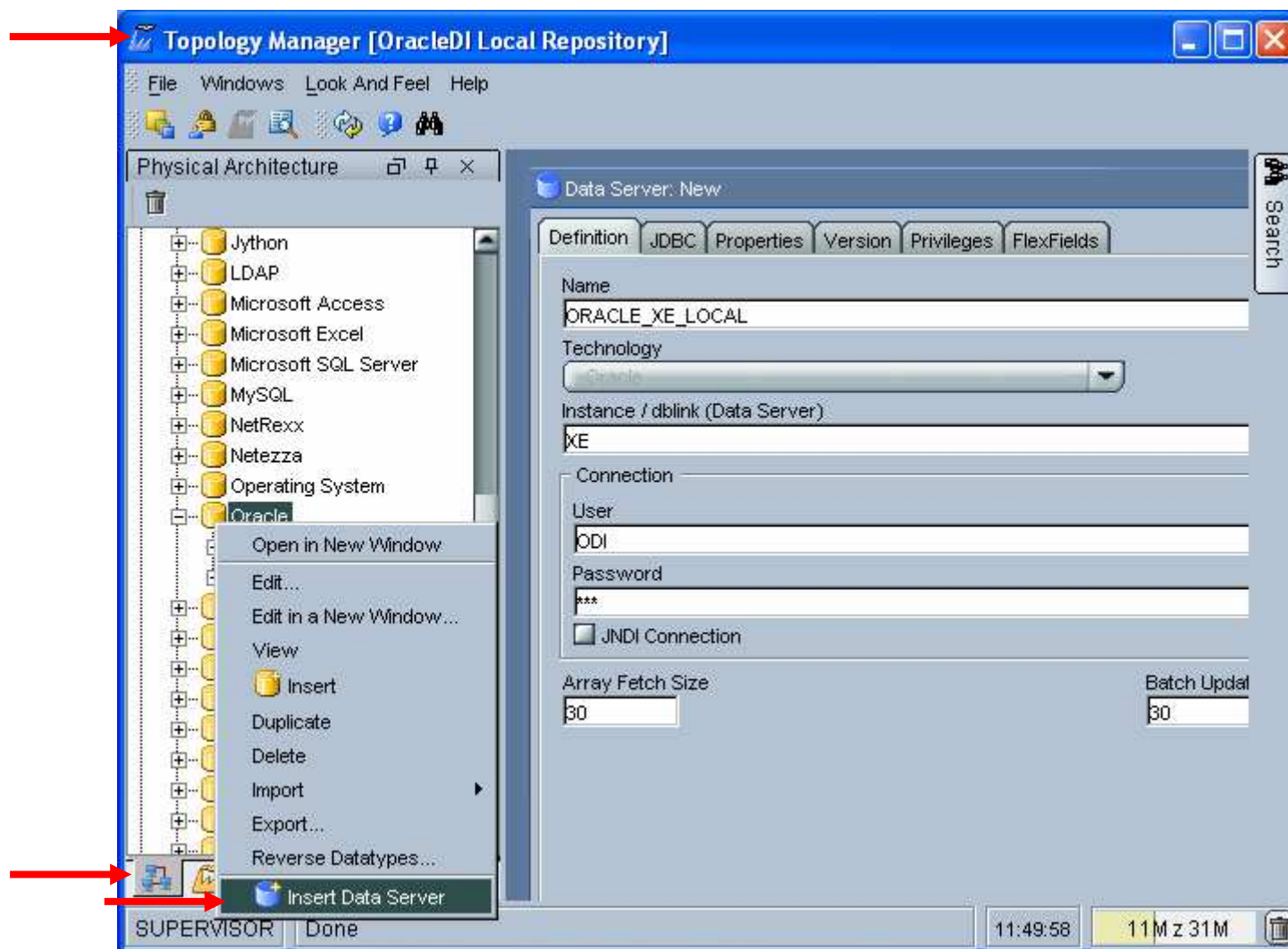


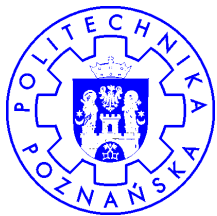
2. Tworzenie serwera danych - XML





2. Tworzenie serwera danych - BD





2. Tworzenie serwera danych - BD

The screenshot shows the 'Topology Manager [OracleDI Local Repository]' application. On the left is a 'Physical Architecture' tree with various database and system components. The 'Oracle' folder is expanded, showing 'Datatypes' and 'Actions'. The main area displays the 'Data Server: New' dialog with tabs for 'Definition', 'JDBC', 'Properties', 'Version', 'Privileges', and 'FlexFields'. The 'JDBC' tab is active, showing 'JDBC Driver' set to 'oracle.jdbc.driver.OracleDriver' and 'JDBC Url' set to 'jdbc:oracle:thin:@localhost:1521:XE'. A 'Test Connection for: ORACLE_XE_LOCAL' dialog is overlaid, prompting to 'Select an Agent to test this Connection'. The 'Agent' dropdown is set to 'Local (No Agent)'. At the bottom of the main dialog, there are buttons for 'OK', 'Cancel', 'Apply', 'Help', and 'Test'. Red arrows point to the 'JDBC Driver' and 'JDBC Url' fields, the 'Agent' dropdown, and the 'Test' button. A red arrow also points to the 'Test' button in the 'Test Connection' dialog. The status bar at the bottom shows 'SUPERVISOR', 'Done', '11:53:22', and '11M z 31M'.

Roberto

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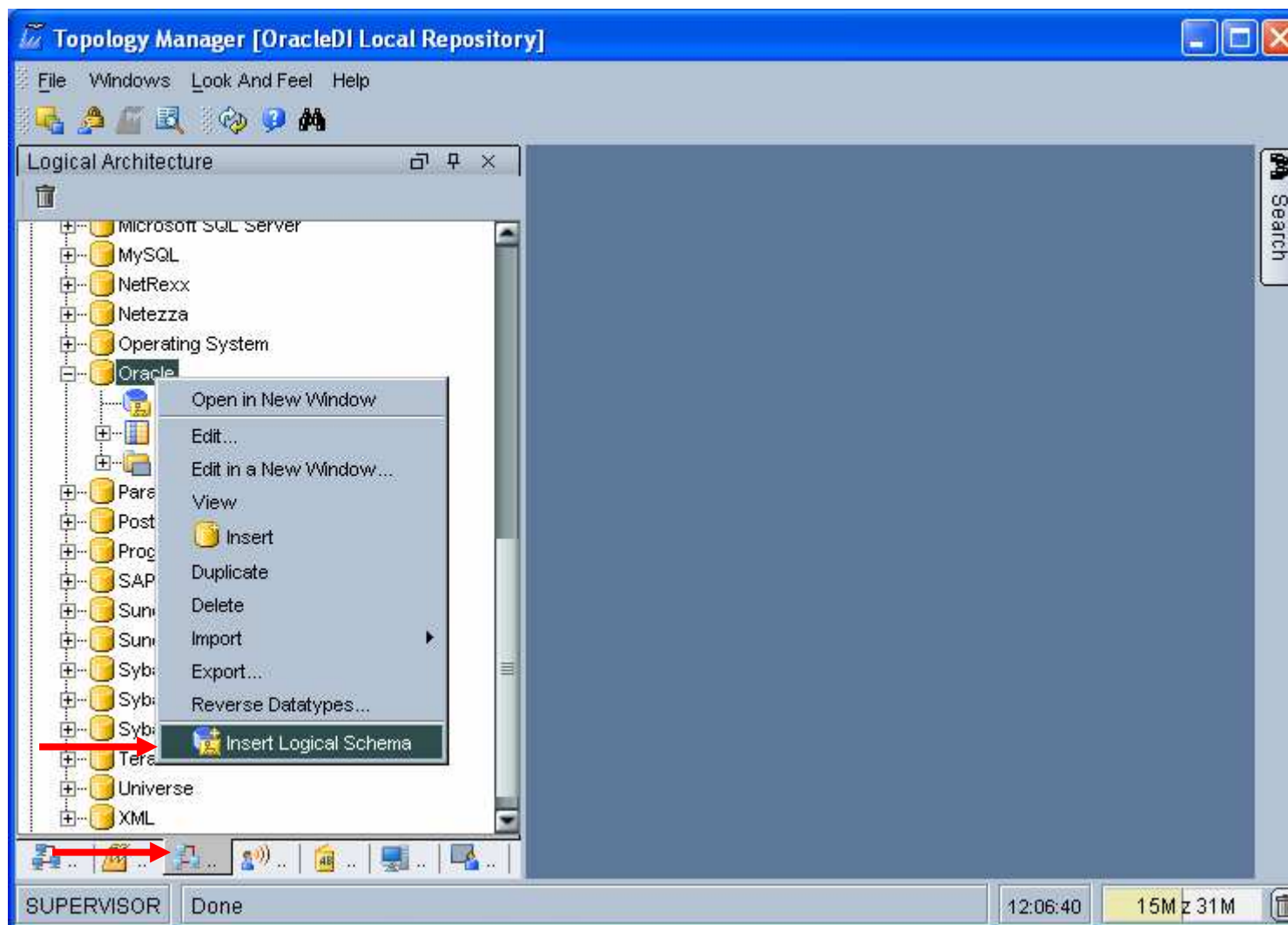
3. Tworzenie schematu fizycznego

The screenshot shows the **Topology Manager [OracleDI Local Repository]** application. The **Physical Architecture** tree on the left lists various data sources, including **ORACLE_XE_LOCAL**. A right-click context menu is open over **ORACLE_XE_LOCAL**, with the **Insert Physical Schema** option highlighted by a red arrow. The main panel displays the configuration for the **Physical Schema: ORACLE_XE_LOCAL.SALES_DEV**. Two red arrows point to the **Schema (Schema)** dropdown (set to **SALES_DEV**) and the **Schema (Work Schema)** dropdown (set to **STAGING**). The configuration includes fields for **Name**, **Default** checkbox, **Work Tables Prefix** (Errors, Loading, Integration), **Journalizing elements prefixes** (Datastores, Views, Triggers), and **Naming Rules** (Local Object Mask, Remote Object Mask). The status bar at the bottom shows **SUPERVISOR**, **Done**, and a progress indicator **15M z 31M**.

