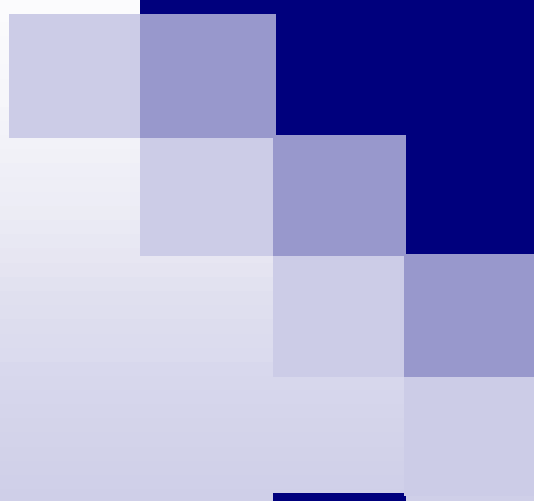




Oracle Warehouse Builder 10g r2 (OWB)

How you can leverage the
new features of OWB “Paris”
release

OWB 10g Release 2
Codename: Paris



Presenter

- Nicholas A. Goodman
 - Principal BI Consultant and Founder of bayon technologies, inc.
 - Certified Business Intelligence Professional
 - Oracle Partner
- “Expert” OWB consultant

Format/Objectives

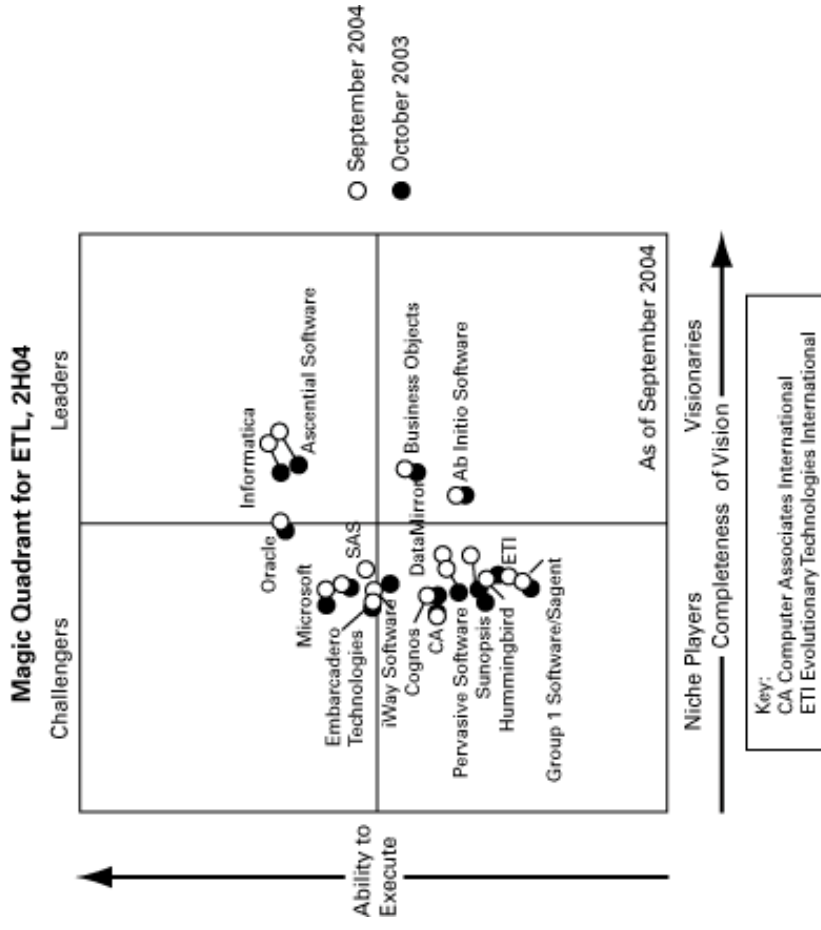
- Descriptive and Narrative (*no demo*)
- You should be able to
 - Describe what OWB is and understand it's general applicability (General OWB)
 - Understand the new features of OWB and how they can be used in real life situations (New OWB)
 - Know where to go for more information

OWB General – Why OWB?

- You already own it (*probably*)
- Provides considerable value
- Beats “scripts” hands down
- Embraces important “orphan” of ETL
- Cost Effective
- Easy to implement if you’re already an “Oracle shop”

OWB General – Why OWB?

- Increasing recognition for ability to execute and vision
- Leaders Quadrant
- Gartner 2004



Source: Gartner Research (September 2004)

OWB General – What is OWB?

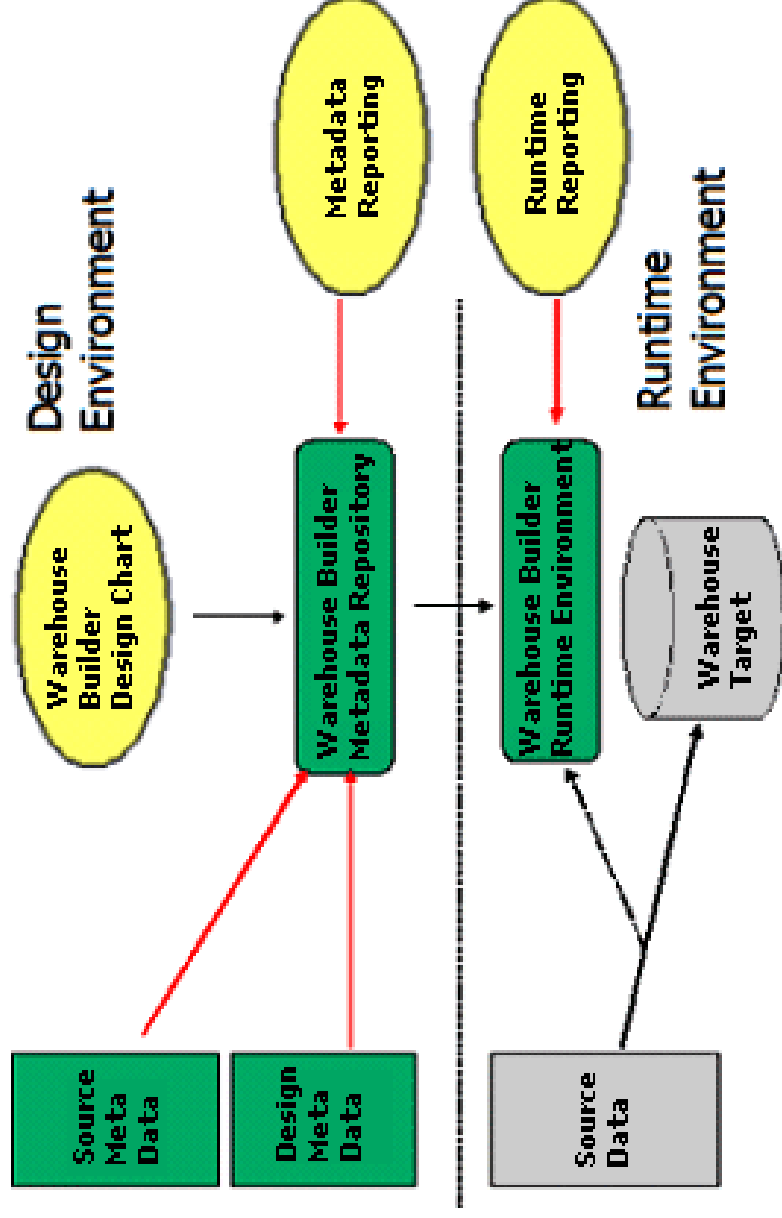
- Primarily a tool to build, deploy, and run ETL (Extract, Transform, Load)

OWB General - Applicability

- Small and Large installations
- DBAs are commonly charged with helping business understand their data
 - Build a reporting area, with some report writing tools
 - Custom SQL scripts, SQL*Ldr, replication and imp/exp
 - Difficulties arise in enrichment, transformation (ie, turning DATA->information)
- IDEAL SOLUTION FOR THESE DBAs!

