

Oracle Data Integrator integration with OBIEE

February 26, 2010 1:20 – 2:00 PM

Presented By

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Oracle Data Integrator

Release (10.1.3)

Productivity with Choice

ORACLE®

Introduction to ODI

Architecture

Installation

Repository Creation

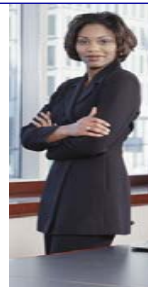
Topology Manager

Security Manager

Scheduler Agent

Integration with OBIEE

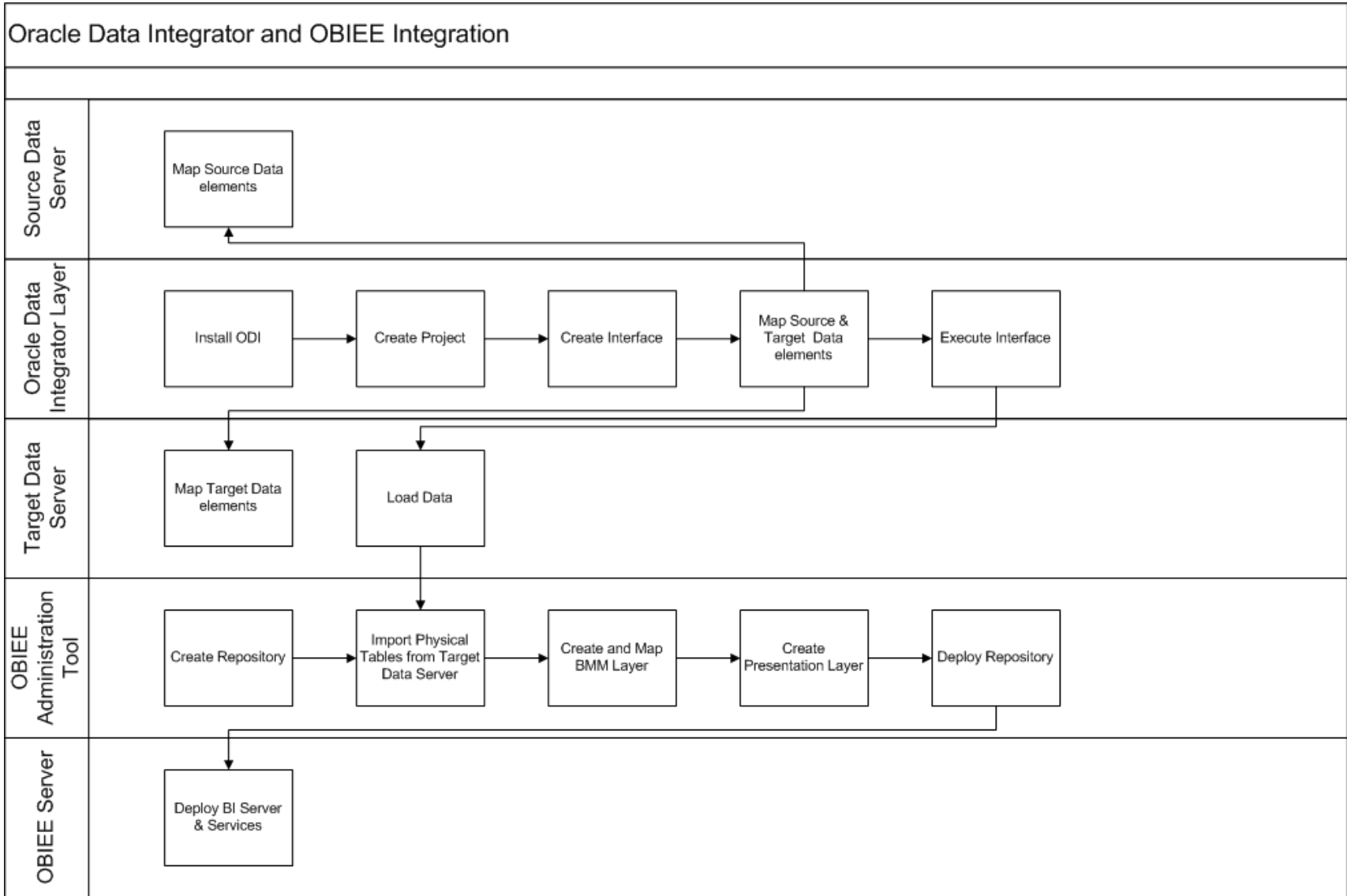
Q&A



- **Oracle Data Integrator**
 - ❖ A widely used data integration software product
 - ❖ Unlike other ETL tools it is based on unique E-LT architecture
 - ❖ It provides unified infrastructure to streamline data and application Integration projects.
 - ❖ Simpler development and maintenance

- **Oracle Data Integrator**
 - ❖ Data quality firewall
 - ❖ Better execution performance
 - ❖ Simpler and more efficient architecture
 - ❖ Platform independence
 - ❖ Data connectivity

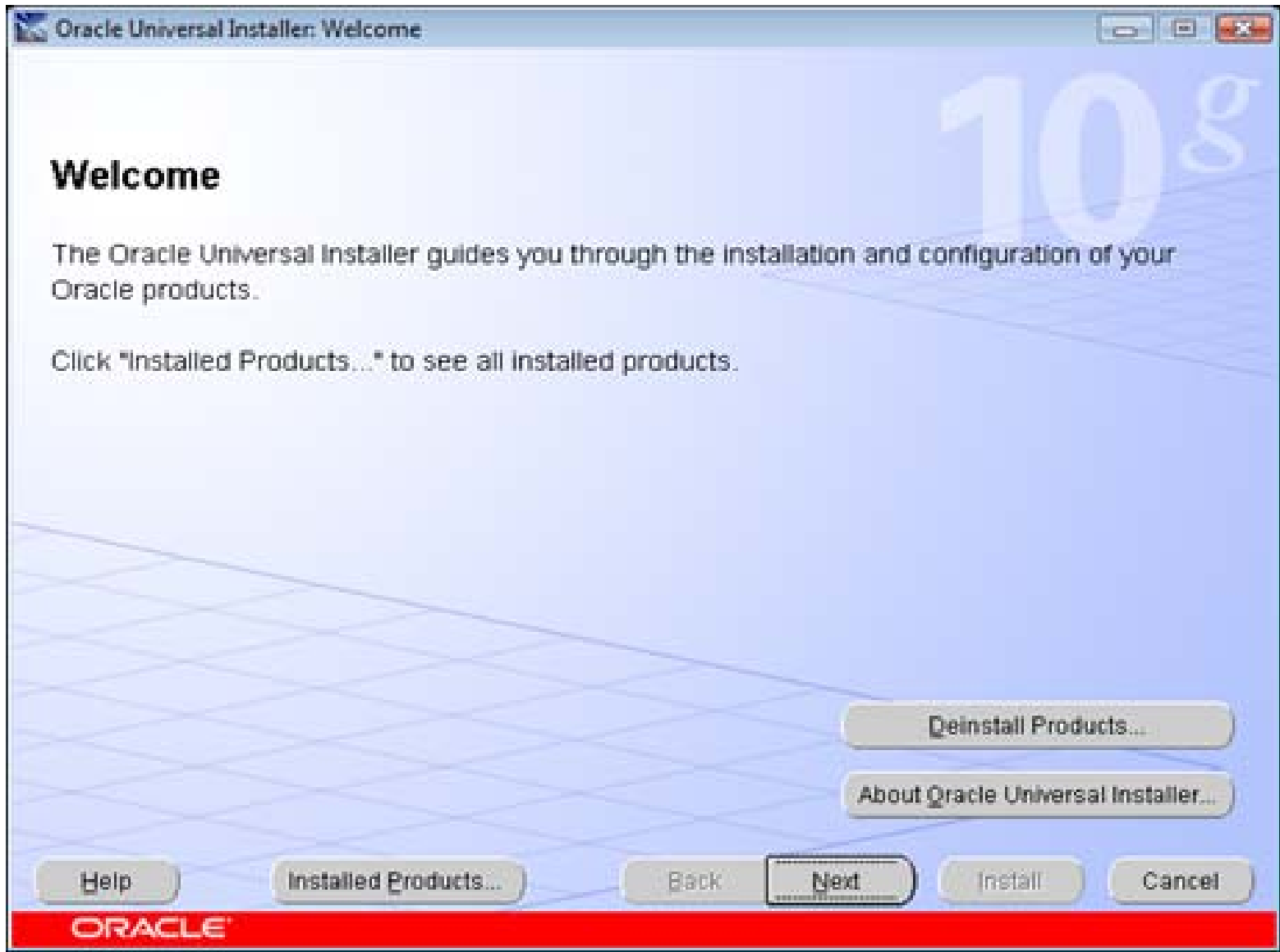
- **Oracle Data Integrator organized around a modular repository**
 - ❖ Accessible in client server mode by different components
 - ❖ web application users can access information through Web interface
- **Graphical Modules**
 - ❖ Designer
 - ❖ Operator
 - ❖ Topology Manager
 - ❖ Security Manager
- **Repositories**
 - ❖ Master Repository
 - ❖ Work Repository
- **Other Key Components**
 - ❖ Metadata Navigator
 - ❖ Runtime Components