Rob

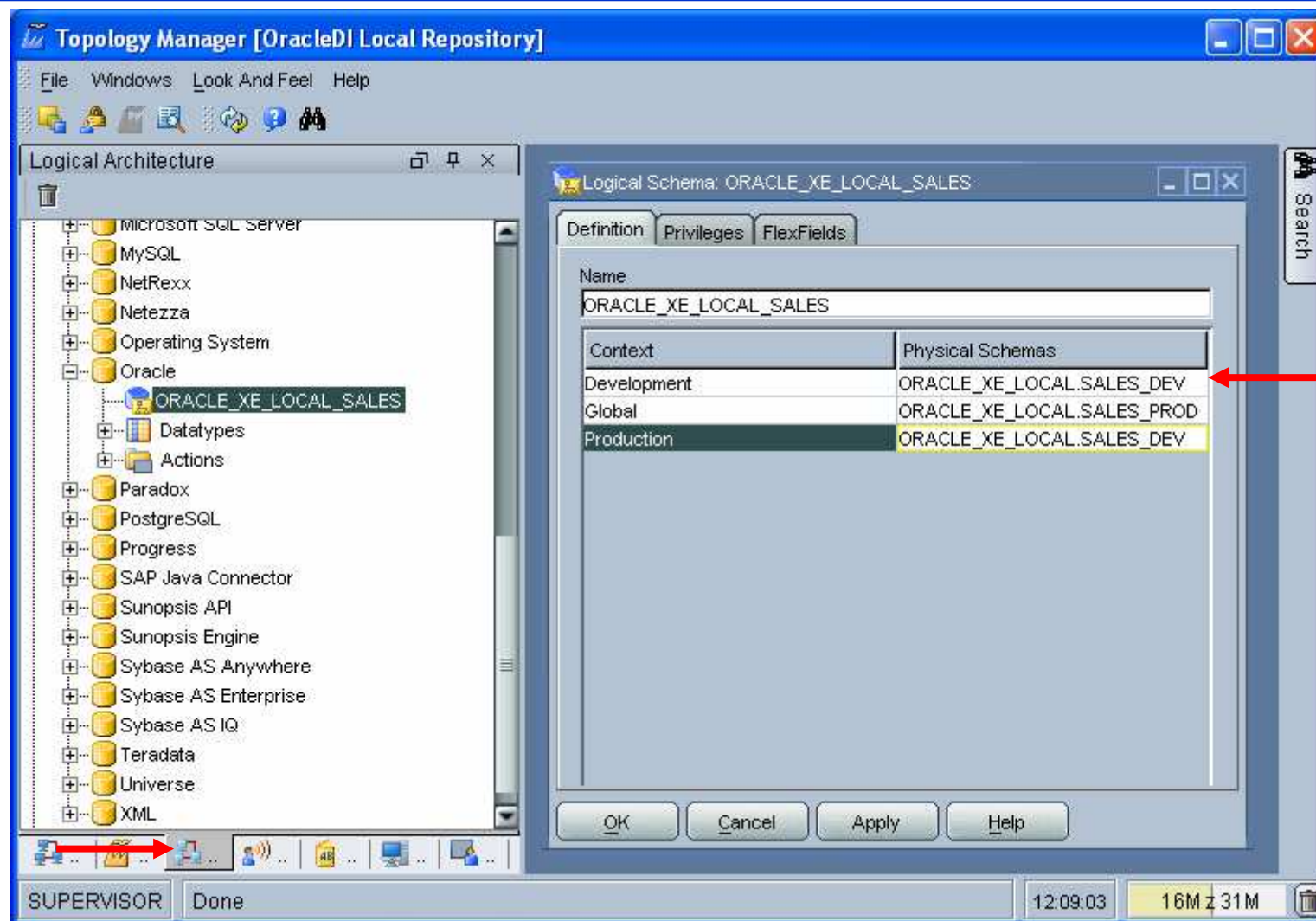


4. Tworzenie schematu logicznego



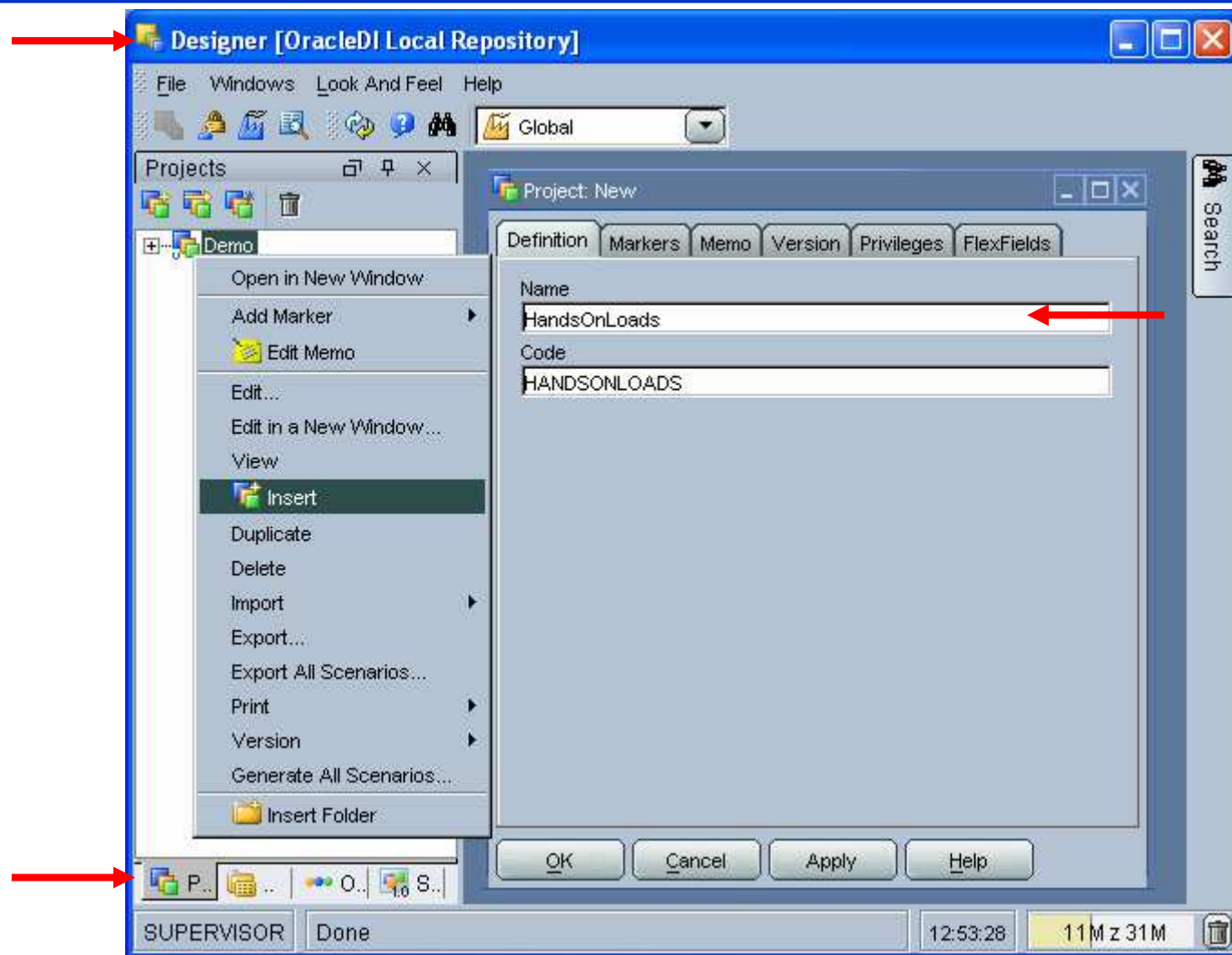


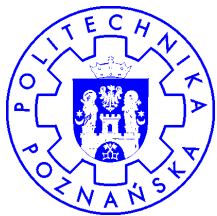
5. Odzwzorowanie schemat logiczny ⇒ schemat fizyczny