OWB General – Concepts

■ Design and Runtime



Graphic
from rittman.net

OWB General - Installation

RED = OWB

OWB RT SYS

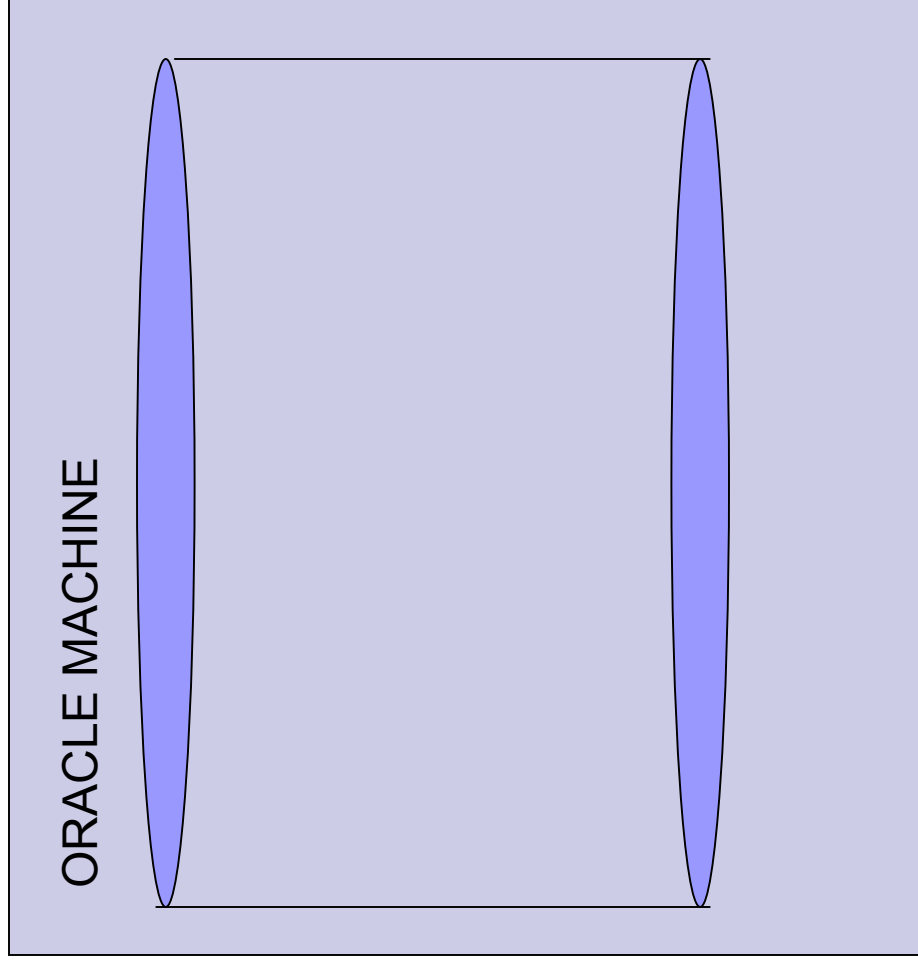
OWB
REPOSITORY
SCHEMA

OWB
INSTALL

BLACK = TARGETS

REPORTING
SCHEMA

STAGING
SCHEMA

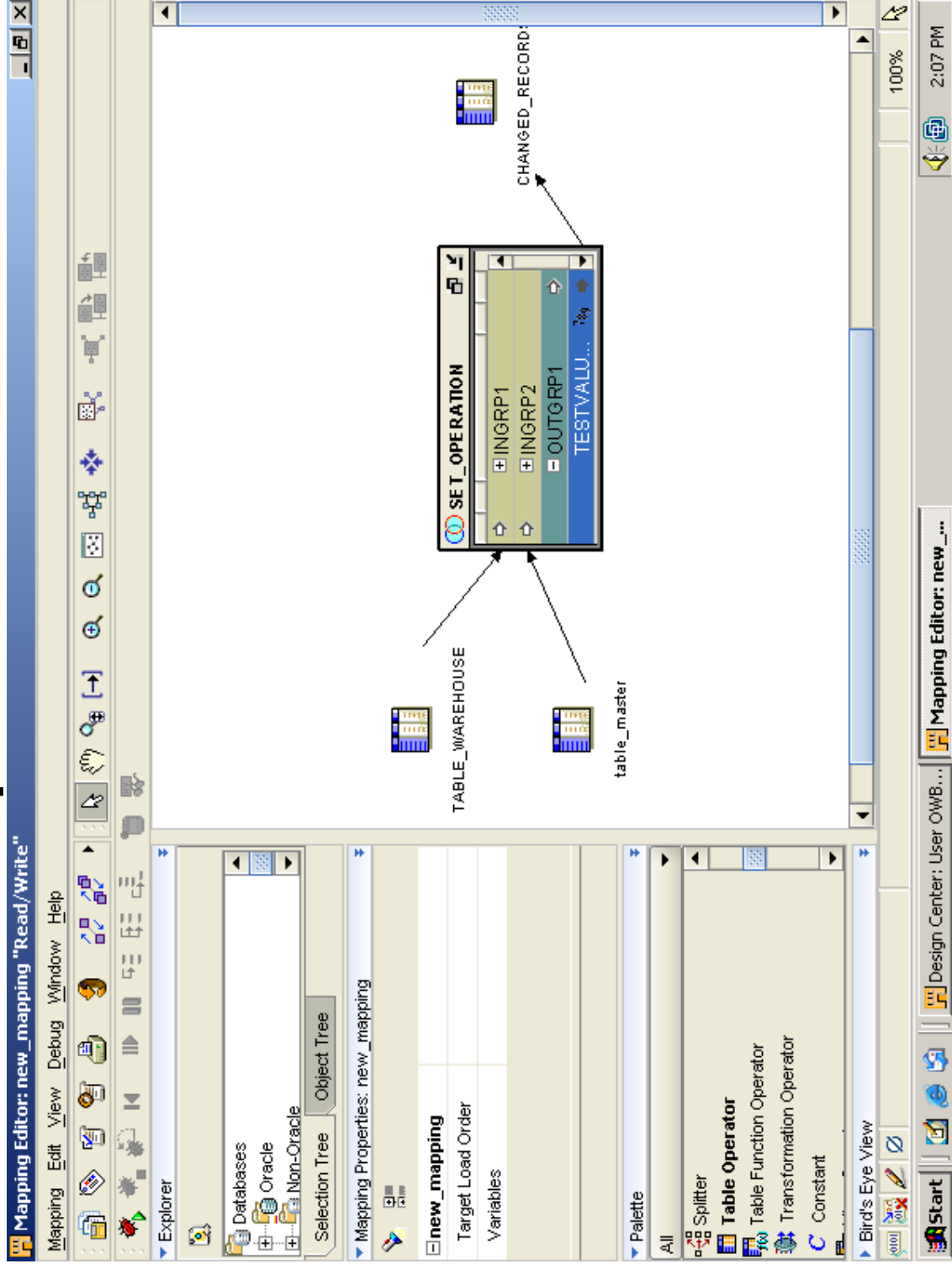




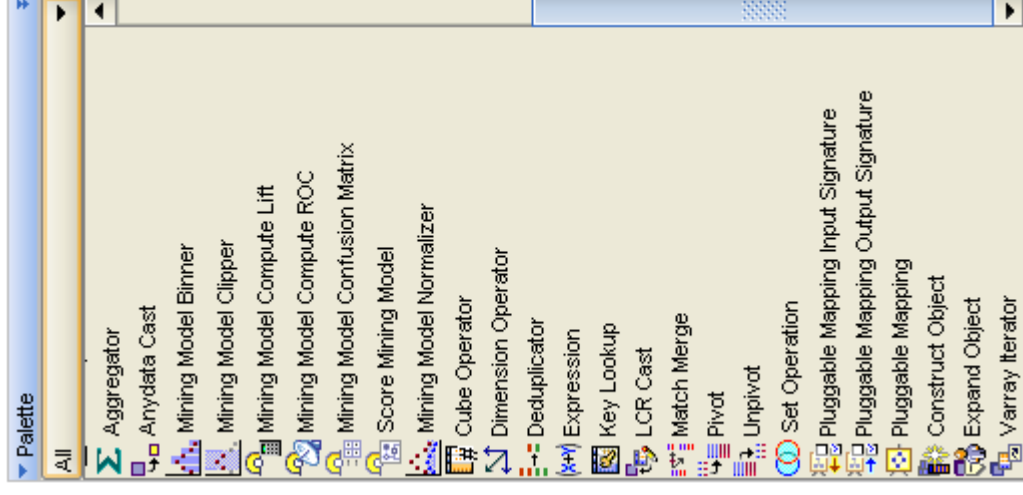
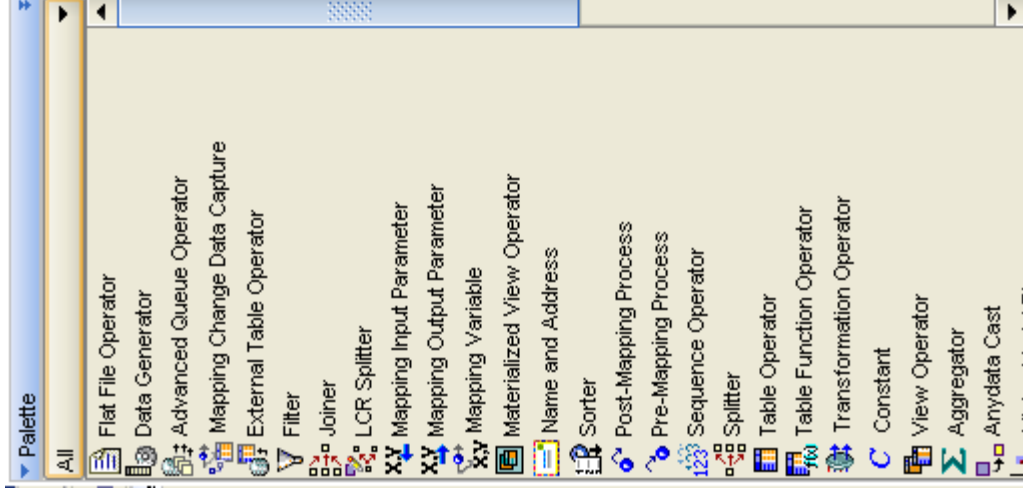
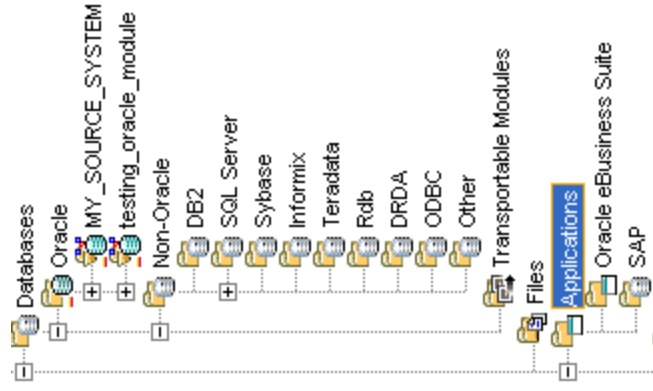
New OWB - Overview

- Improved UI
- ETL/Pluggable Mappings
- Data Profiling
- Real Time BI (right time BI, and CDC)
- Experts
- Impact Analysis
- Misc

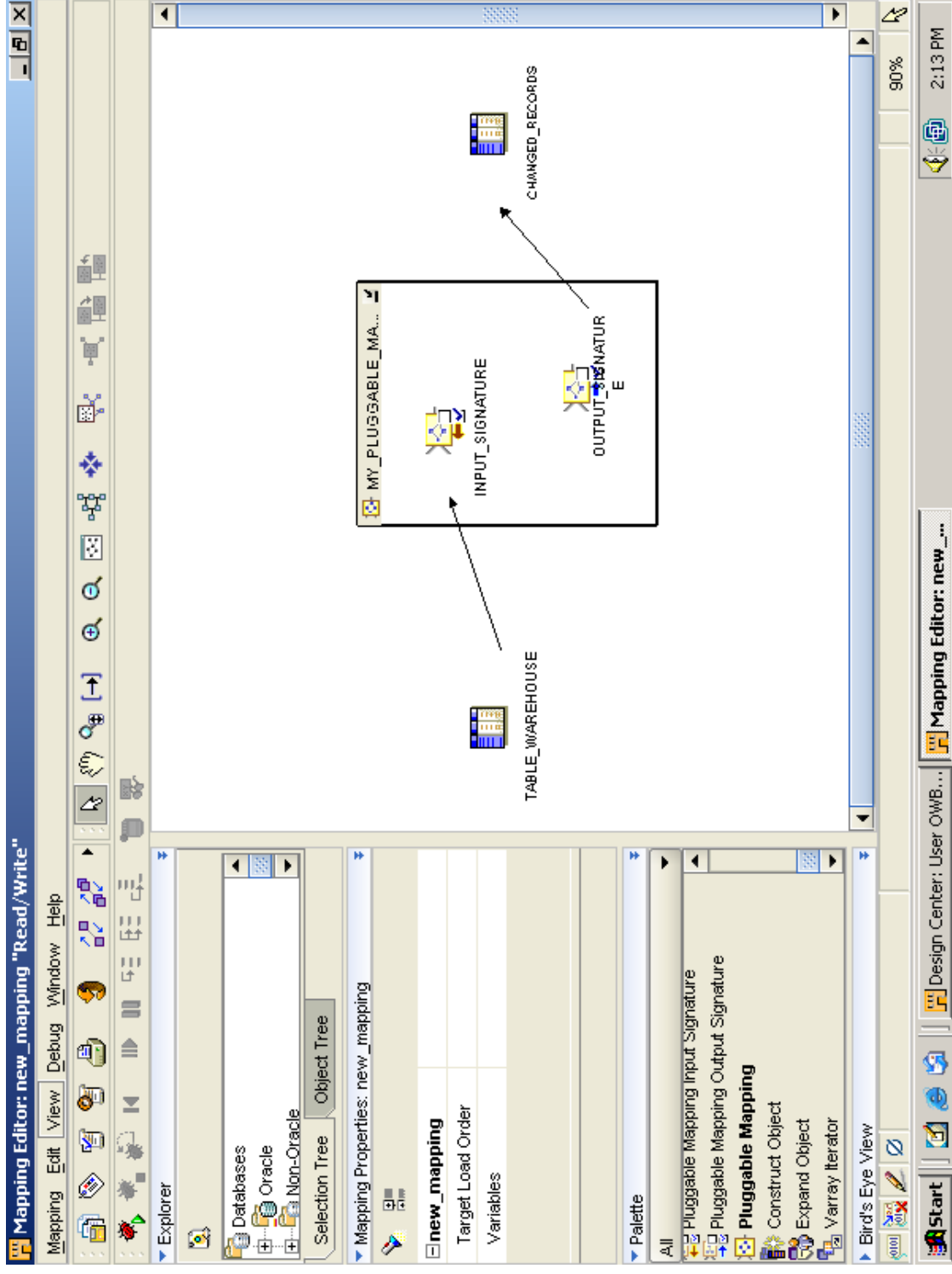
New OWB - Improved UI



New OWB - ETL



New OWB – Pluggable Mappings



New OWB – Data Profiling (1)

Data Profile Manager: HR_PROFILE

Profile Edit View Window Help

Object Trees

- HR_PROFILE
 - Corrected M
 - HR_COUNTRIES
 - HR_DEPARTMENTS
 - HR_EMPLOYEES
 - HR_JOBS
 - HR_JOB_HISTORY
 - HR_LOCATIONS
 - HR_REGIONS

Profile Results Canvas

Data Profile Profile Object Aggregation Data Type Pattern Domain Referential Unique Key

The following are the aggregation analysis results for HR_EMPLOYEES, which has 11 columns and 107 rows.

Columns	Minimum	Maximum	# Distinct	% Distinct	Null Allowed	# Nulls	% Nulls	Six-Sigma
COMMISSION_PCT	1	4	7	7%	Yes	72	67%	1.95
DEPARTMENT_ID	10	110	11	10%	No	1	1%	3.85
EMAIL	ABANDA	WTAYLOR	107	100%	No	0	0%	Infinity
EMPLOYEE_ID	100	206	107	100%	No	0	0%	Infinity
FIRST_NAME	Adam	Winston	91	85%	No	0	0%	Infinity

Tabular Graphical

Data Drill Panel

Here are drill results on HR_EMPLOYEES column COMMISSION_PCT, related to Null values.