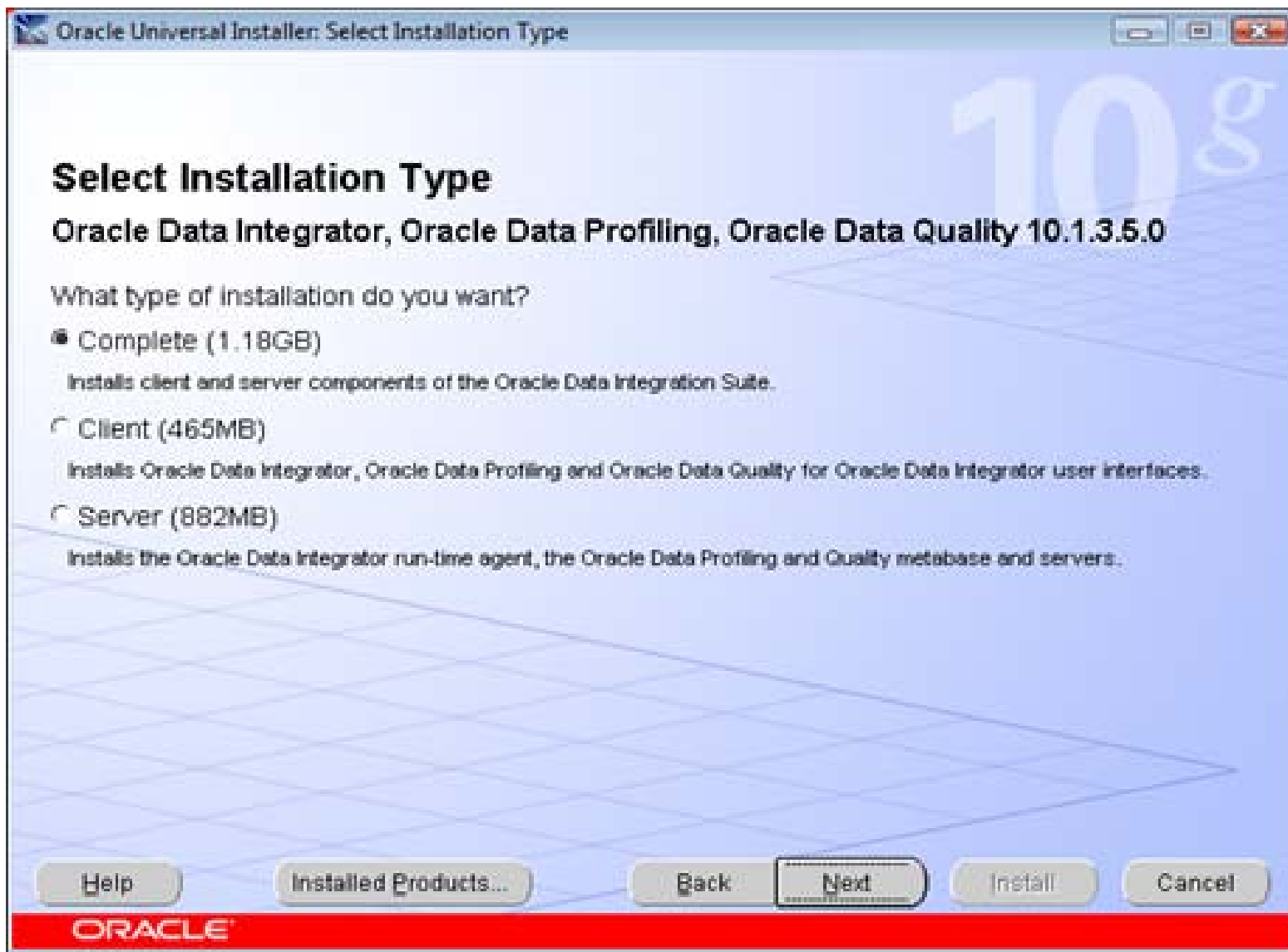
- Operating system certified to run on (Windows, Linux, HP-UX, Solaris and AIX etc)
- Run setup.exe on a Windows platform or sh on a Unix platform Designer
- Oracle Data Integrator requires a Java Development Kit(1.5) to use web services.
- A Java Development Kit is not included in the setup program.
- The Inetd component (Xinetd for Linux) must be installed on the UNIX machine in order to use Oracle Data Quality Products
- <http://java.sun.com/products/archive/>

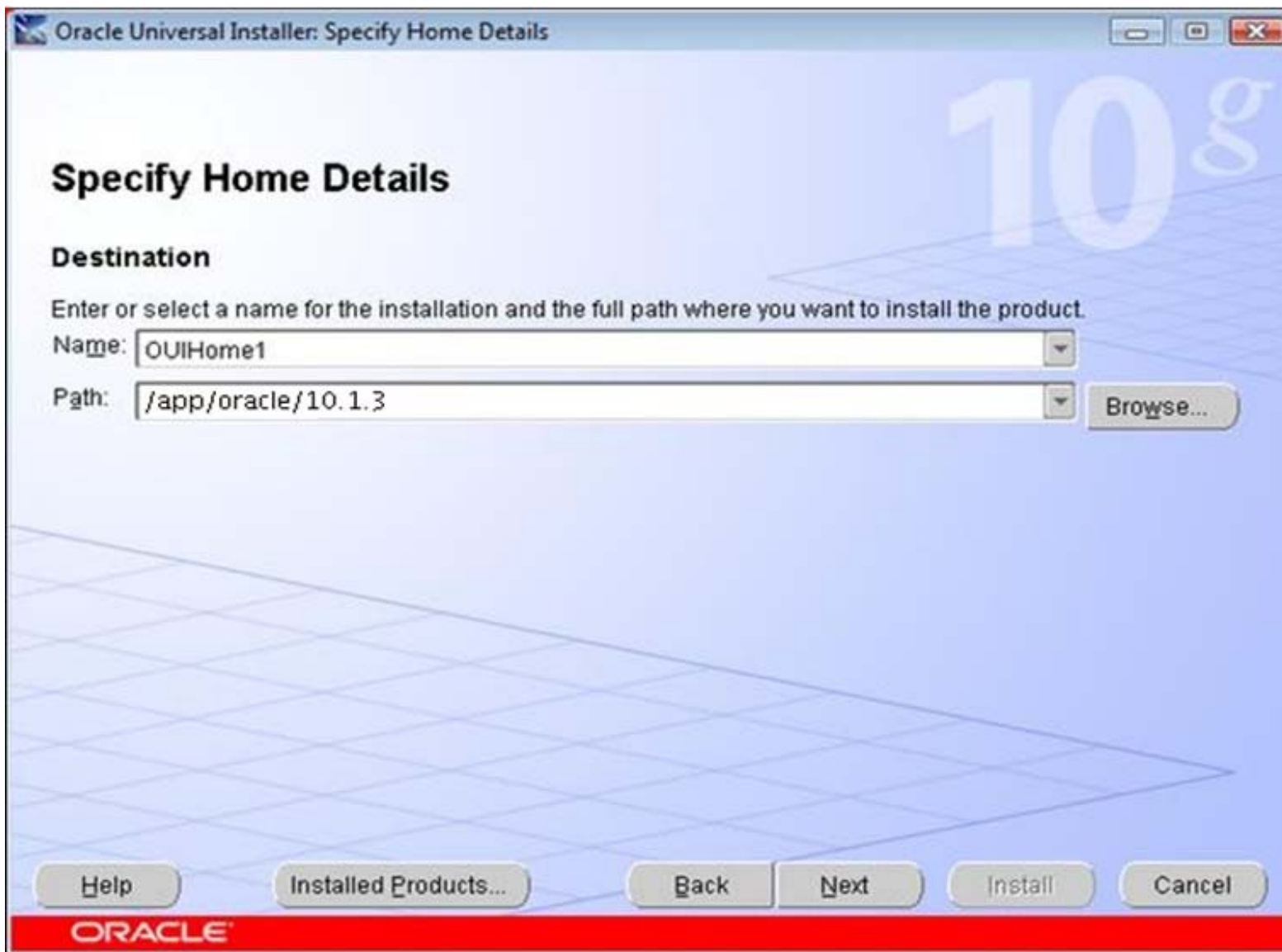
- **Oracle Data Integrator uses the JDBC driver (Java Database Connectivity) for database, JNDI (Java Naming and Directory Interface) and JMS (Java Message Service) for MOM (Message Oriented Middleware).**