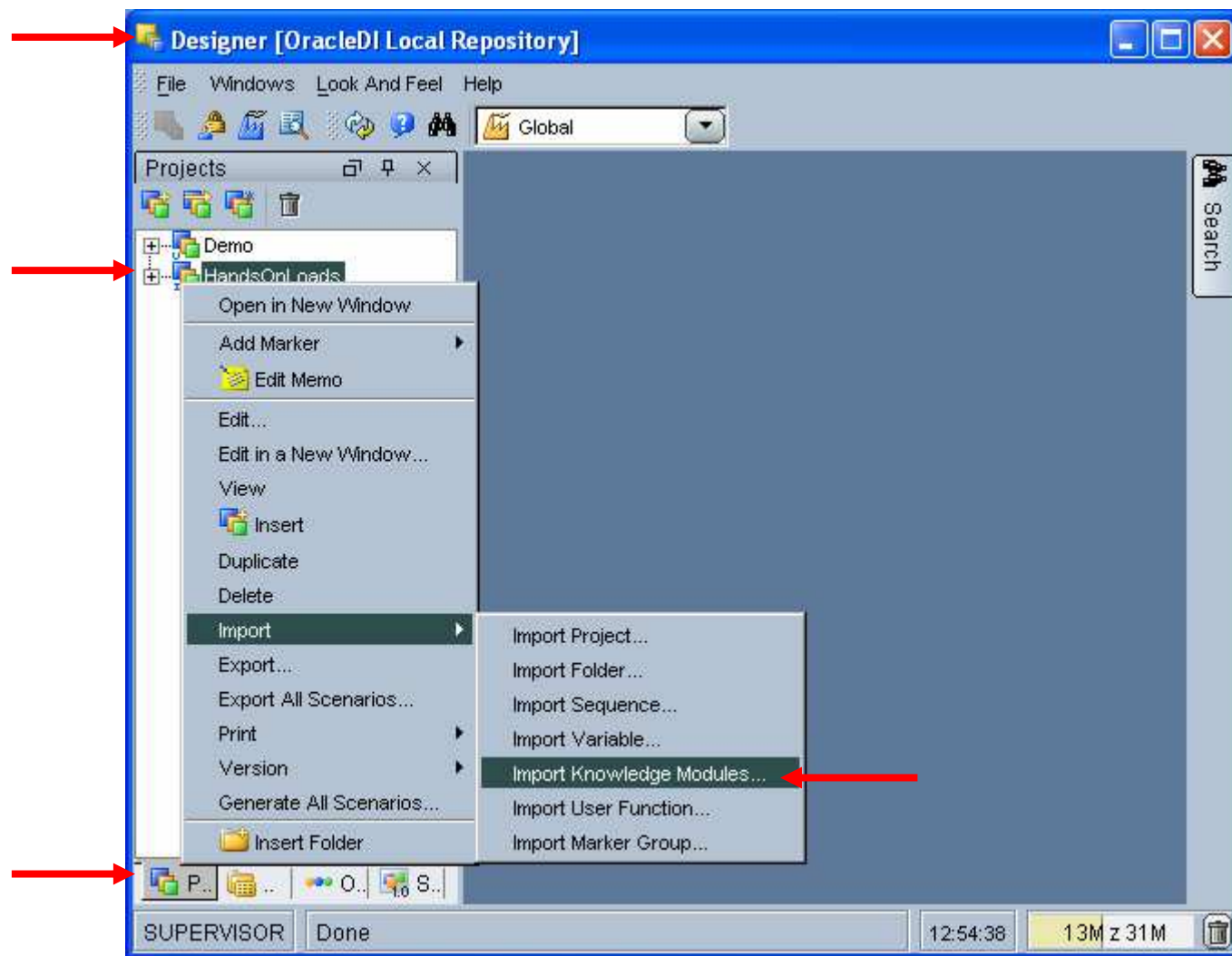


6. Tworzenie nowego projektu



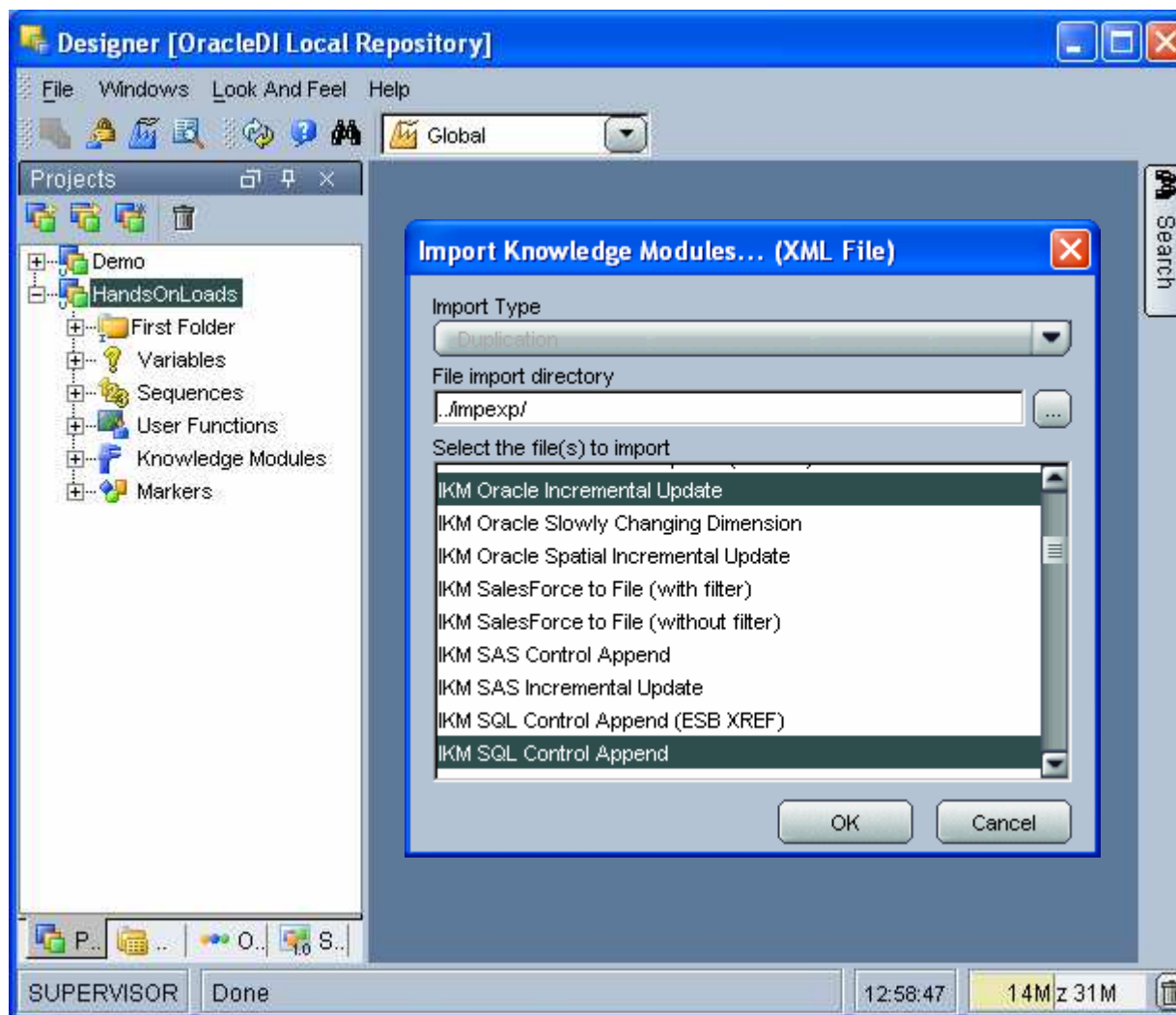


7. Importowanie modułów wiedzy



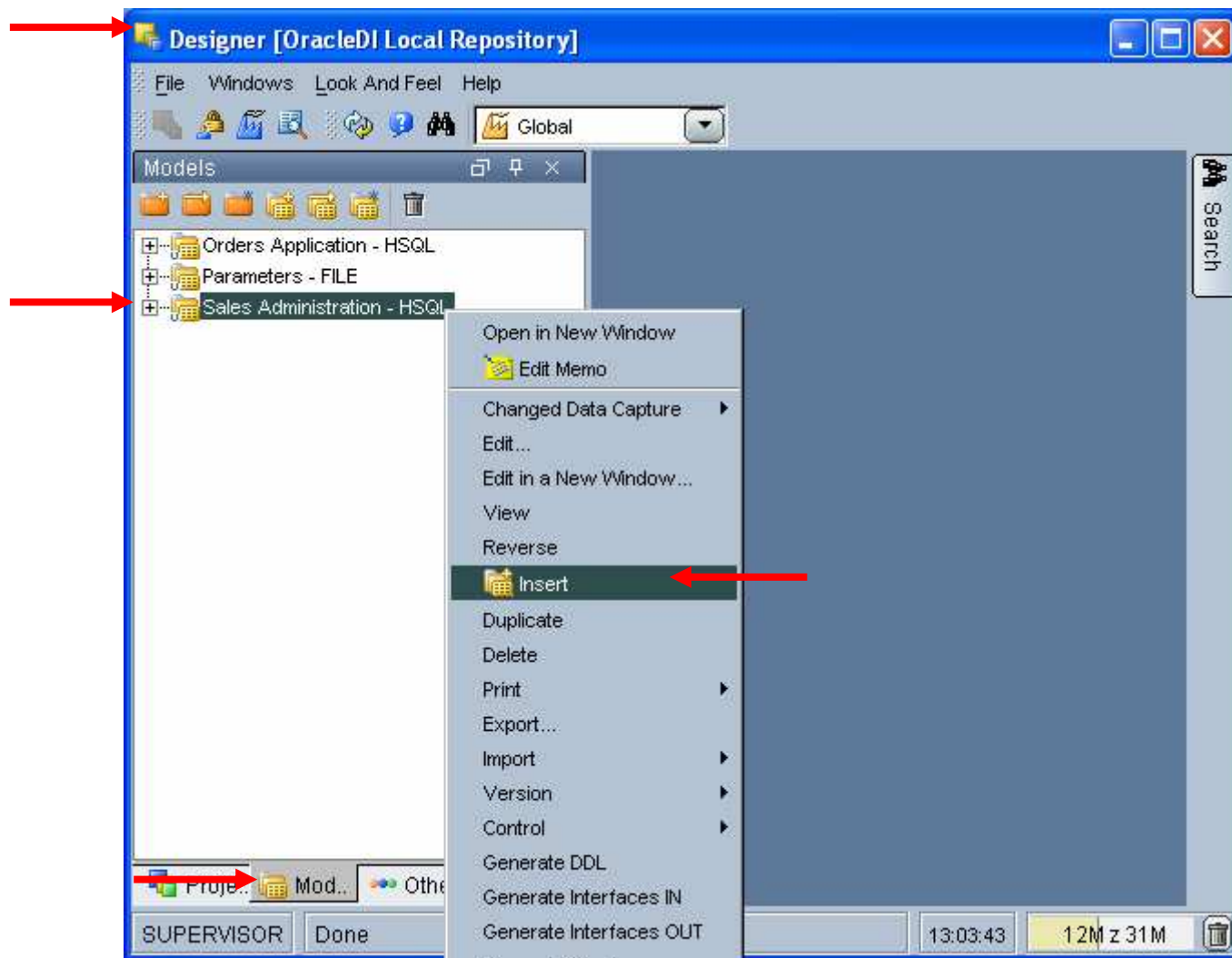


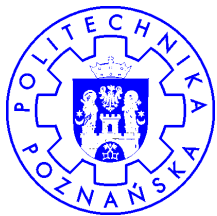
7. Importowanie modułów wiedzy



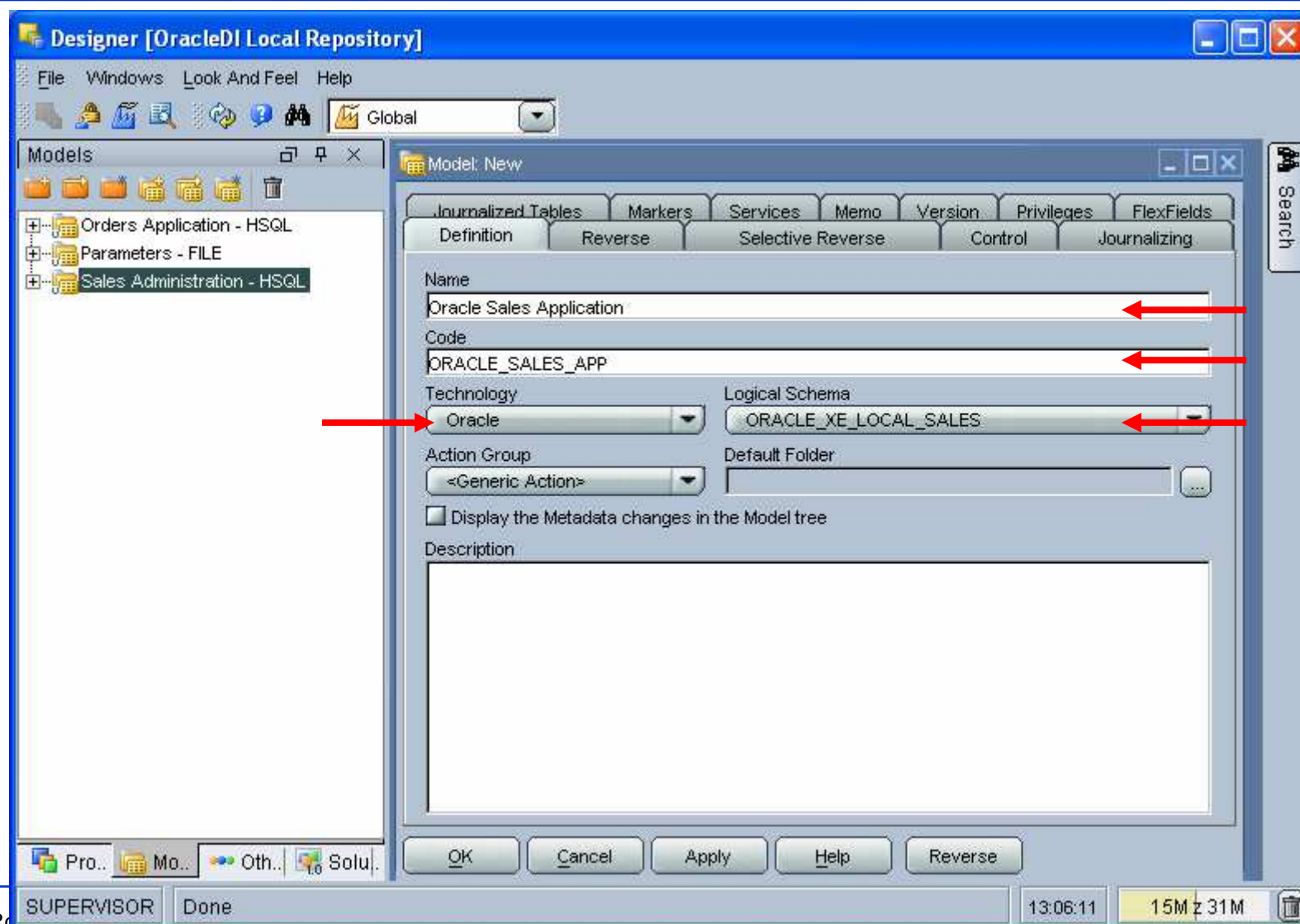


8. Tworzenie modelu



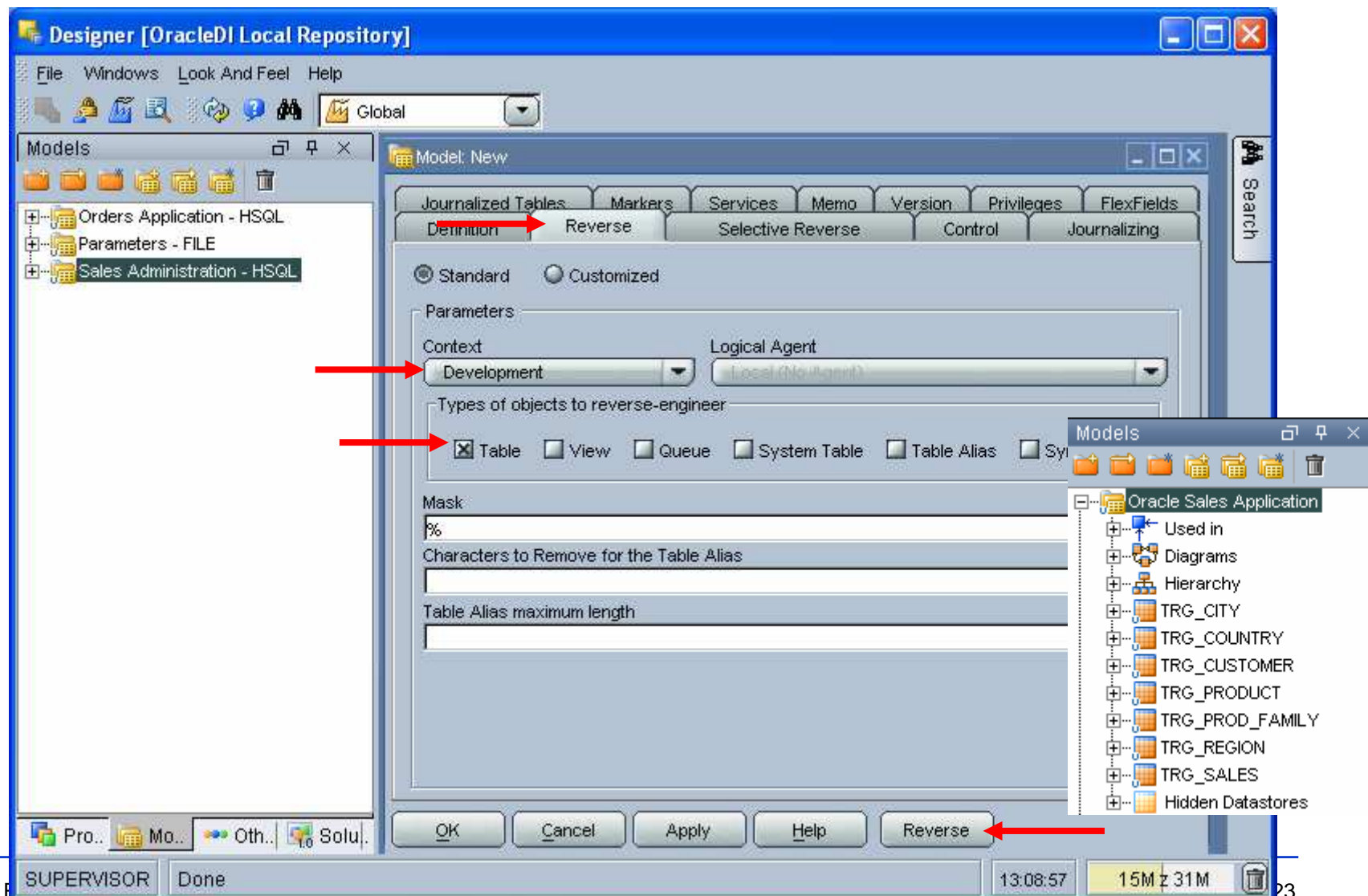


8. Tworzenie modelu - BD