Distinct values:

COMMISSION_PCT	# Rows	% of 107
1	72	67%
4	1	1%
.35	3	3%
.3	7	7%
.25	6	6%
.2	7	7%
.15	5	5%
.1	6	6%

Rows for the selected distinct value:

COMMISSION_PCT	DEPARTMENT...	EMAIL	EMPLOYEE_ID	FIRST_N
1	50	AFRIPP	121	Adam
2	50	AWALSH	196	Alana
3	60	AHUNOLD	103	Alexand
4	30	AKHOO	115	Alexand
5	50	ABULL	185	Alexis
6	50	ACABRIO	187	Anthony
7	50	BEVERETT	193	Britney
8	60	BERNST	104	Bruce
9	50	COAVIES	142	Curtis
10	100	DFAVIET	109	Daniel
11	60	DAUSTIN	105	David

Displaying 8 Rows out of 8

Displaying 72 Rows out of 72

Property Inspector

LOAD_CONFIGURATION

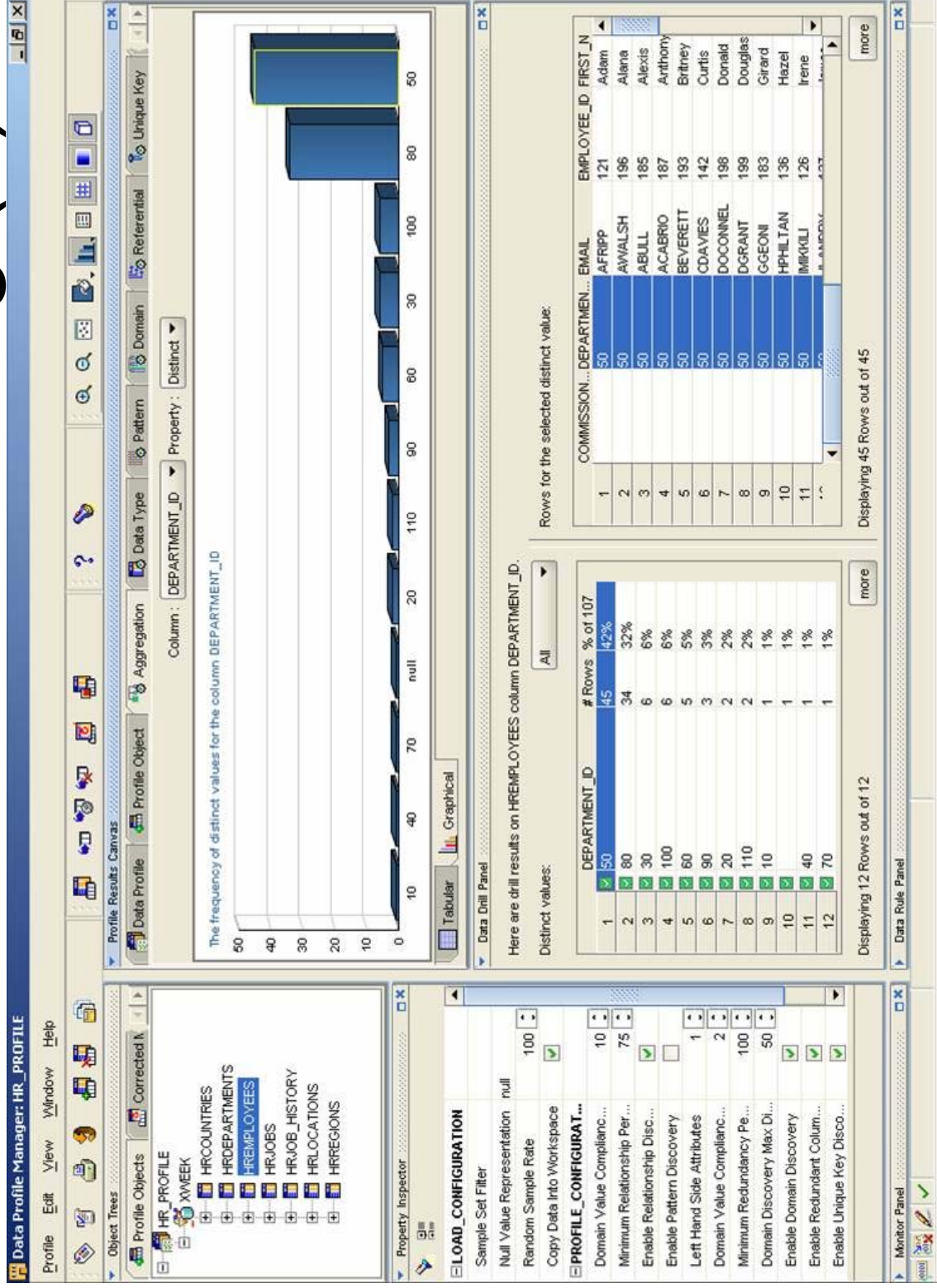
- Sample Set Filter
- Null Value Representation null
- Random Sample Rate 100
- Copy Data into Workspace

PROFILE_CONFIGURATION...

- Domain Value Compliance 10
- Minimum Relationship Per 75
- Enable Relationship Discovery
- Enable Pattern Discovery
- Left Hand Side Attributes 1
- Domain Value Compliance 2
- Minimum Redundancy Pe 100
- Domain Discovery Max Di 50
- Enable Domain Discovery
- Enable Redundant Colum
- Enable Unique Key Disco

Monitor Panel

New OWB – Data Profiling (2)



New OWB – Data Profiling (3)

The screenshot displays the Data Profile Manager interface for the HR_PROFILE. The main window shows domain analysis results for the HREMPLOYEES table, which has 11 columns and 107 rows. The results are presented in a table with columns: Columns, Found Domain, % Compliant, and Six-Sigma.

Columns	Found Domain	% Compliant	Six-Sigma
HIRE_DATE		0%	10001.50
JOB_ID	8T_CLERK SA_REP SH_CLERK	65%	10001.50
LAST_NAME		0%	10001.50
MANAGER_ID	100	13%	10001.50
PHONE_NUMB...		0%	10001.50
SALARY		0%	10001.50

Below the table, there is a section for "Rows for the selected distinct value:" showing a list of rows with their corresponding domain values. The rows are displayed in a table with columns: JOB_ID, PU_MAN, MK_REP, FL_MGR, AD_VP, FL_ACCOUNT, ST_MAN, SA_MAN, IT_PROG, PU_CLERK, SH_CLERK, ST_CLERK, and SA_REP. The rows are sorted by the number of rows for each distinct value, with SH_CLERK having the highest count (20).

JOB_ID	PU_MAN	MK_REP	FL_MGR	AD_VP	FL_ACCOUNT	ST_MAN	SA_MAN	IT_PROG	PU_CLERK	SH_CLERK	ST_CLERK	SA_REP
8	1	1	1	2	5	5	5	5	5	20	19	30
9	1	1	1	2	5	5	5	5	5	20	19	30
10	1	1	1	2	5	5	5	5	5	20	19	30
11	1	1	1	2	5	5	5	5	5	20	19	30
12	1	1	1	2	5	5	5	5	5	20	19	30
13	1	1	1	2	5	5	5	5	5	20	19	30
14	1	1	1	2	5	5	5	5	5	20	19	30
15	1	1	1	2	5	5	5	5	5	20	19	30
16	1	1	1	2	5	5	5	5	5	20	19	30
17	1	1	1	2	5	5	5	5	5	20	19	30
18	1	1	1	2	5	5	5	5	5	20	19	30
19	1	1	1	2	5	5	5	5	5	20	19	30

The interface also includes a "Data Drill Panel" on the right, which shows the results of a drill-down analysis for the selected distinct value. It displays a table with columns: COMMISSION, DEPARTMENT, EMAIL, EMPLOYEE_ID, and FIRST_N. The rows are sorted by the number of rows for each distinct value, with SH_CLERK having the highest count (20).

COMMISSION	DEPARTMENT	EMAIL	EMPLOYEE_ID	FIRST_N
1	50	AWALSH	196	Alana
2	50	ABULL	185	Alexis
3	50	ACABRIO	187	Anthony
4	50	BEVERETT	193	Britney
5	50	DOONNEL	198	Donald
6	50	DGRANT	199	Douglas
7	50	GGEONI	183	Girard
8	50	JFLEAUR	181	Jean
9	50	JOLLY	189	Jennifer
10	50	JDELLING	186	Julia
11	50	KCHUNG	188	Kelly

The interface also includes a "Data Rule Panel" on the right, which shows the results of a data rule analysis for the selected distinct value. It displays a table with columns: JOB_ID, PU_MAN, MK_REP, FL_MGR, AD_VP, FL_ACCOUNT, ST_MAN, SA_MAN, IT_PROG, PU_CLERK, SH_CLERK, ST_CLERK, and SA_REP. The rows are sorted by the number of rows for each distinct value, with SH_CLERK having the highest count (20).