- **Data integrator client certified on below operating systems with graphical capability.**
 - ❖ Windows
 - ❖ Linux
 - ❖ HP-UX
 - ❖ Solaris










Oracle Universal Installer: Oracle Data Profiling and Quality Server Configuration

Oracle Data Profiling and Quality Server Configuration

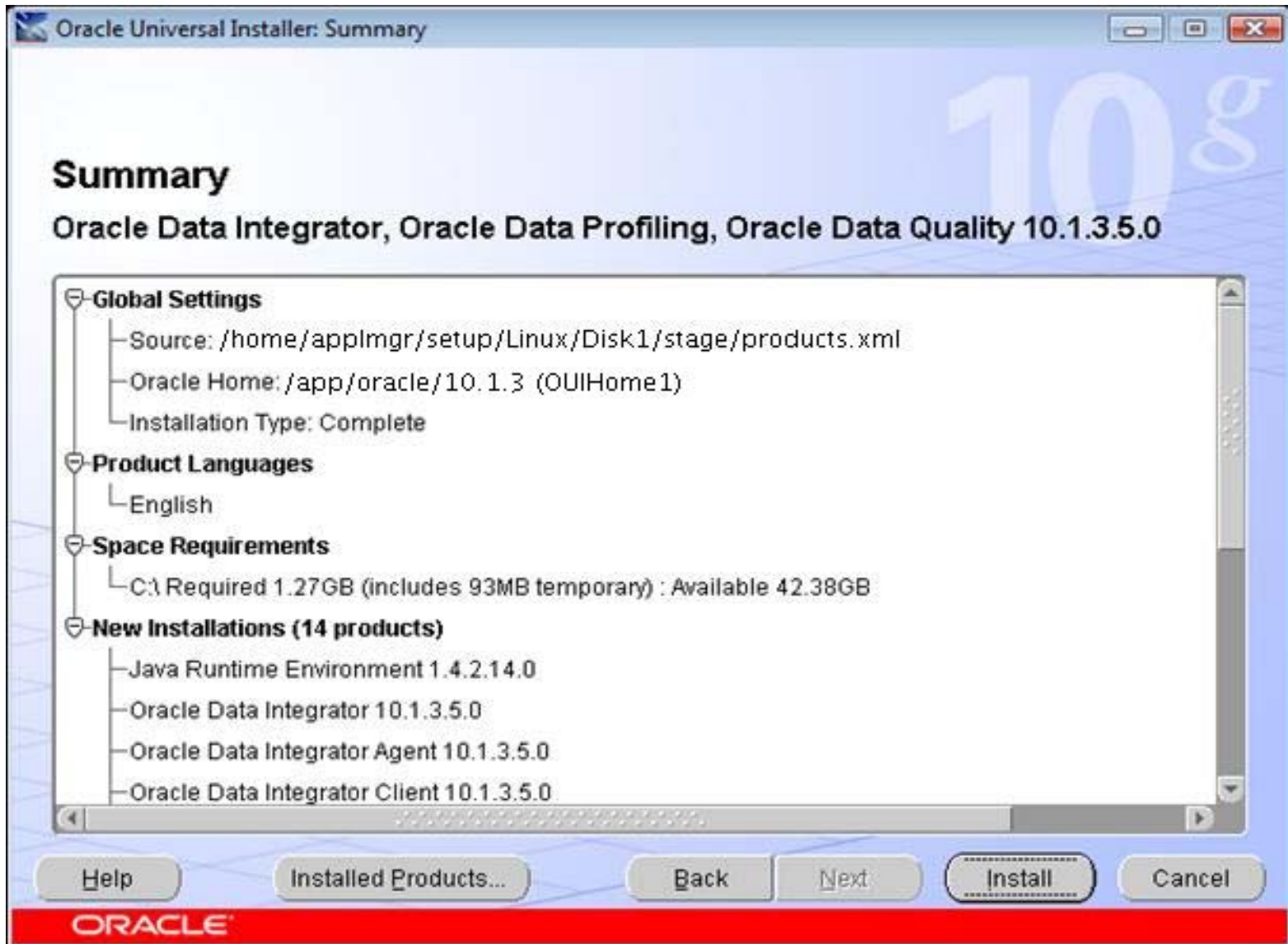
The profiling and quality server contains the information for the profiling and quality projects. Please provide configuration information to configure this server.

Repository Port	<input type="text" value="7600"/>
Scheduler Port	<input type="text" value="7601"/>
Administrator Username	<input type="text" value="madmin"/>
Administrator Password	<input type="password" value="*****"/>

Help Installed Products... Back **Next** Install Cancel







Create a schema test to host the Master repository
and a schema testw to host the Work repository

```
SQL> create user test identified by test default  
tablespace users temporary tablespace temp;
```

```
SQL> grant connect, resource to test;
```

Launch Master Repository Creation wizard from

`$ODI_HOME/bin/repcreate.bat` or
`$ODI_HOME/bin/repcreate.sh` to create Master
Repository.

- Master repository can be stored in the same schema as one of your work repositories. on the other hand, you cannot create two different work repositories in the same schema.
- The Repository installation and the temporary objects creation use the CHAR semantics syntax for creating VARCHAR columns on Oracle. This syntax is not supported on Oracle version before 9i.
- To install a repository on such an Oracle version, edit the TECH_Oracle.xml file in the /lib/scripts/xml/ sub-directory of Oracle Data Integrator installation folder, and replace the VARCHAR2(%L CHAR)string by VARCHAR2(%L).

Master Repository Creation Wizard

Driver: ...

URL: ...

User:


Pass...:

Id: (ID of new repository)

Technology:

- Derby
- Hypersonic SQL
- IBM DB2/400
- IBM DB2 UDB
- Informix
- Microsoft SQL Server
- Oracle**
- PostgreSQL

Oracle Data Integrator Information

 Repository creation successful. Do you want to quit the Oracle Data Integrator Wizard?

Topology Manager [MasterRepository]

