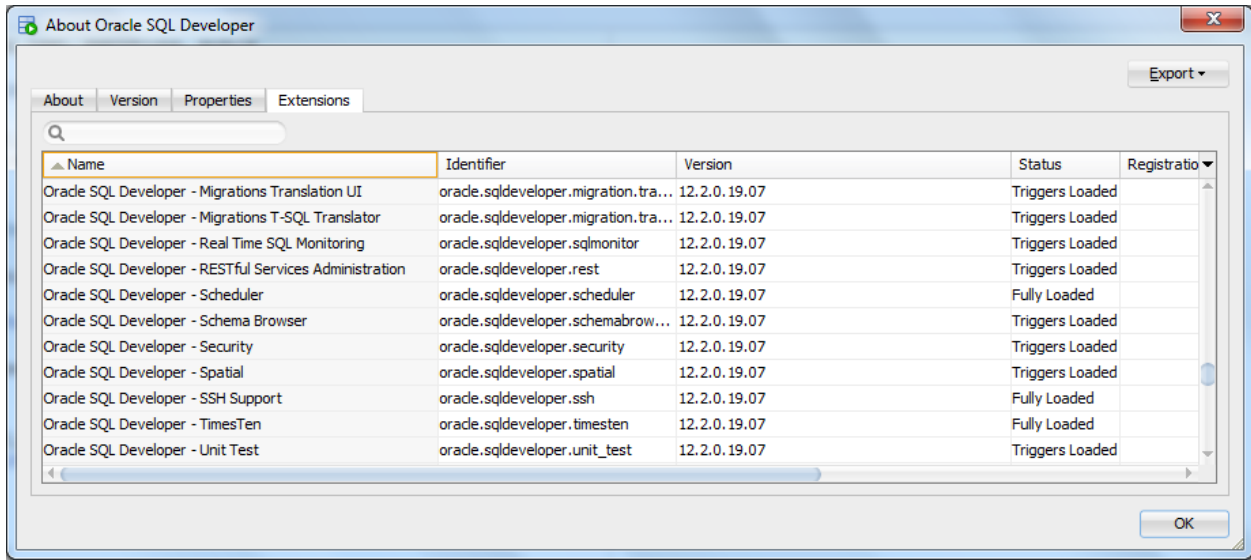
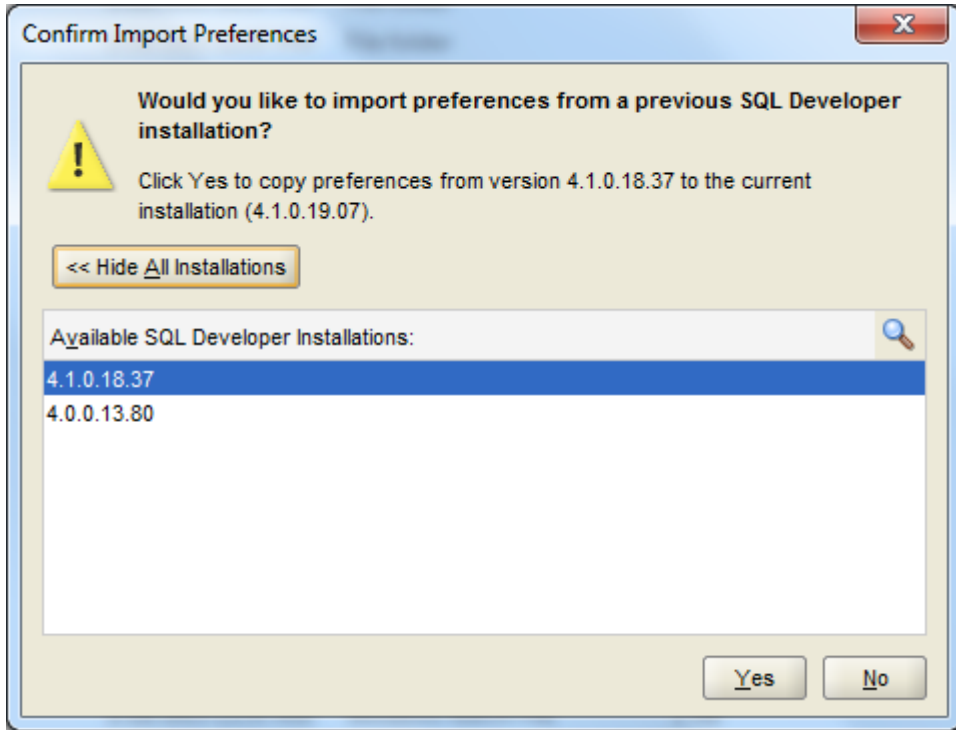