JOB_ID	PU_MAN	MK_REP	FL_MGR	AD_VP	FL_ACCOUNT	ST_MAN	SA_MAN	IT_PROG	PU_CLERK	SH_CLERK	ST_CLERK	SA_REP
8	1	1	1	2	5	5	5	5	5	20	19	30
9	1	1	1	2	5	5	5	5	5	20	19	30
10	1	1	1	2	5	5	5	5	5	20	19	30
11	1	1	1	2	5	5	5	5	5	20	19	30
12	1	1	1	2	5	5	5	5	5	20	19	30
13	1	1	1	2	5	5	5	5	5	20	19	30
14	1	1	1	2	5	5	5	5	5	20	19	30
15	1	1	1	2	5	5	5	5	5	20	19	30
16	1	1	1	2	5	5	5	5	5	20	19	30
17	1	1	1	2	5	5	5	5	5	20	19	30
18	1	1	1	2	5	5	5	5	5	20	19	30
19	1	1	1	2	5	5	5	5	5	20	19	30

New OWB – Data Correction

Data Profile Manager: HR_PROFILE

Profile Edit View Window Help

Create Correction - Step 5 of 5: Choose data correction actions

Select a corrected table:

Correct	Table	Description
☒	HRLOCATIONS_1	
☒	HRDEPARTMENT...	
☒	HREMPLOYEES_1	
☒	HRJOBS_1	
☒	HRJOB_HISTORY_1	
☒	HRREGIONS_1	
☒	HRCOUNTRIES_1	

Choose data correction actions:

Rule	Rule type	Action	Cleanse Strategy	Des
1	DERIVED_DATA_RULES.D...	Cleanse Ignore Report Cleanse	Remove	