File Windows Look And Feel Help

Repositories

- MASTER REPOSITORY_v4.2.02.01
 - Work Repositories
 - APPS

Data Server: New

Definition JDBC Version Privileges FlexFields

Name: _____

Technology: <Undefined>

(Data Server): _____

Connection

User: _____

Password: _____

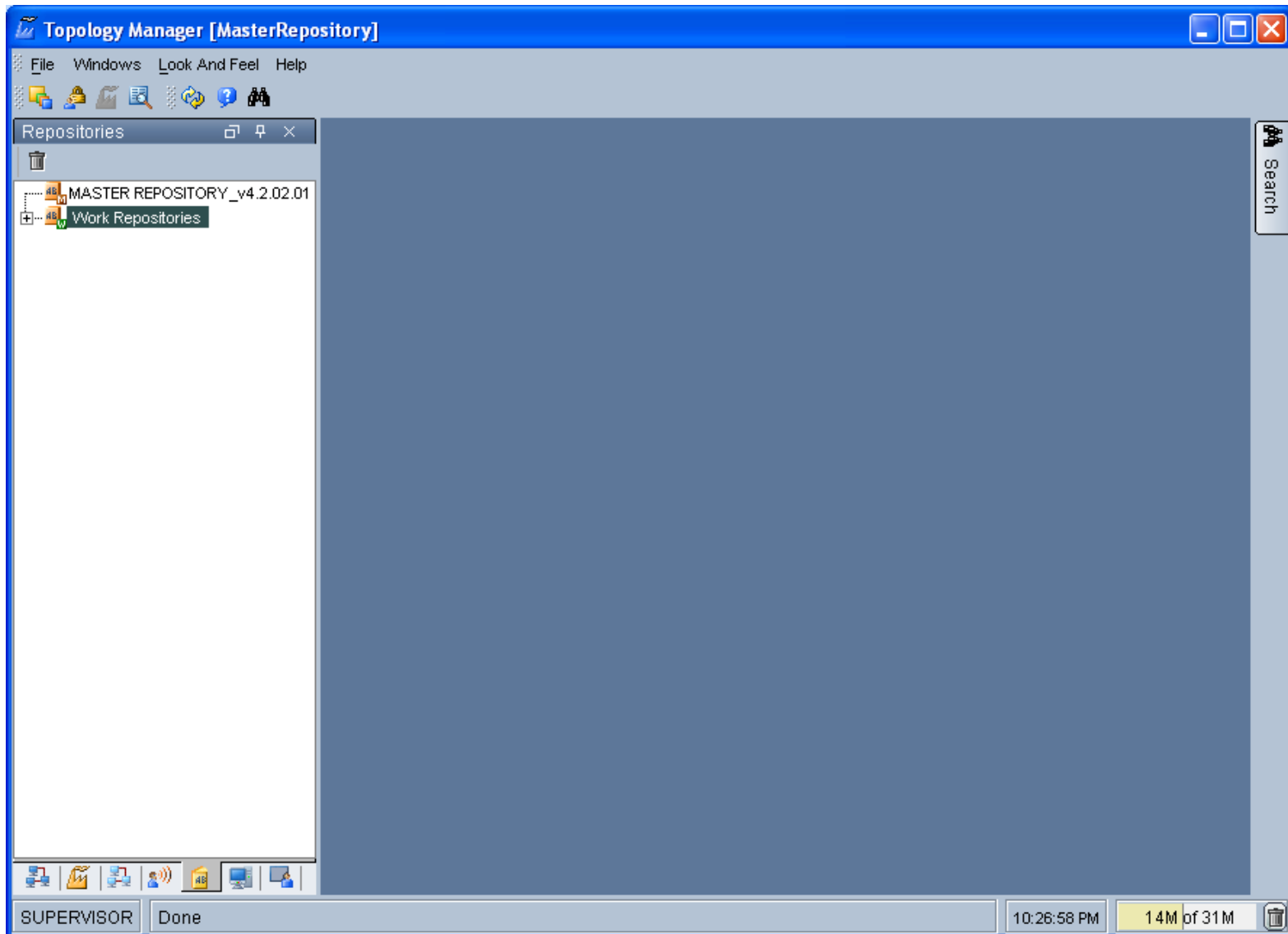
JNDI Connection

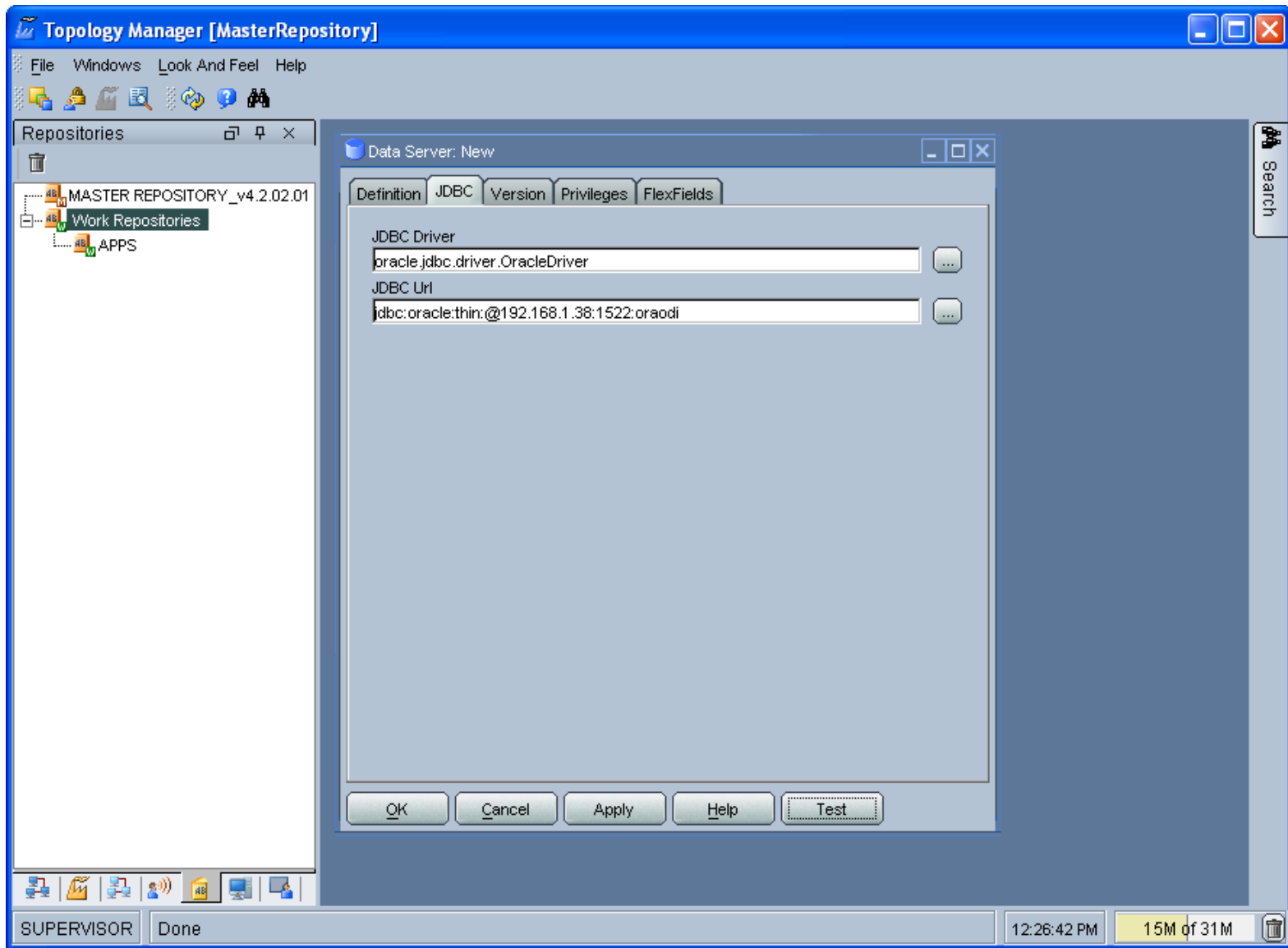
Array Fetch Size: 30

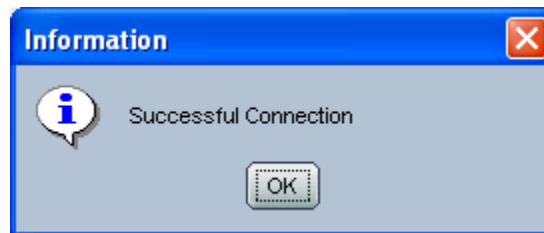
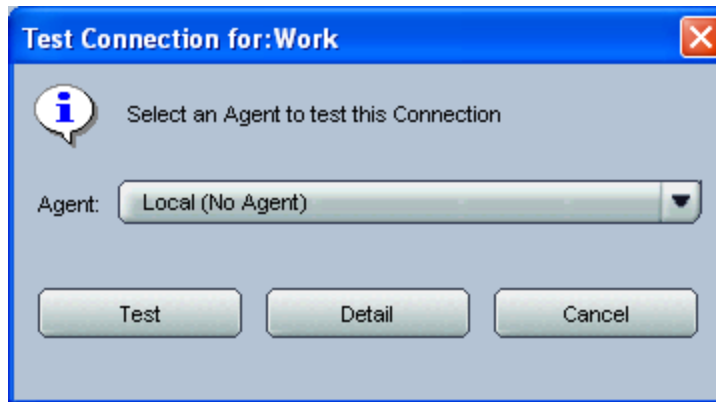
Batch Update Size: 30