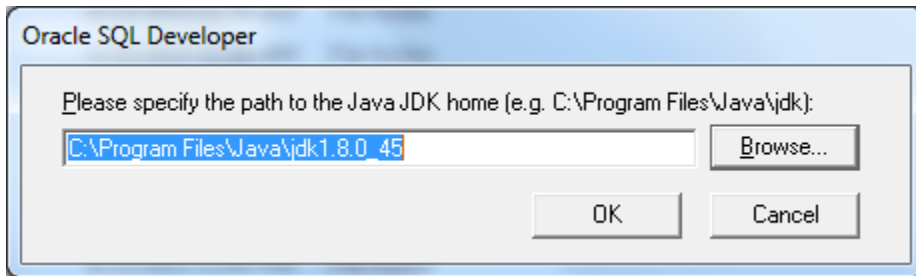
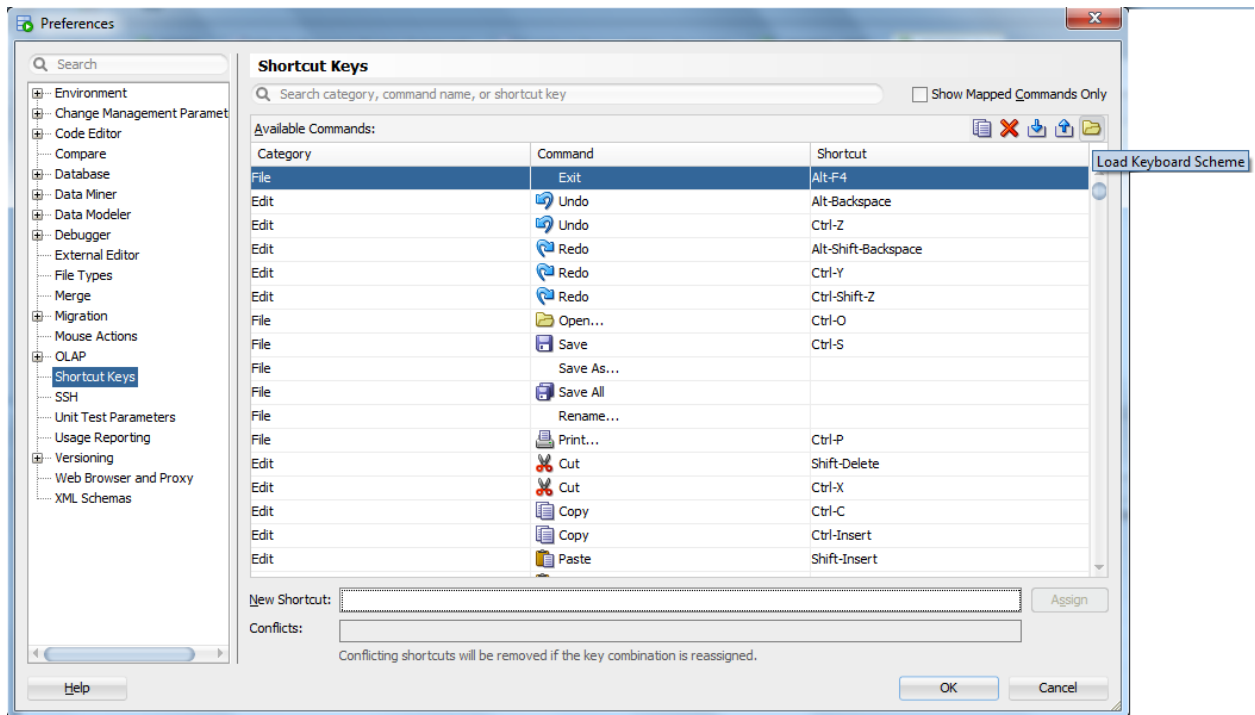