Help

Displaying 19 Rows out of 19

Displaying 20 Rows out of 20

Monitor Panel

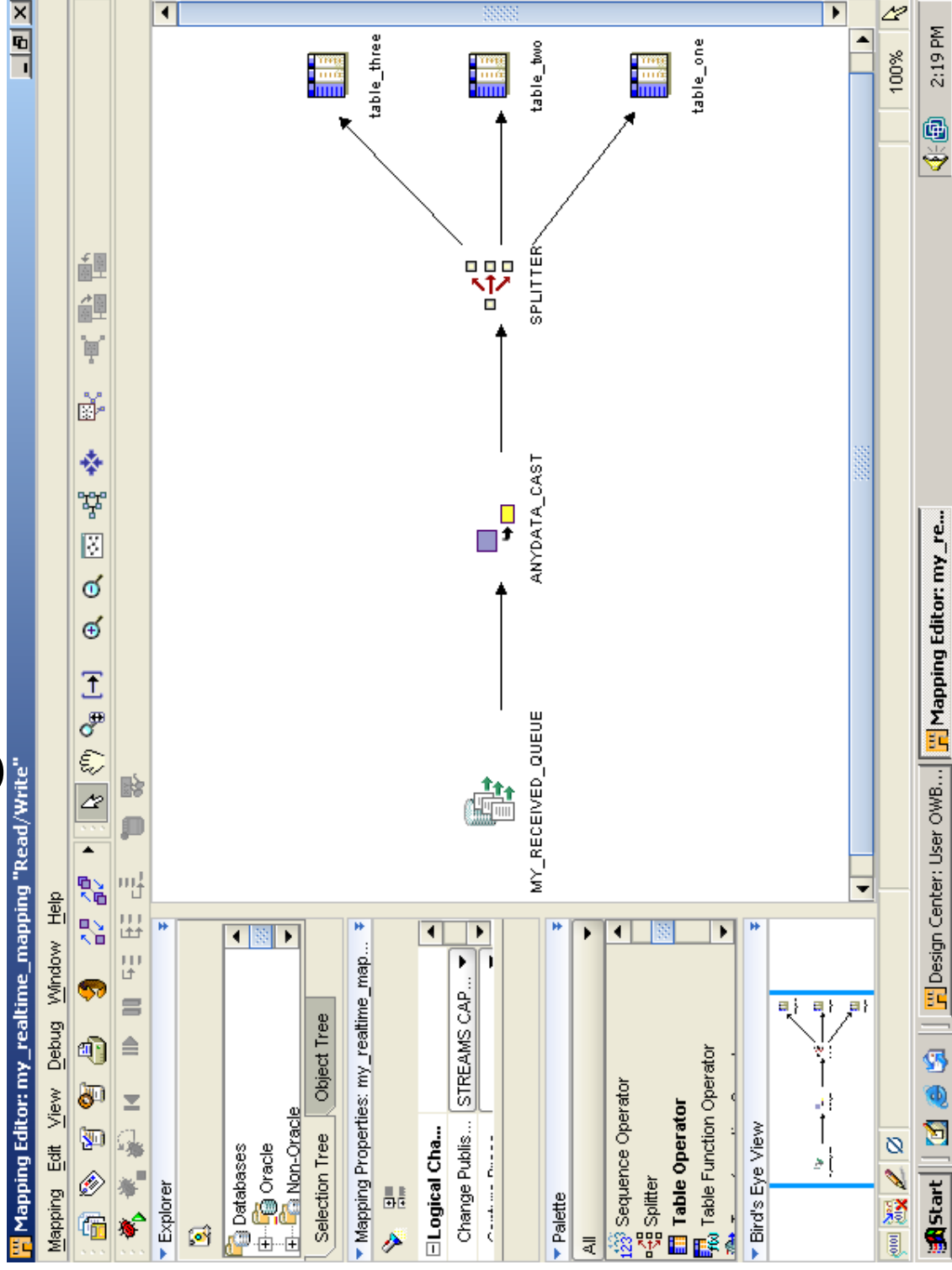
Number of Days: 7 Number of it

Profile

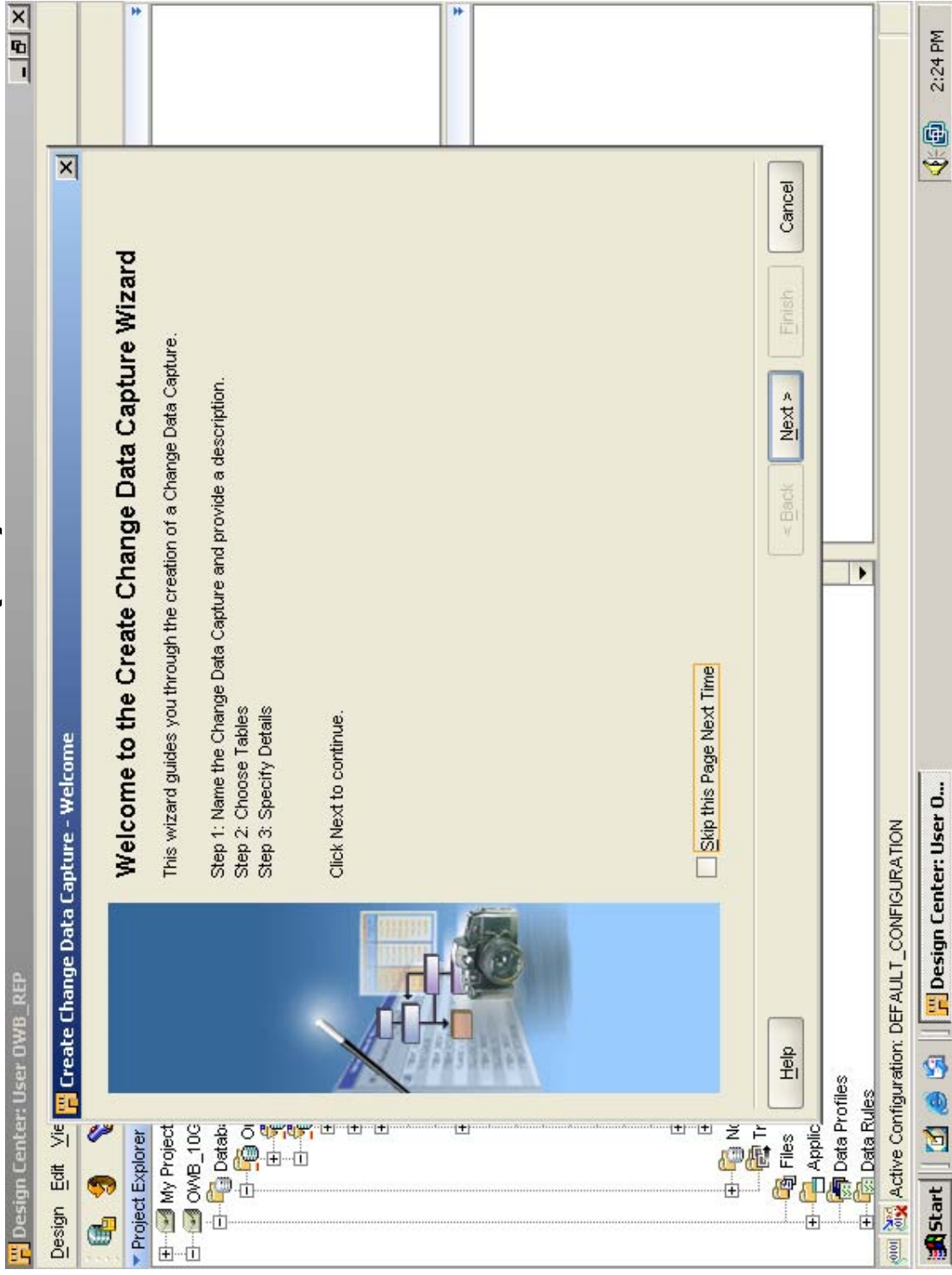
Property Inspector

- LOAD_CONFIGUR...
- Sample Set Filter
- Null Value Represent... null
- Random Sample Rate
- Copy Data Into Work...
- PROFILE_CONFIG...
- Domain Value Compl...
- Minimum Relationship...
- Enable Relationship

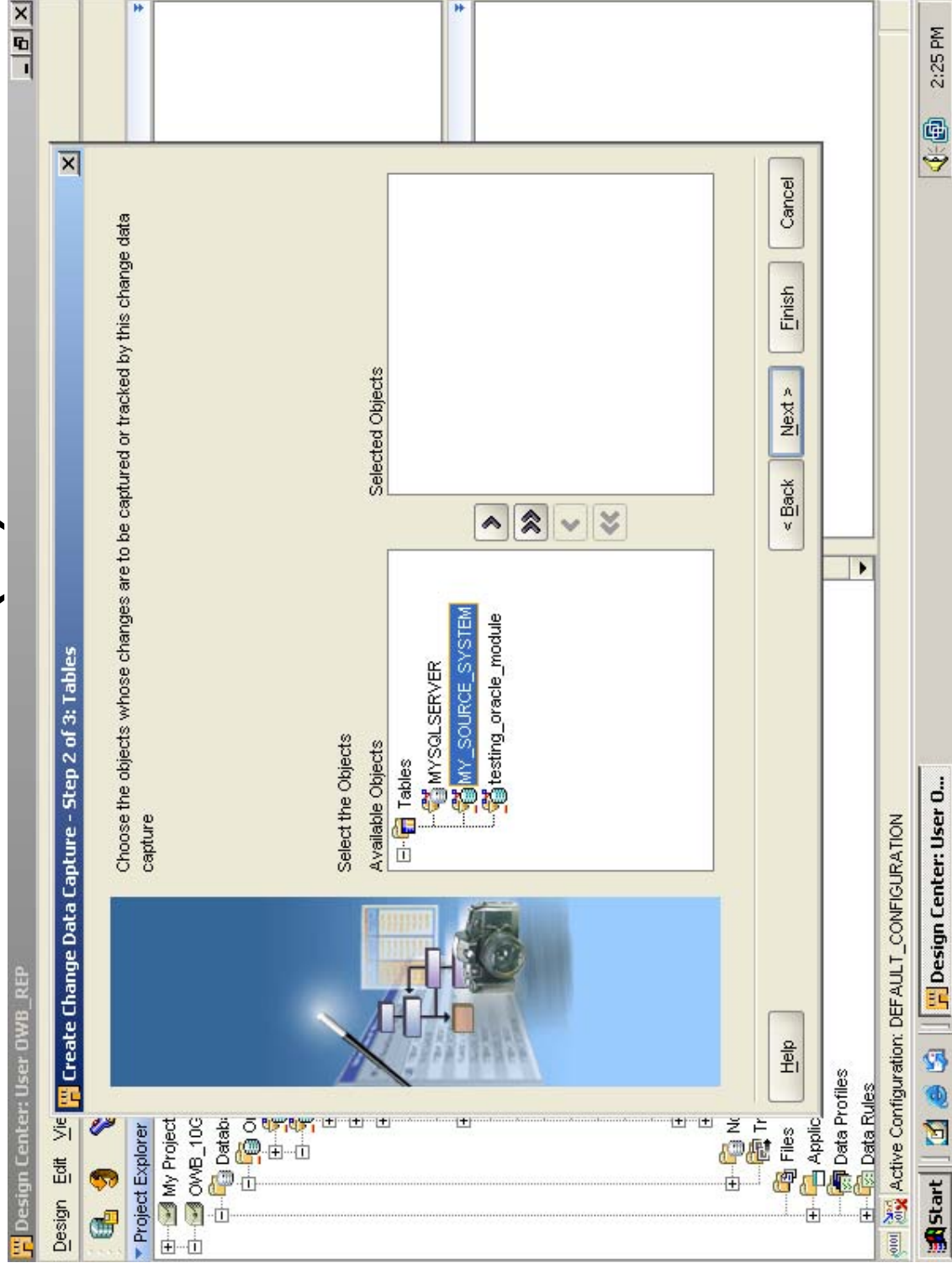
New OWB – Right Time BI



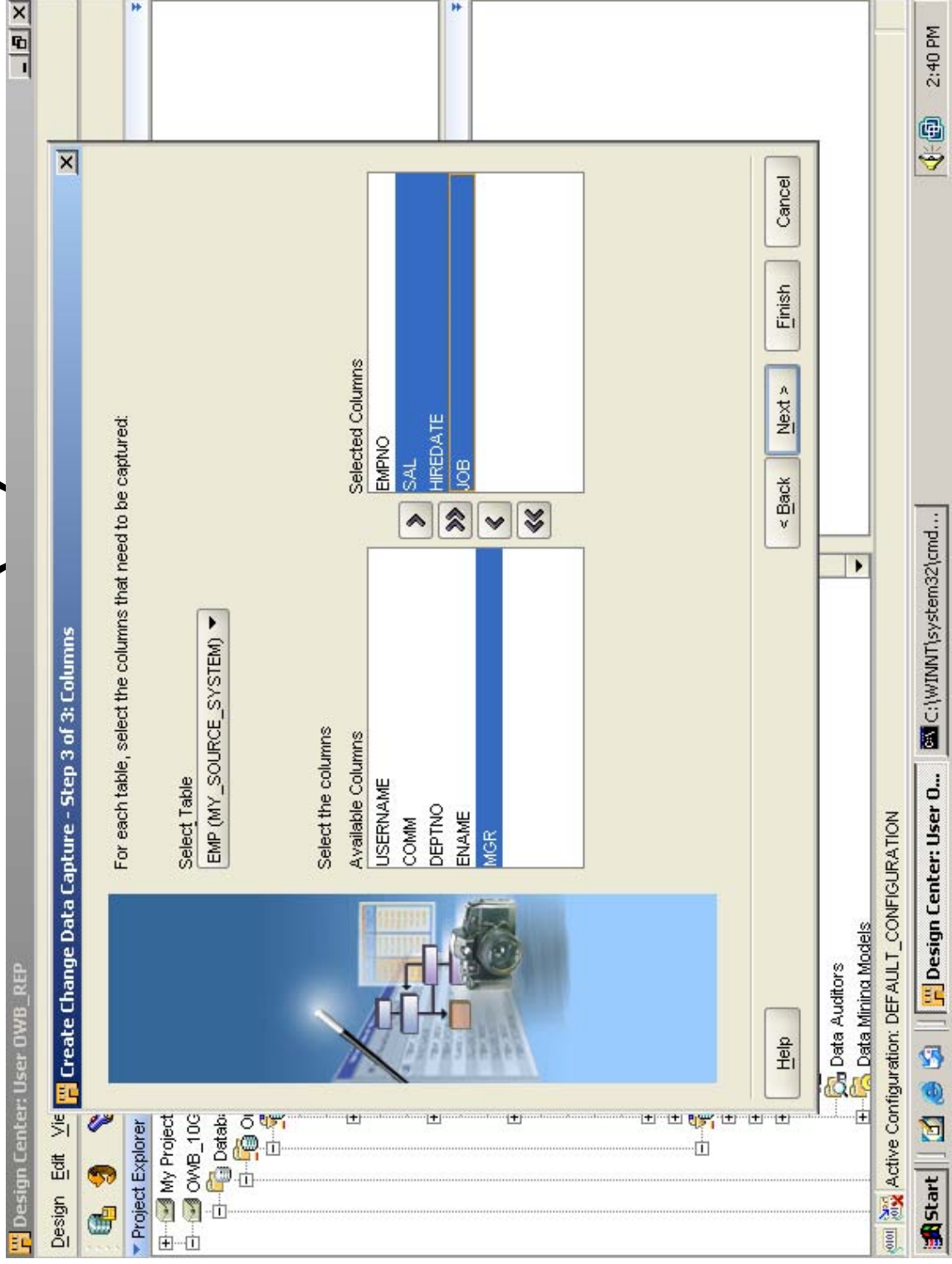
New OWB – CDC (1)