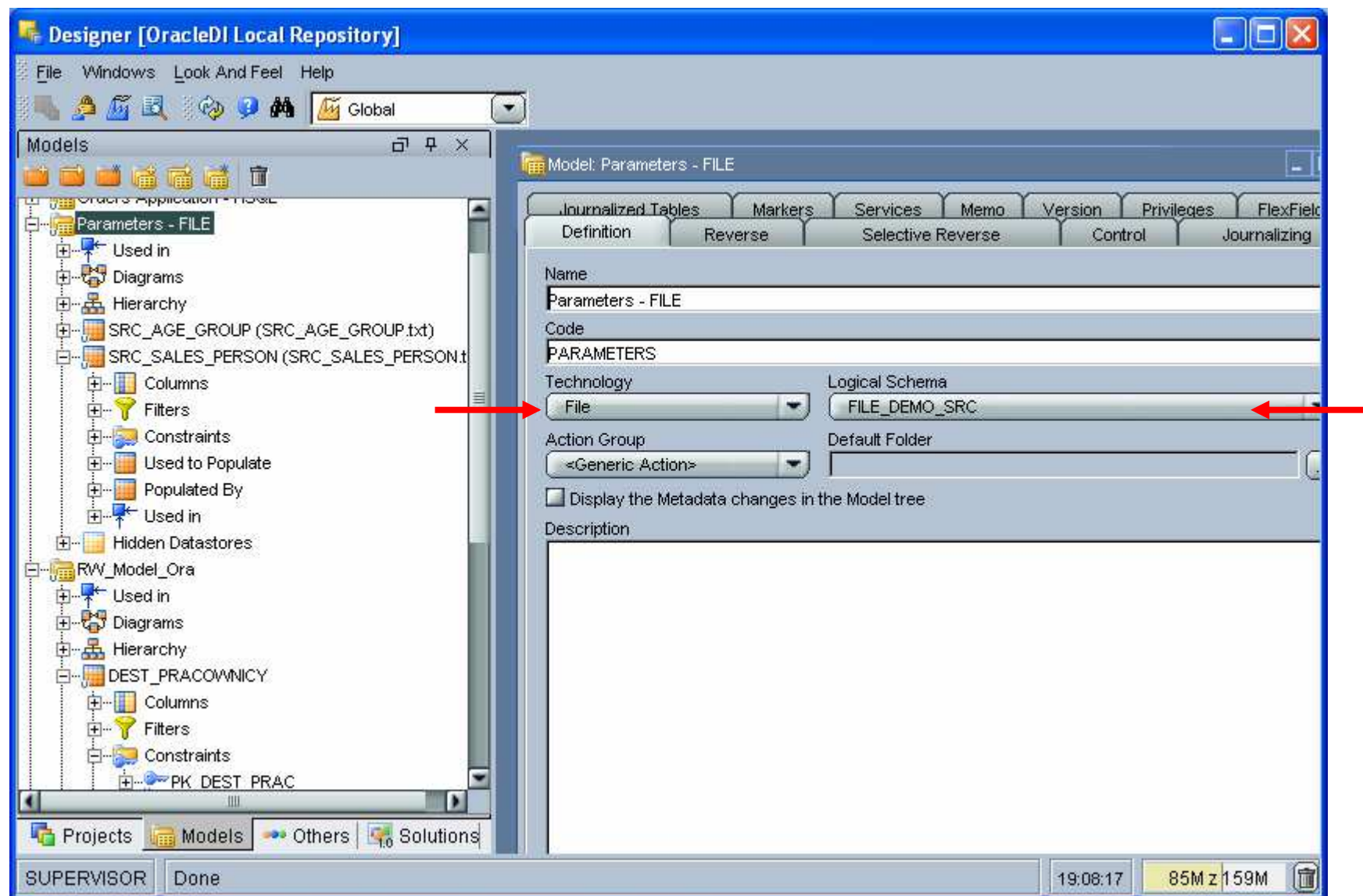


8. Tworzenie modelu - BD





8. Tworzenie modelu - txt





8. Tworzenie modelu - txt

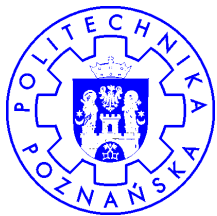
The screenshot displays the Oracle Designer [OracleDI Local Repository] interface. The left pane shows a tree view of the repository structure. The right pane shows the properties of the selected model, **DataStore: SRC_SALES_PERSON**.