OK Cancel Apply Help Test

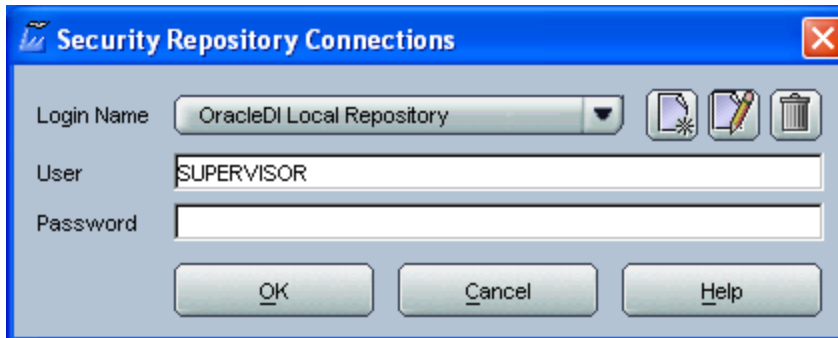
SUPERVISOR Done 10:40:17 PM 14M of 31M

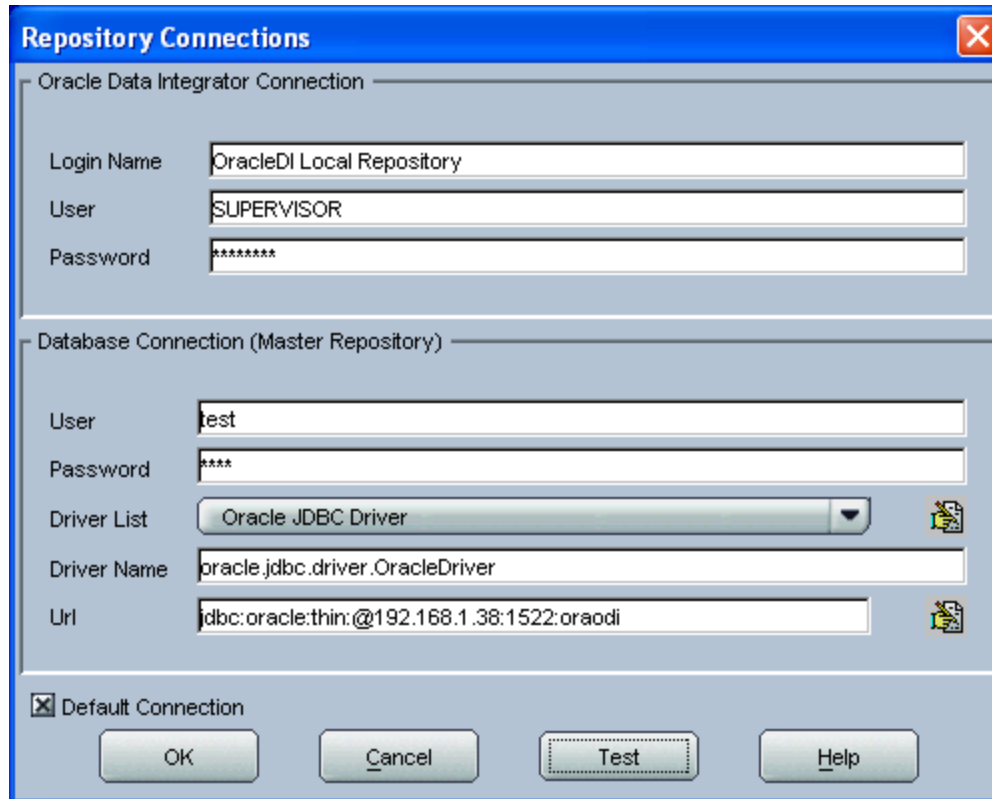






- To connect to the Master repository launch the Topology Manager script
\$ODI_HOME/bin/topology.bat or
\$ODI_HOME/bin/topology.sh
- Click on the button New





Repository Connections

Oracle Data Integrator Connection

Login Name: OracleDI Local Repository

User: SUPERVISOR

Password: *****

Database Connection (Master Repository)

User: test

Password: ****

Driver List: Oracle JDBC Driver

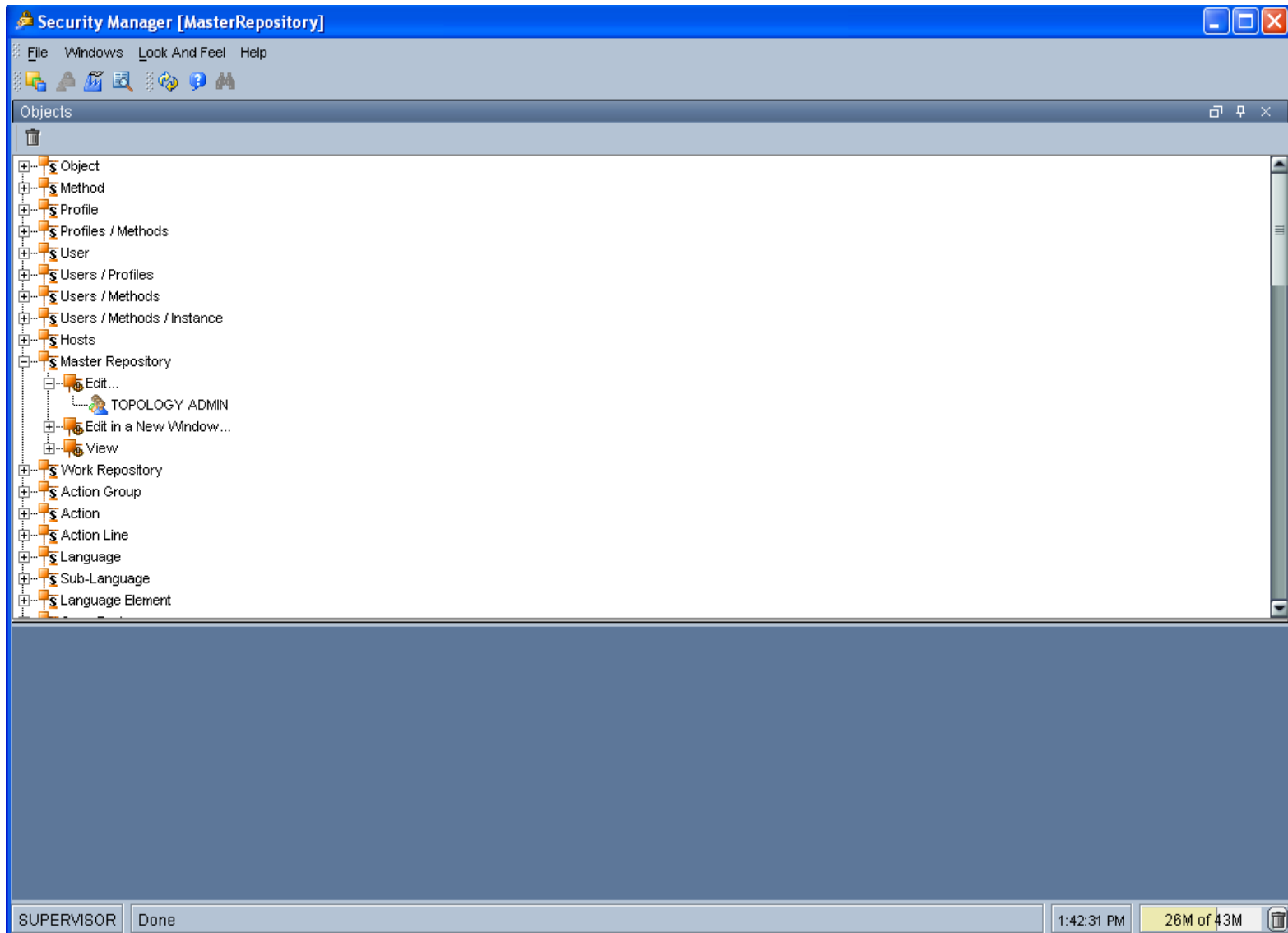
Driver Name: oracle.jdbc.driver.OracleDriver

Url: jdbc:oracle:thin:@192.168.1.38:1522:oraodi

Default Connection

OK Cancel Test Help

- The default password of the SUPERVISOR is **SUNOPSIS**.



- At runtime, the Scheduler Agent coordinates the execution of the scenarios.
- The Scheduler Agent can be installed on any platform that supports a Java Virtual Machine (J2SE), including Windows, Linux, HP-UX, Solaris, and IBM AIX.
- The Agent retrieves code from the execution repository and then requests database servers, operating systems, or scripting engines to execute that code.
- They are multithreaded, load-balanced, lightweight components in this distributed integration architecture.