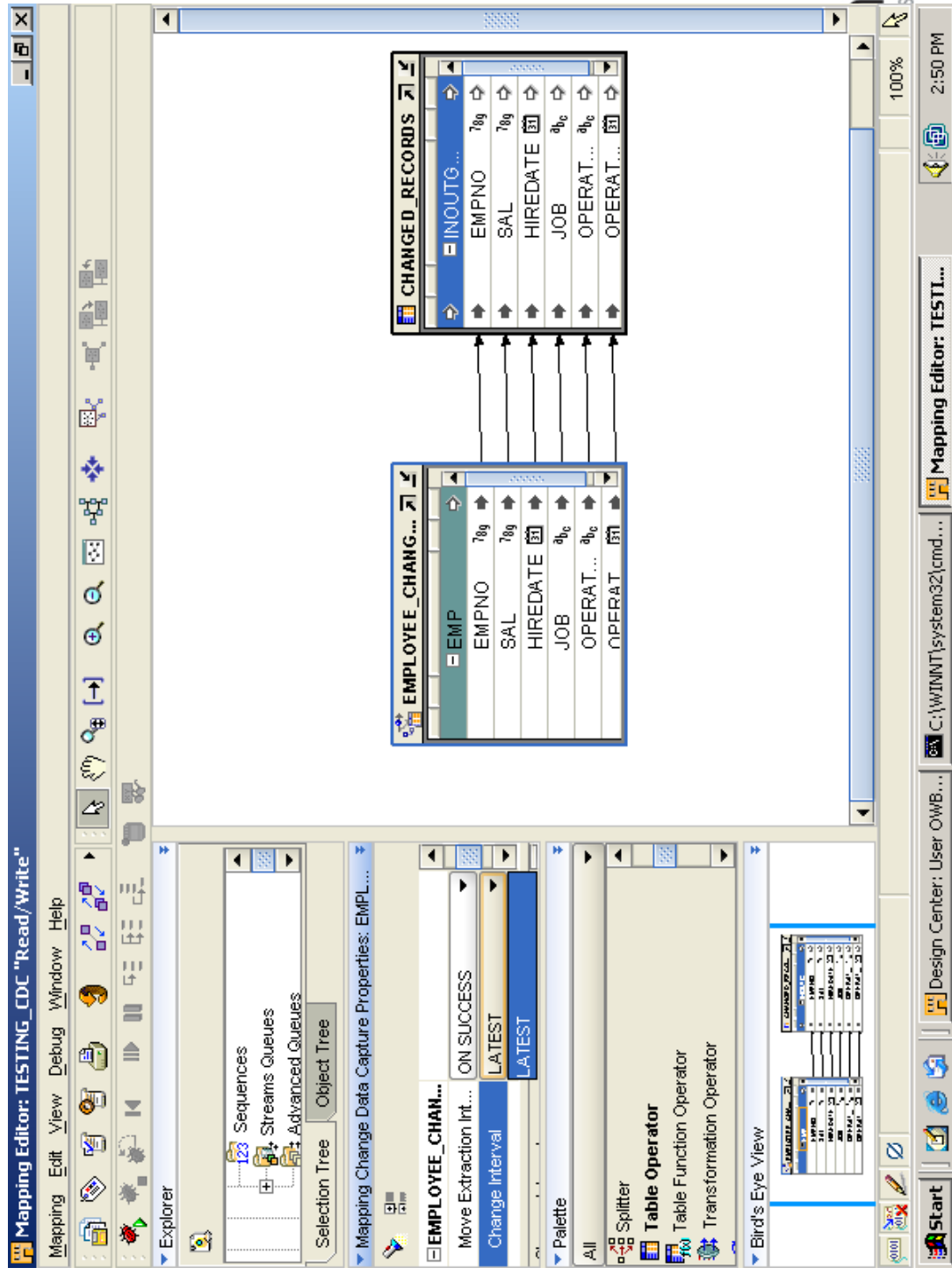
New OWB – CDC (2)



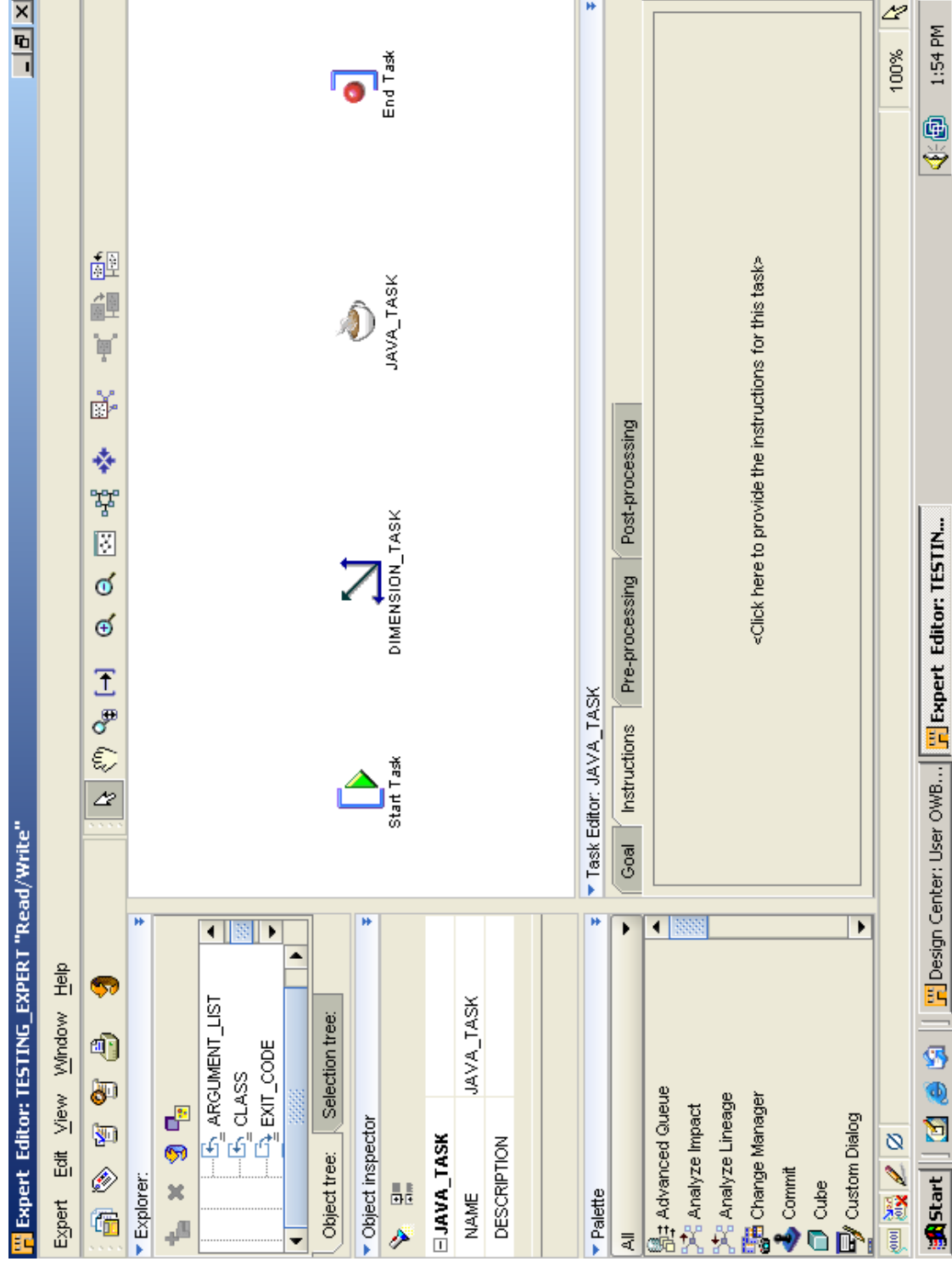
New OWB – CDC (3)