Model / Sub-Model: Parameters - FILE / Global

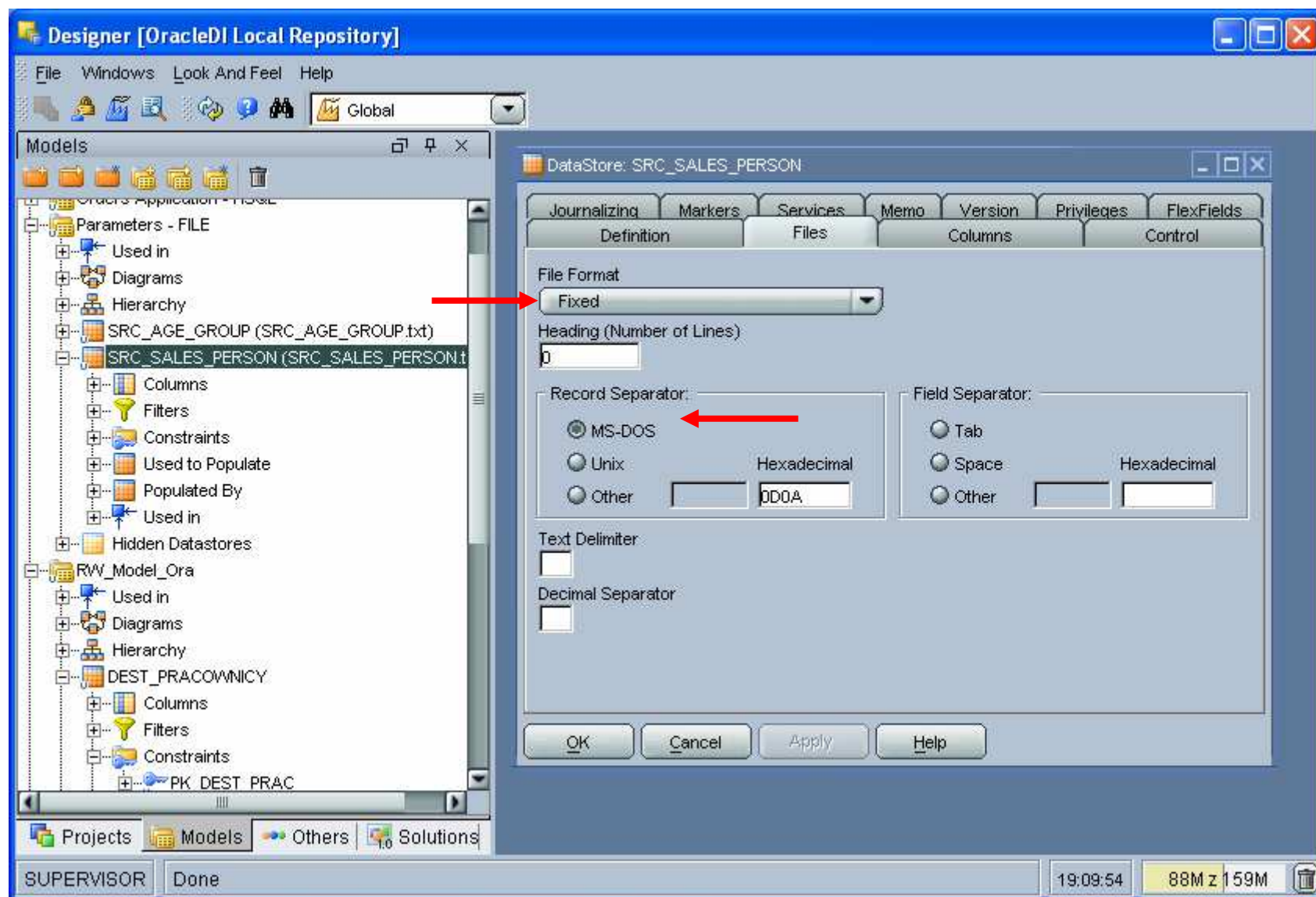
Property	Value
Name	SRC_SALES_PERSON
Alias	SRC_SALES_PERSON
Datastore Type	Table
OLAP Type	<Undefined>
Resource Name	SRC_SALES_PERSON.txt
Description	List of the Sales Persons Fixed File

Red arrows point from the **SRC_SALES_PERSON (SRC_SALES_PERSON.txt)** entry in the left pane to the **Name** and **Resource Name** fields in the right pane.

The status bar at the bottom shows: SUPERVISOR Done 19:09:00 85M z 159M



8. Tworzenie modelu - txt





8. Tworzenie modelu - txt

Designer [OracleDI Local Repository]

File Windows Look And Feel Help

Global

Models

- Oracle Application Tools
- Parameters - FILE
 - Used in
 - Diagrams
 - Hierarchy
 - SRC_AGE_GROUP (SRC_AGE_GROUP.txt)
 - SRC_SALES_PERSON (SRC_SALES_PERSON.txt)**
 - Columns
 - SALES_PERS_ID
 - FIRST_NAME
 - LAST_NAME
 - HIRE_DATE
 - Filters
 - Constraints
 - Used to Populate
 - Populated By
 - Used in
 - Hidden Datastores
- RW_Model_Ora
 - Used in
 - Diagrams

dodać ręcznie

DataStore: SRC_SALES_PERSON

Journalizing Markers Services Memo Version Privileges FlexFields

Definition Files Columns Control

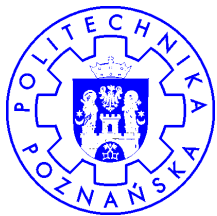
Reverse Reverse Cobol CopyBook Automatic adjustment

Name	Type	Start	Physic...	Logica...	Scale	Decim...	Rec. C...	Format
SALES_...	Numeric	1	10	10				
FIRST_...	String	11	50	50				
LAST_N...	String	61	50	50				
HIRE_D...	Date	111	19	19				dd/MM/...