Oracle Enterprise Manager (oc4jadmin) - OC4J: home - Microsoft Internet Explorer

Address: http://mantra.ast.com:7779/em/console/ias/oc4j/applications

ORACLE Enterprise Manager 10g
Application Server Control

Cluster Topology > Application Server. obieeas.mantra.ast.com >
OC4J: home

Page Refreshed Feb 20, 2010 2:51:10 PM CST

Home Applications Web Services Performance Administration

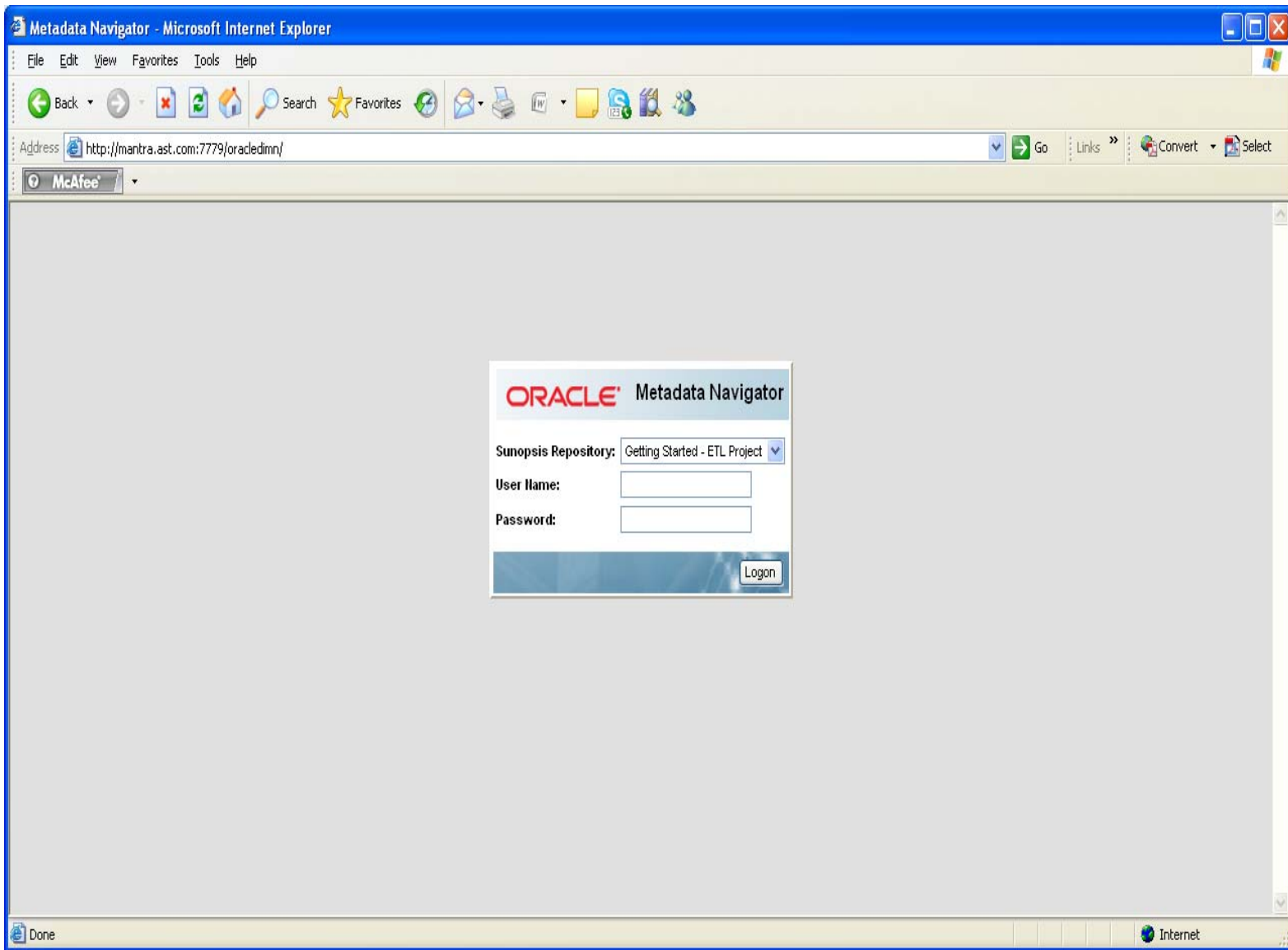
This page shows the J2EE applications and application components (EJB Modules, WAR Modules, Resource Adapter Modules) deployed to this OC4J instance.