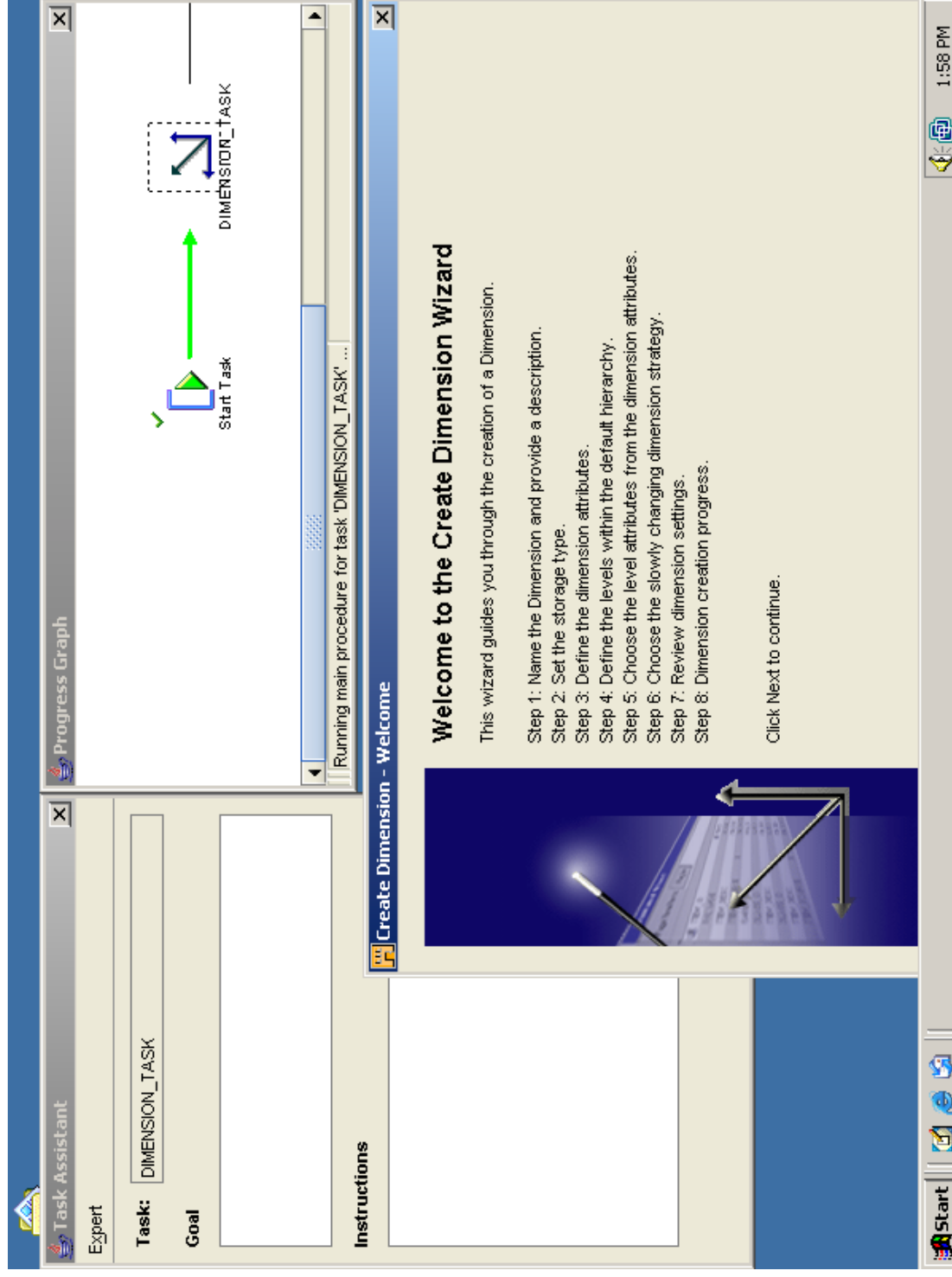
New OWB – CDC (4)



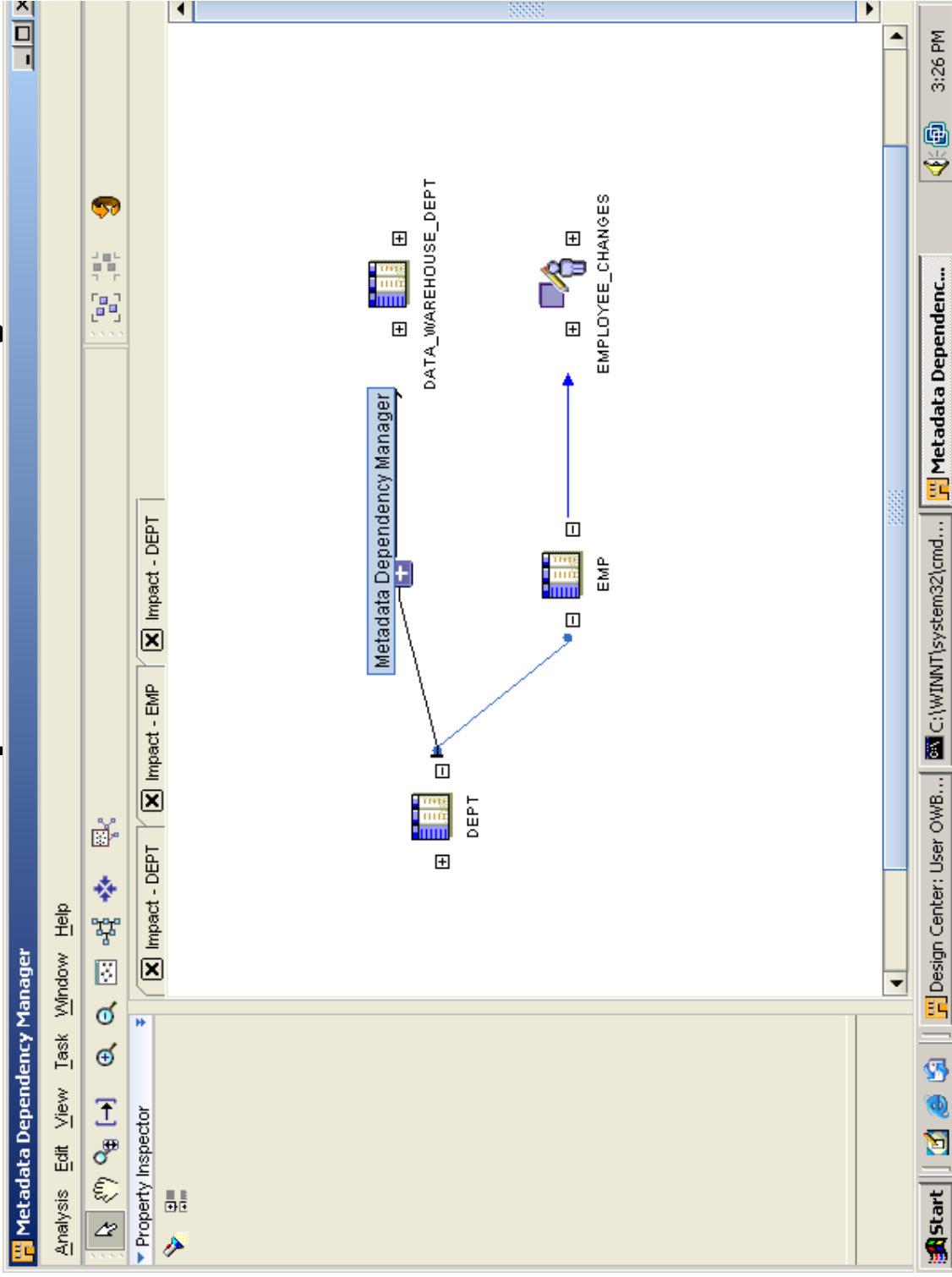
New OWB – Experts (1)



New OWB – Experts (2)



New OWB – Impact Analysis



New OWB – Misc

- User Defined Objects
- Personalities
- Process Flow Improvements
- Scheduling
- Data Mining
- Security and Mgmt
- Control Center Runtime/Deploy
- Better Integration with Discoverer
- OLAP Enhancements

Where to go for more OWB

- <http://www.bayontechnologies.com>
(Our Work)
- OTN OWB Page
- rittman.net (OWB Page)
- ngoodman@bayontechnologies.com
- Expected release this year