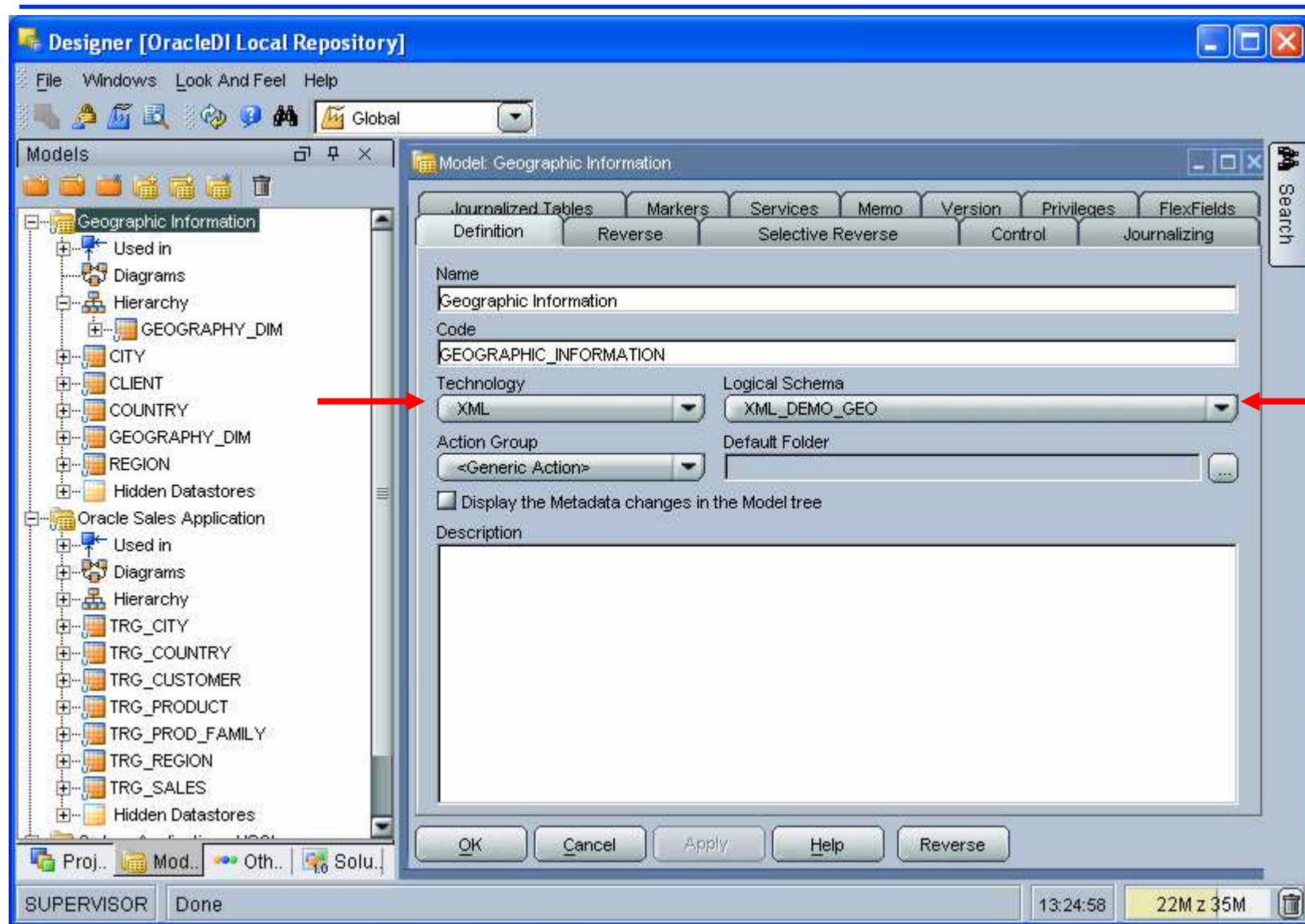
OK Cancel Apply Help

Projects Models Others Solutions

SUPERVISOR Done 19:11:58 89M z 159M

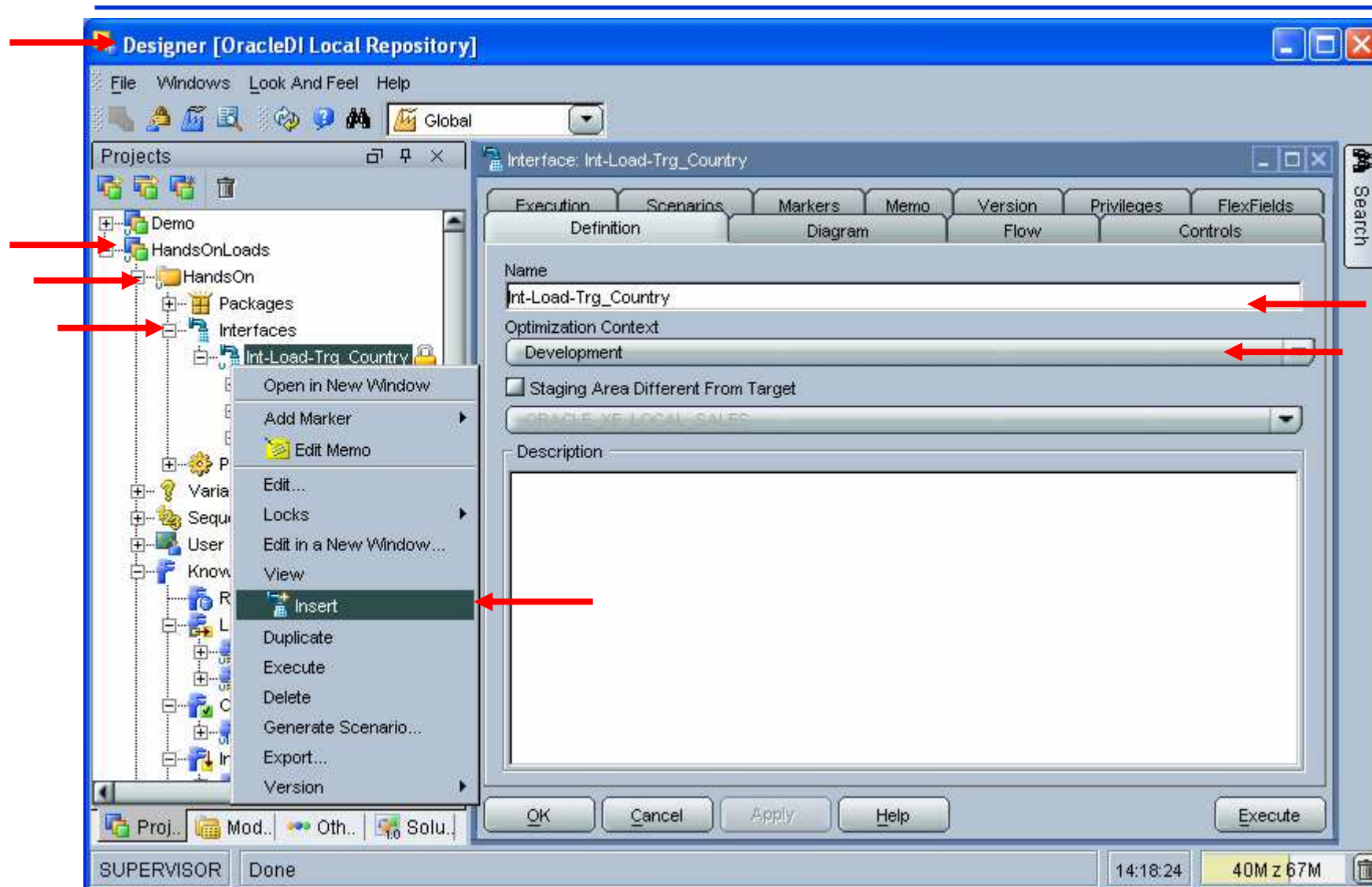


8. Tworzenie modelu - XML



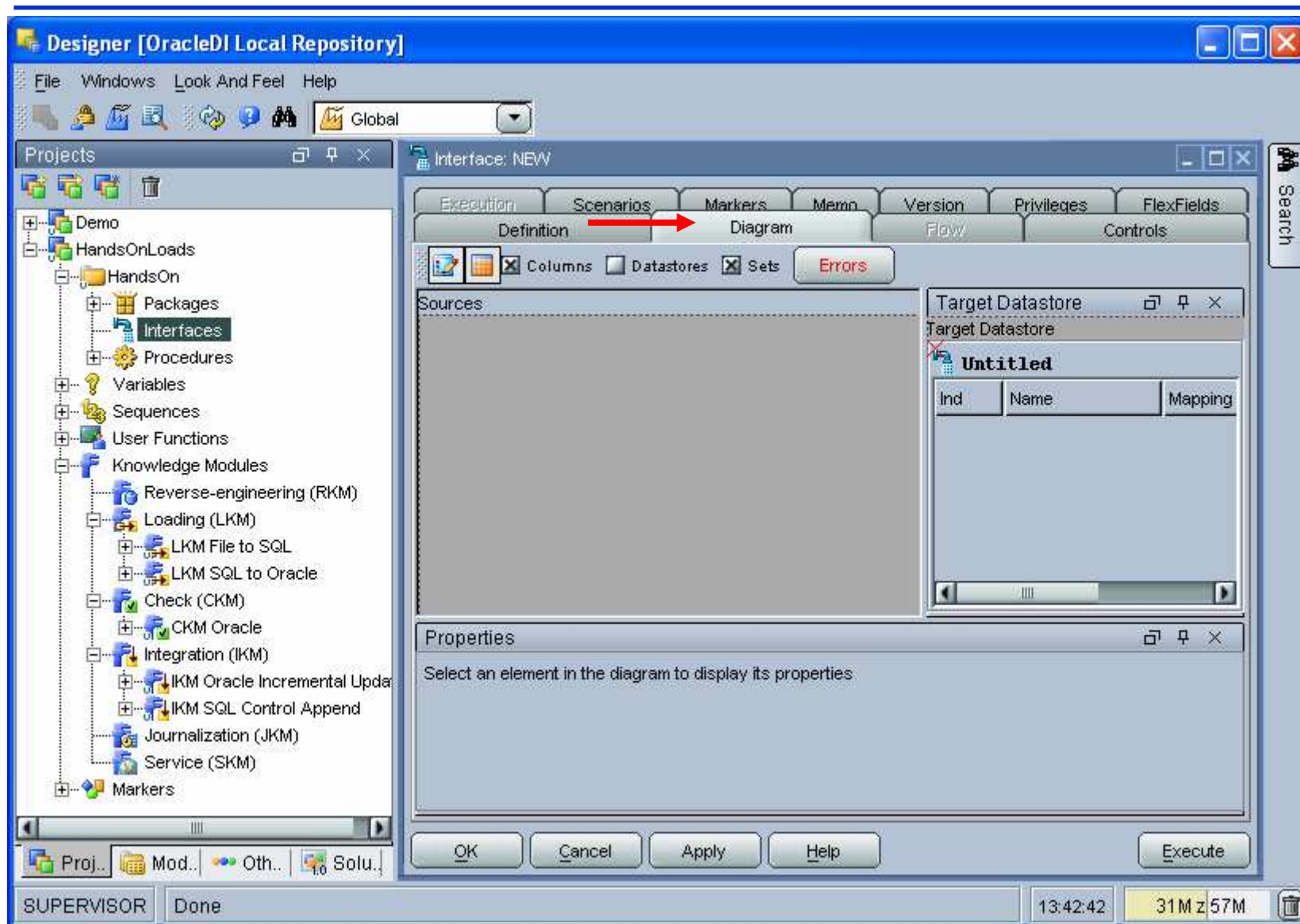


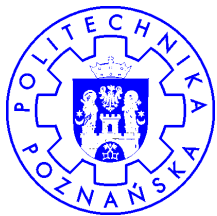
9. Definiowanie transformacji





9. Definiowanie transformacji





9. Definiowanie transformacji

The screenshot shows the Oracle Data Integrator Designer interface. The left pane displays a tree structure of models. The main workspace shows a transformation diagram with a source data store and a target data store. The 'Columns' tab is selected, showing the mapping of columns between the source and target data stores.

Models:

- Geographic Information
- Oracle Sales Application
 - Used in
 - Diagrams
 - Hierarchy
 - TRG_CITY
 - TRG_COUNTRY
 - TRG_CUSTOMER
 - TRG_PRODUCT
 - TRG_PROD_FAMILY
 - TRG_REGION
 - TRG_SALES
 - Hidden Datastores
- Orders Application - HSQL
 - Used in
 - Diagrams
 - Hierarchy
 - SRC_CITY
 - SRC_CUSTOMER
 - SRC_ORDERS
 - SRC_ORDER_LINES
 - SRC_PRODUCT
 - SRC_REGION

Transformation Diagram:

1 - SRC_REGI...

Column	Source	Target
*REGION ID	REGION	COUNTRY ID
REGION	COUNTRY ID	COUNTRY
COUNTRY ID	COUNTRY	

Target Datastore:

Ind	Name	Mapping
1	*COUNTRY ID	SRC REG
2	COUNTRY	SRC REG

Properties:

Select an element in the diagram to display its properties

Buttons: OK, Cancel, Apply, Help, Execute

Status Bar: SUPERVISOR Done 13:45:11 34M z 57M



9. Definiowanie transformacji

Designer [OracleDI Local Repository]

File Windows Look And Feel Help

Global

Models

- Geographic Information
- Oracle Sales Application
 - Used in
 - Diagrams
 - Hierarchy
 - TRG_CITY
 - TRG_COUNTRY
 - TRG_CUSTOMER
 - TRG_PRODUCT
 - TRG_PROD_FAMILY
 - TRG_REGION
 - TRG_SALES
 - Hidden Datastores
- Orders Application - HSQL
 - Used in
 - Diagrams
 - Hierarchy
 - SRC_CITY
 - SRC_CUSTOMER
 - SRC_ORDERS
 - SRC_ORDER_LINES
 - SRC_PRODUCT
 - SRC_REGION

Interface: NEW

Execution Scenarios Markers Memo Version Privileges FlexFields

Definition Diagram Flow Controls

SS_0 (1 - HSQL...)