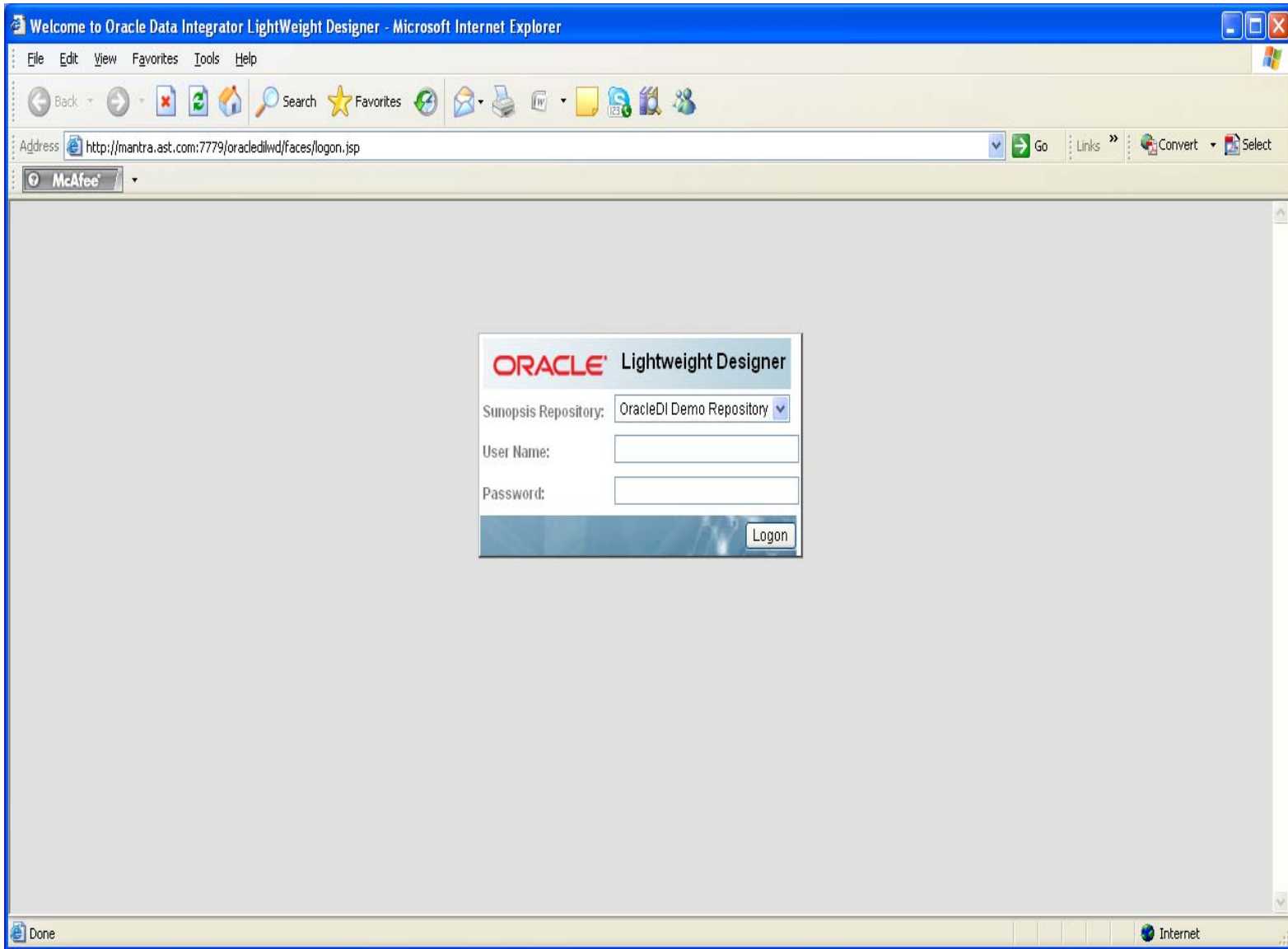
View: Applications

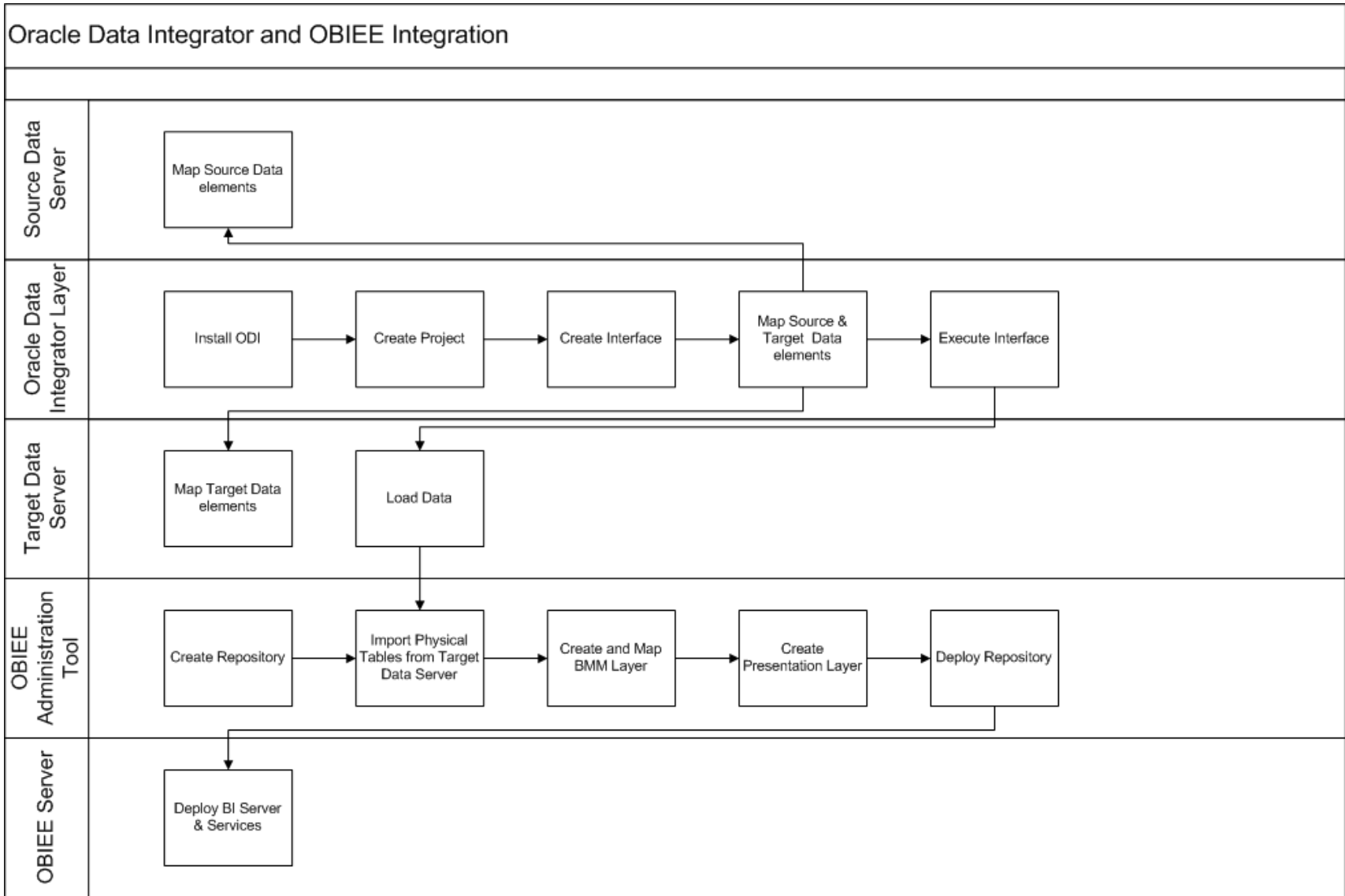
Start Stop Restart Undeploy Redeploy Deploy

Select All Select None Expand All Collapse All

Select	Name	Status	Start Time	Active Requests	Request Processing Time (seconds)	Active EJB Methods	Application Defined MBeans
<input type="checkbox"/>	▼ All Applications						
<input type="checkbox"/>	ascontrol	↑	Feb 12, 2010 5:20:59 PM CST	0	0.00	0	
<input type="checkbox"/>	▼ default	↑	Feb 12, 2010 5:20:59 PM CST	0	0.00	0	
<input type="checkbox"/>	Oracle BI Management	↑	Feb 12, 2010 5:20:59 PM CST				
<input type="checkbox"/>	analytics	↑	Feb 12, 2010 5:20:59 PM CST	0	0.00	0	
<input type="checkbox"/>	biooffice	↑	Feb 12, 2010 5:20:59 PM CST	0	0.00	0	
<input type="checkbox"/>	oracledilwd	↑	Feb 19, 2010 12:03:44 AM CST	0	0.00	0	
<input type="checkbox"/>	oracledimn	↑	Feb 19, 2010 12:43:40 AM CST	0	0.00	0	







Designer [work]

File Windows Look And Feel Help

Global

Projects

- Test
 - First Folder
 - Packages
 - Interfaces
 - Customer Interface
 - Scenarios
 - Used in
 - Used by
 - Procedures
 - Variables
 - Sequences
 - User Functions
 - Knowledge Modules
 - Markers
 - Test_OE_Headers

Interface: Customer Interface

Definition Diagram Flow Controls Execution Scenarios Markers Memo Version Privileges FlexFields

Columns Datasources Sets Errors

Target Datasource

Target Datasource

Ind	Name	Mapping
	*CUSTOMER_KEY	HZ_CUST_ACCOUNTS
	*CUSTOMER...	HZ_PARTIES.PAR
	*ENABLED	HZ_CUST_ACCOUNTS
	*START_DATE	CURRENT_DATE
	*END_DATE	HZ_CUST_ACCOUNTS
	*CREATED_BY	HZ_PARTIES.LAS
	*CREATION...	CURRENT_DATE
	*LAST_UPDA...	HZ_PARTIES.LAS
	*LAST_UPDA...	CURRENT_DATE

Source: 1 - HZ_CUST_ACCOUNTS (HZ_CUST_ACCOUNTS)

Journalized Data only

Alias: HZ_CUST_ACCOUNTS Order: 1 Context: <Execution Context>

Datasource	HZ_CUST_ACCOUNTS
Resource	HZ_CUST_ACCOUNTS
Model	DEVL_AR
Logical Schema	AR
Context	Global
Physical Schema	DEVL_AR.AR

OK Cancel Apply Help Execute

Interface: Customer Interface

Definition Diagram Flow Controls Execution Scenarios Markers Memo Version Privileges FlexFields

SS_0 (2 - DEVL_AR)

HZ_CUST_ACCOUNTS

LKM Oracle to Oracle (DBLINK)

Target+Staging...

SS_0 SM_CUSTOMI

SS_0 (2 - DEVL_AR)

Name

LKM Selection

LKM

LKM Description

Option	Value
DELETE_TEMPORARY_OBJ...	<Default>:Yes
AUTO_CREATE_DB_LINK	Yes

Version History:

Last Update: JAN-2008
- Updated to odiRef

OK Cancel Apply Help Execute

The screenshot shows the ODI Operator [work] interface. On the left, the 'Session List' pane displays a tree view of sessions under 'Physical Agent' and 'Internal - 31'. The main pane shows a table of sessions with columns for Status, Step number, Step name, Start, Duration, and In. A dialog box titled 'Session: Customer Interface' is open, showing configuration options for the 'Customer Interface' session.