SRC_REGION

Target+Staging Area (ORAC...)

SS_0

TRG_COUNTRY

LKM SQL to Oracle

Properties

Select an element in the diagram to display its properties

OK Cancel Apply Help Execute

SUPERVISOR Done 13:49:15 32M z 60M



10. Uruchomienie transformacji

Designer [OracleDI Local Repository]

File Windows Look And Feel Help

Operator: log z wykonania

Projects

- Demo
- HandsOnLoads
 - HandsOn
 - Packages
 - Interfaces
 - Int-Load-Trg_Country

Open in New Window

Add Marker

Edit Memo

Edit...

Locks

Edit in a New Window...

View

Insert

Duplicate

Execute

Delete

Generate Scenario...

Export...

Version

Interface: Int-Load-Trg_Country

Execution Scenarios Markers Memo Version Privileges FlexFields

Definition Diagram Flow Controls

SS_0 (-1 - HSQL...

SRC_REGION

Target+Staging Area (ORA...

SS_0

TRG_COUNTRY

LKM SQL to Oracle

Properties

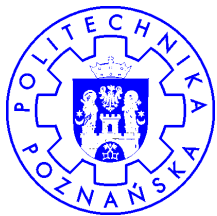
Select an element in the diagram to display its properties

OK Cancel Apply Help

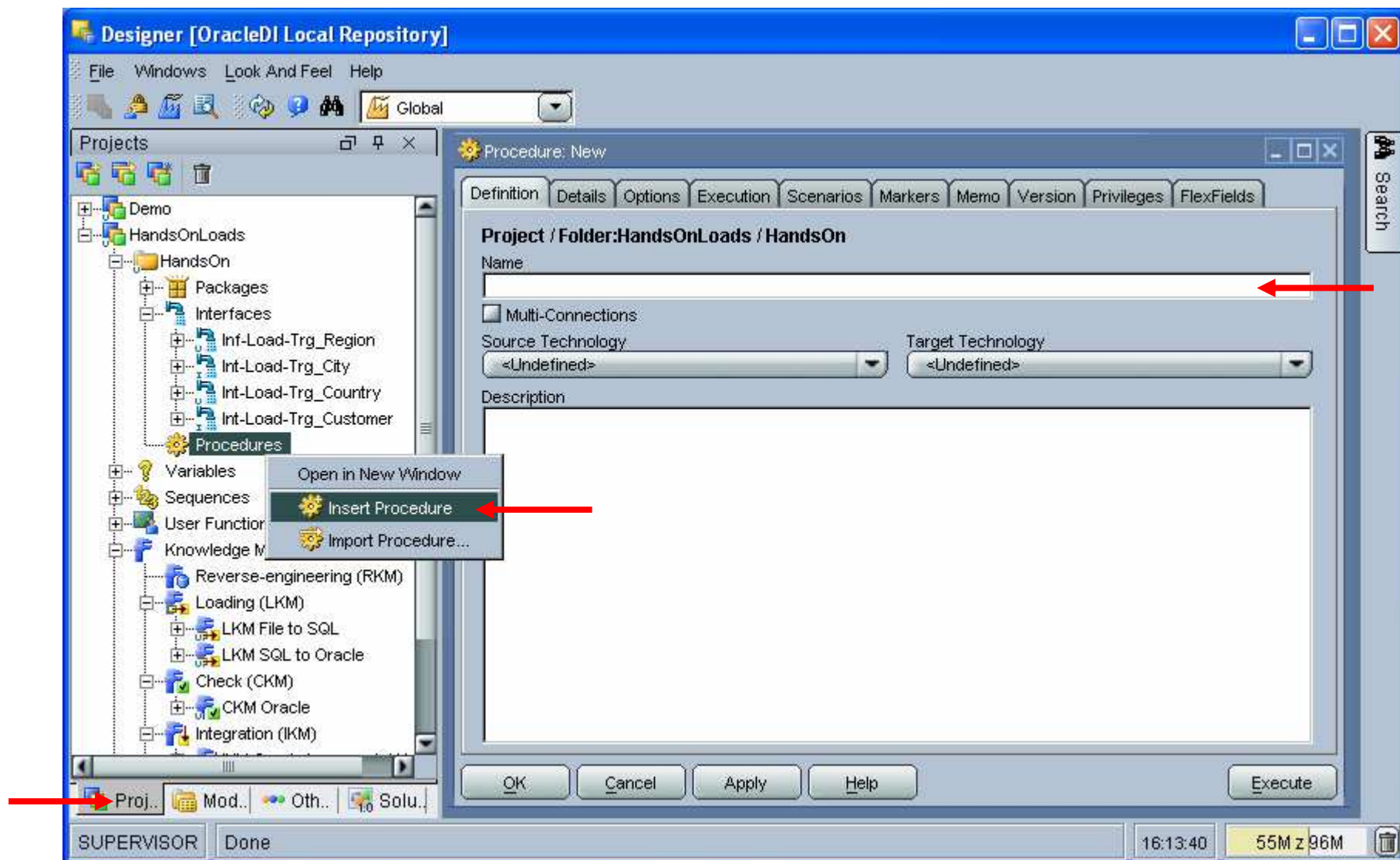
Execute

SUPERVISOR Done

14:21:11 37M z 67M

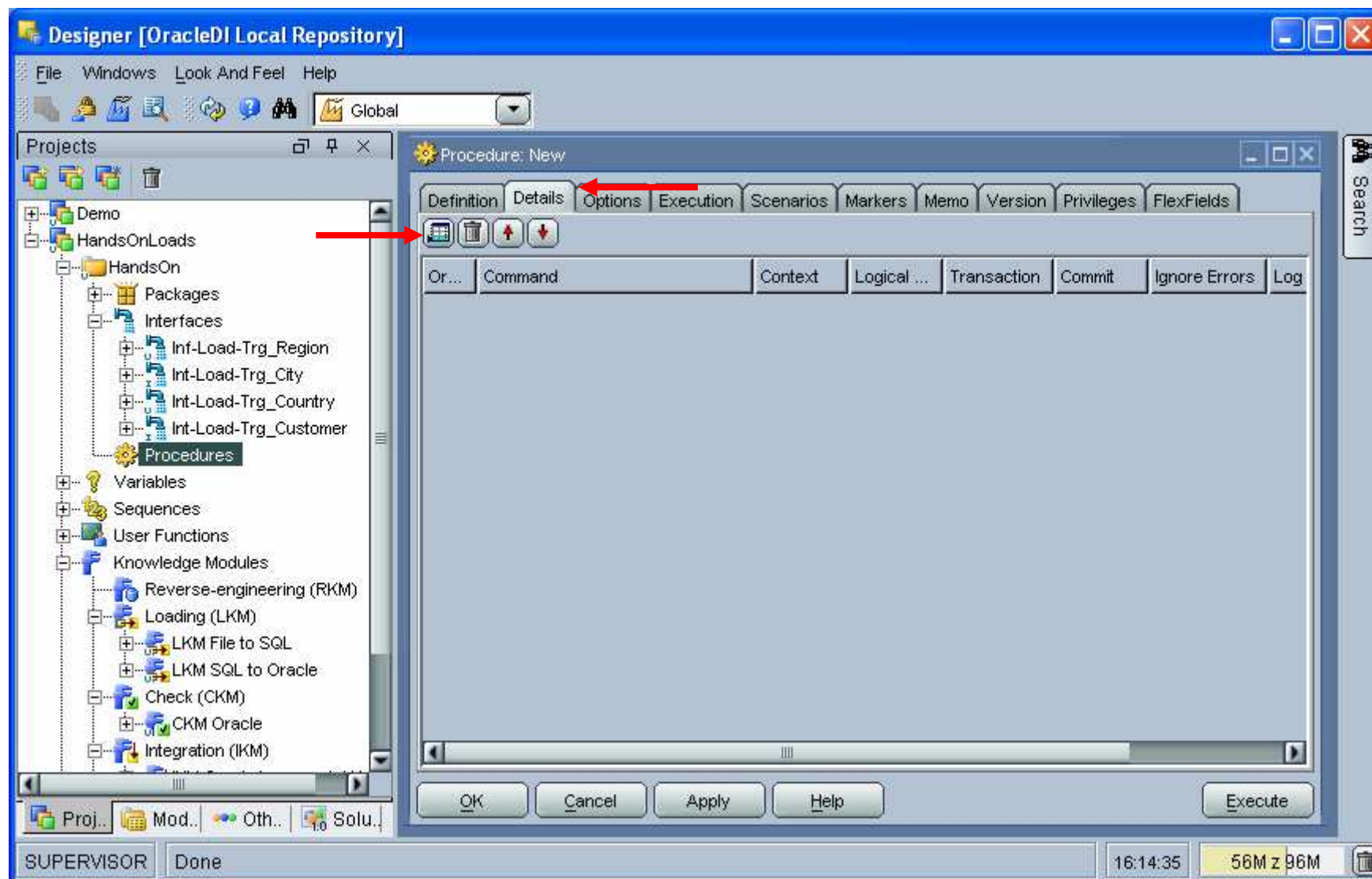


11. Definiowanie procedury





11. Definiowanie procedury





11. Definiowanie procedury

The screenshot shows the Oracle Designer [OracleDI Local Repository] interface. The left pane displays a project tree with the following structure:

- Demo
 - HandsOnLoads
 - HandsOn
 - Packages
 - Pkg-Load1
 - Steps
 - Scenarios
 - Interfaces
 - Int-Load-Trg_Region
 - Int-Load-Trg_City
 - Int-Load-Trg_Country
 - Int-Load-Trg_Customer
 - Procedures
 - Proc-delete-Trg-tables
 - Scenarios
 - Variables
 - Sequences

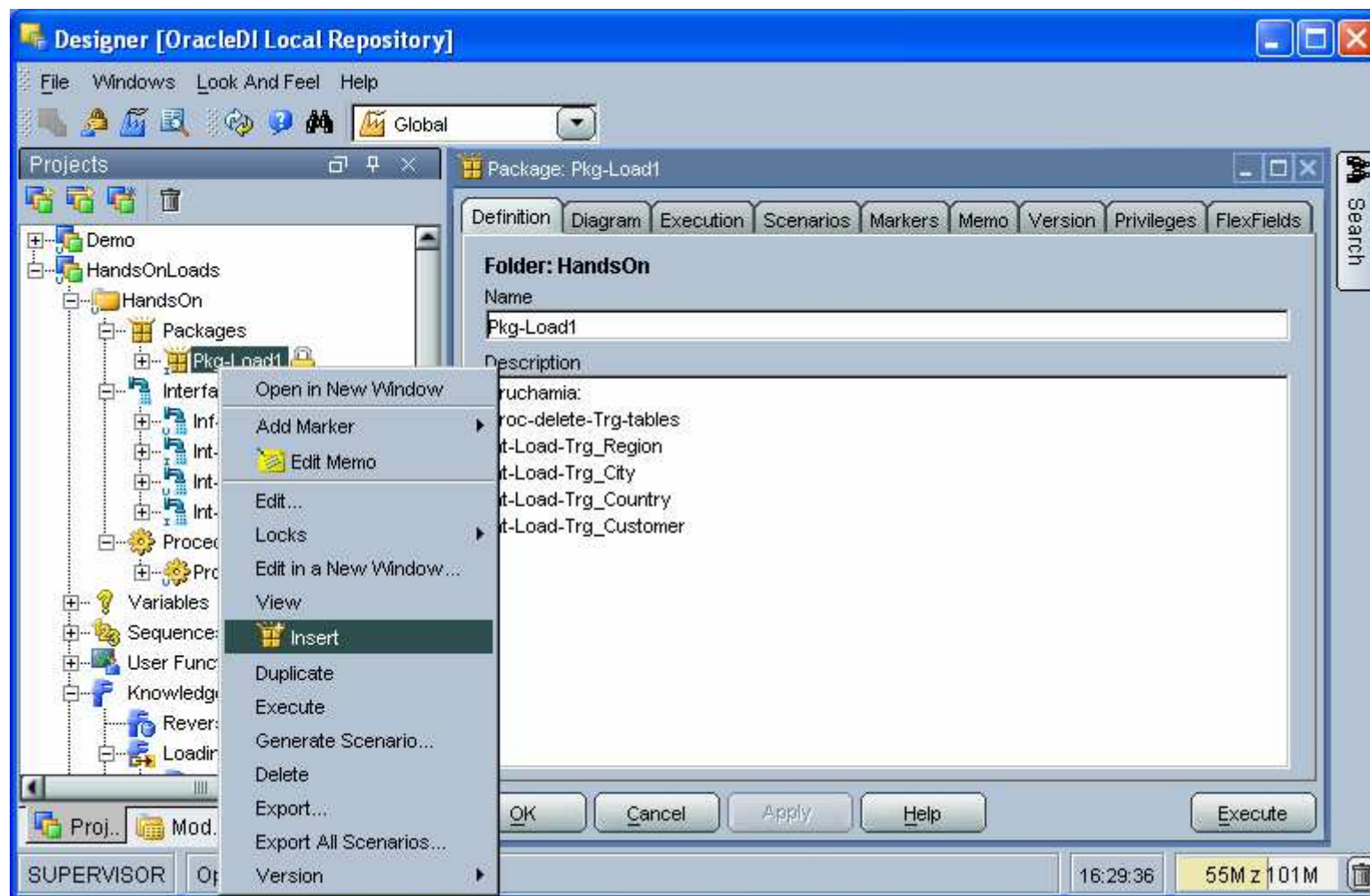
The right pane shows the definition of the procedure 'Del Trg_Customer'. The 'Definition' tab is selected. The 'Name' field contains 'Del Trg_Customer'. The 'Log Counter' is set to '<Undefined>' and the 'Log Level' is set to '3'. The 'Command on Target' and 'Command on Source' tabs are both selected. The 'Technology' is set to 'Oracle' and the 'Transaction Isolation' is set to '<Undefined>'. The 'Context' is set to '<Execution Context>' and the 'Schema' is set to 'ORACLE_XE_LOCAL_SALES'. The 'Transaction' is set to 'Autocommit' and the 'Commit' is set to '<Undefined>'. The 'Command' field contains the following SQL statement:

```
delete <%=odiRef.getObjectName("TRG_CUSTOMER")%>
```

Red arrows point to the 'Name' field, the 'Schema' dropdown, and the 'Command' field. A note in the bottom right corner of the command field reads: **uwaga: musi być dużymi literami** (note: must be in uppercase letters).



12. Definiowanie pakietu





12. Definiowanie pakietu

Designer [OracleDI Local Repository]

File Windows Look And Feel Help

Global

Projects

- Demo
- HandsOnLoads
 - HandsOn
 - Packages
 - Pkg-Load1
 - Steps
 - Proc-delete-Trg-table
 - Int-Load-Trg_Country
 - Int-Load-Trg_Region
 - Int-Load-Trg_City
 - Int-Load-Trg_Custom
 - Scenarios
 - Interfaces
 - Int-Load-Trg_City
 - Int-Load-Trg_Country
 - Int-Load-Trg_Customer
 - Int-Load-Trg_Region
 - Procedures
 - Proc-delete-Trg-tables
 - Variables
 - Sequences
 - User Functions
 - Konwersja

Package: Pkg-Load1

Definition Diagram Execution Scenarios Markers Memo Version Privileges FlexFields

Toolbox

- All
- Changed Data Capture
- Event Detection
- Files
- Internet
- Metadata
- Oracle Data Integrator Objects
- Plugins
- SAP
- Utilities
- OS Command
- OdiAnt

Diagram

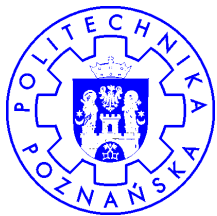
Proc-delete-Trg-tables → Int-Load-Trg_Country → Int-Load-Trg_Region → Int-Load-Trg_City → Int-Load-Trg_Custo...

Properties

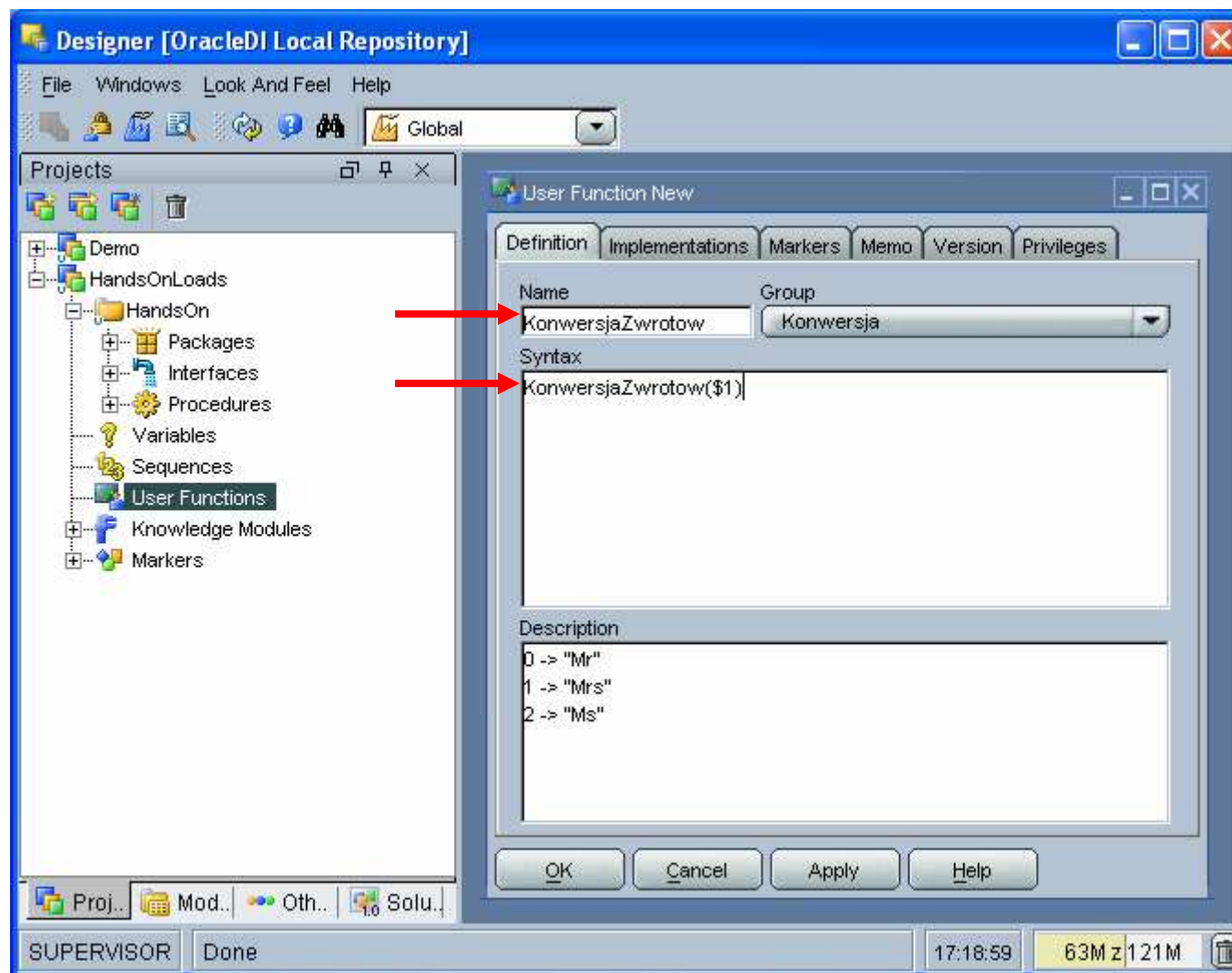
Select an element in the diagram to display its properties

OK Cancel Apply Help Execute

SUPERVISOR Operation complete. 18:03:05 78M z 130M



13. Definiowanie własnej funkcji





13. Definiowanie własnej funkcji