Status	Step number	Step name	Start	Duration	In
Variables					
✓	1	Customer Interf...	2010-02-09 09:...	2	1

Session: Customer Interface

Definition Execution Privileges

Number of running child sessions:

Number of successful child sessions:

Number of failed child sessions:

Execution

Start	End	Duration
Feb 9, 2010 9:42:26 A	Feb 9, 2010 9:42:28 A	2

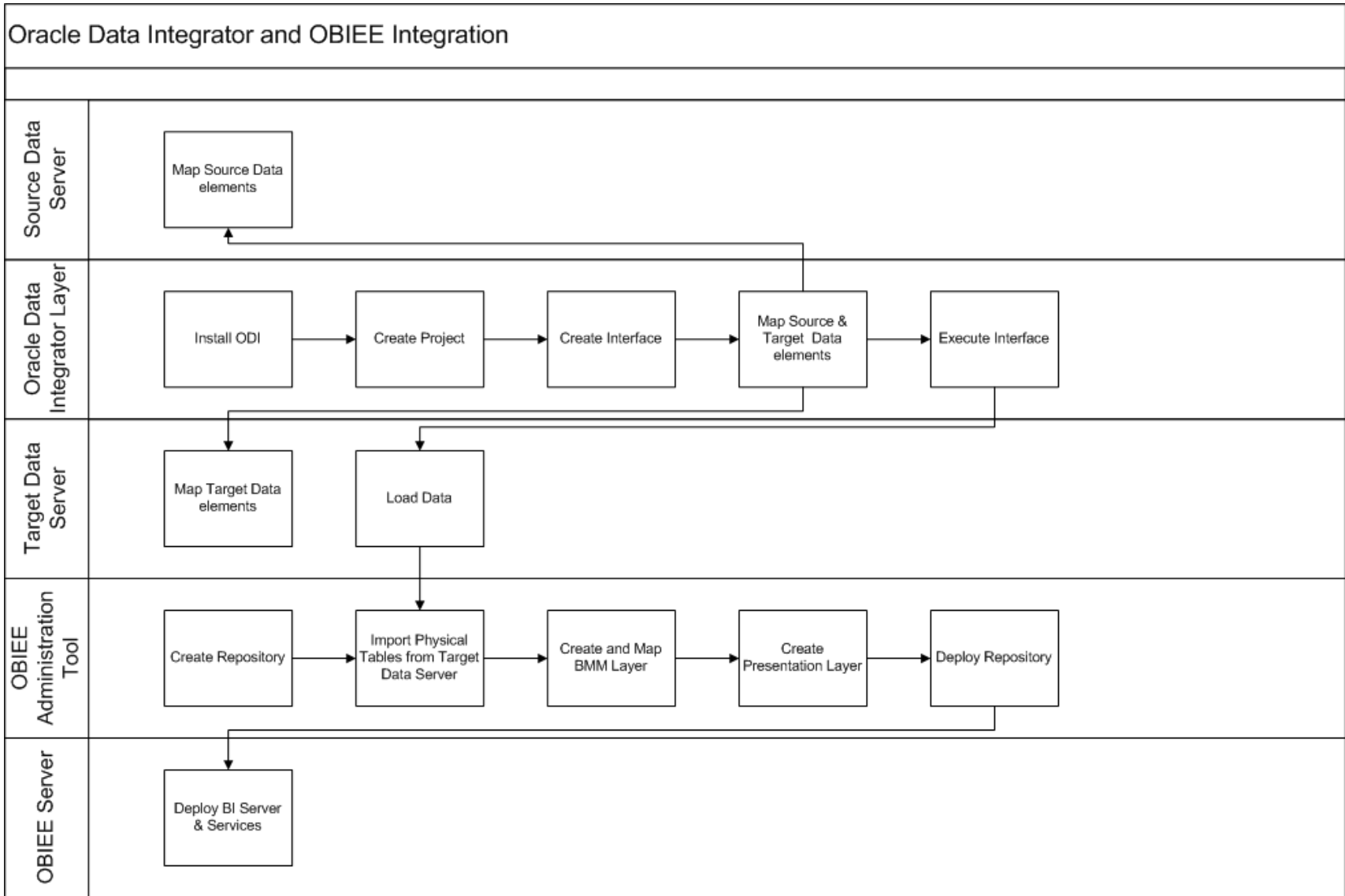
Return Code:

Message:

OK Cancel Apply Help

Session List Scenarios Solutions

SUPERVISOR Done 6:10:45 AM 125M of 201M



Presentation
Business Model and Mapping
Physical

Select Data Source X

Connection Type: ODBC 3.5

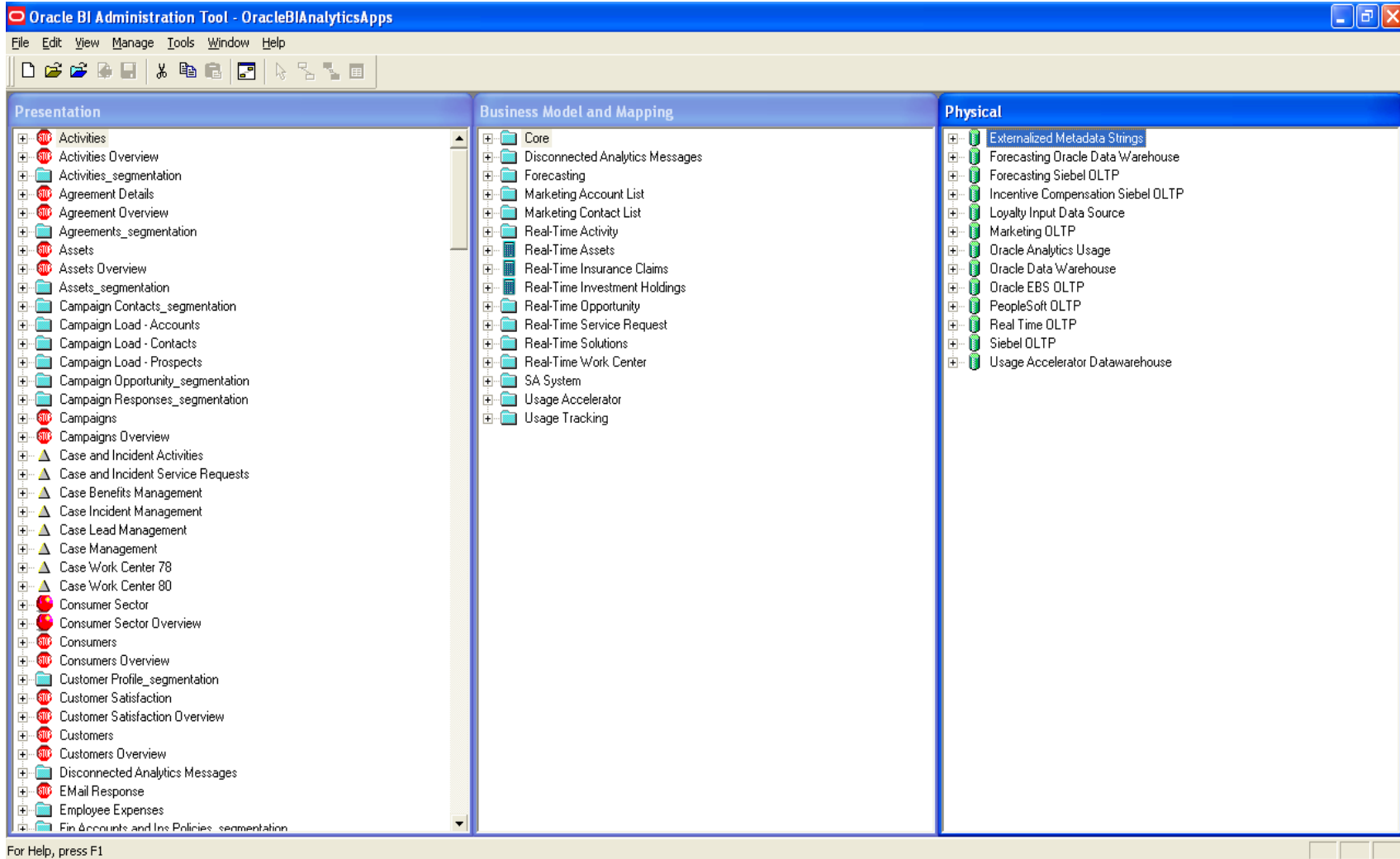
DSN	Driver
AnalyticsWeb	Oracle BI Server
Oraodi	Oracle in OraDb10g_home1
Yoga	Oracle in OraClient10g_home1

User Name: oraodi

Password:

Read from CRM metadata tables OK Cancel

Map the Physical, BMM and Presentation Layers and Create Repository file





Contact Information

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Presentation Copy

www.astcorporation.com/papers/ncoaug