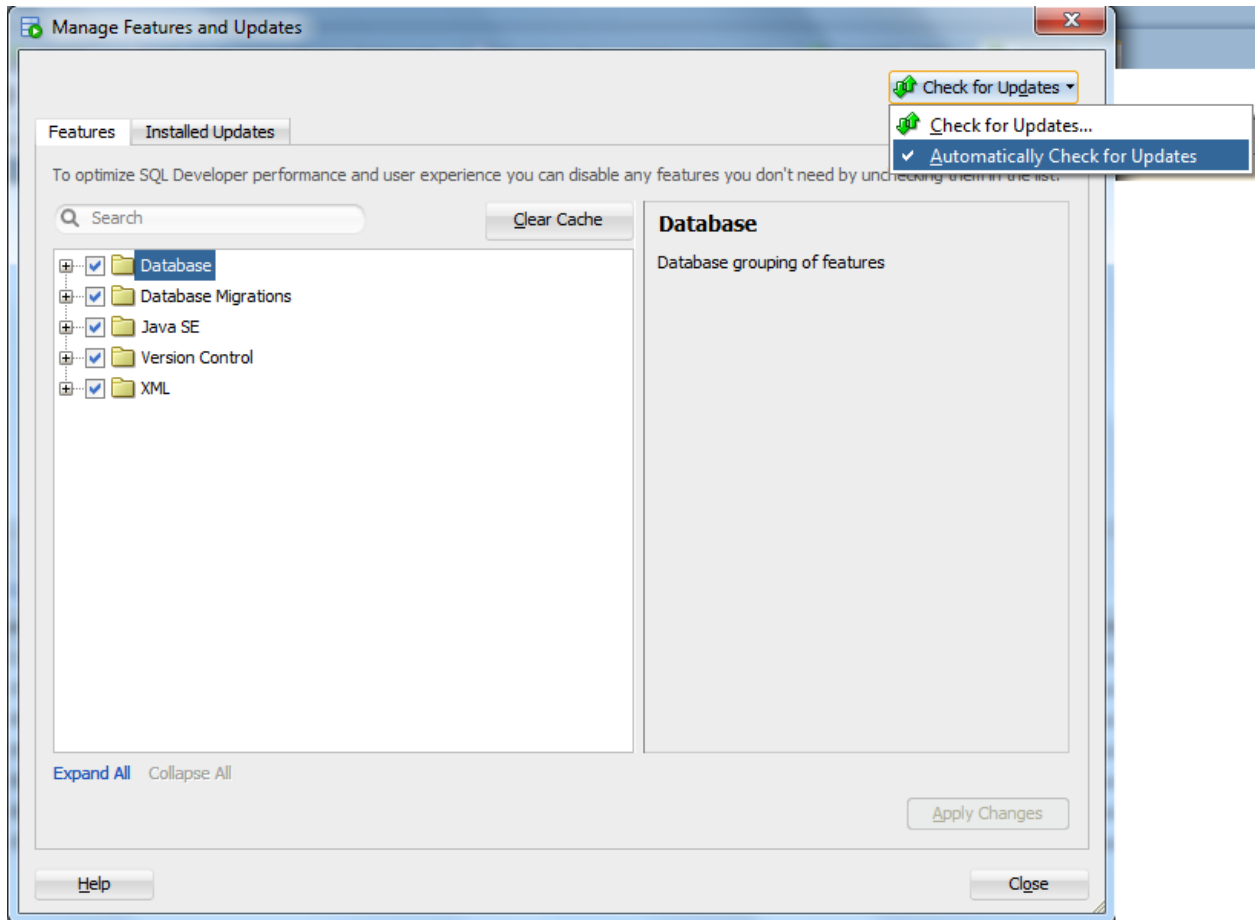
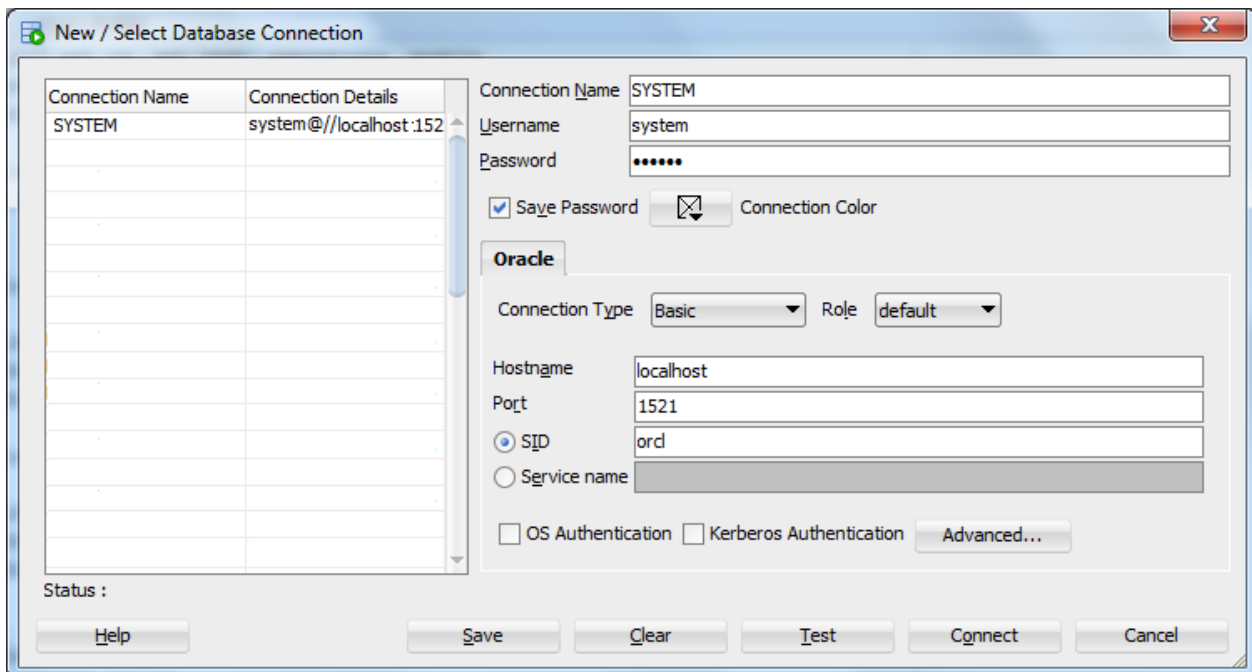
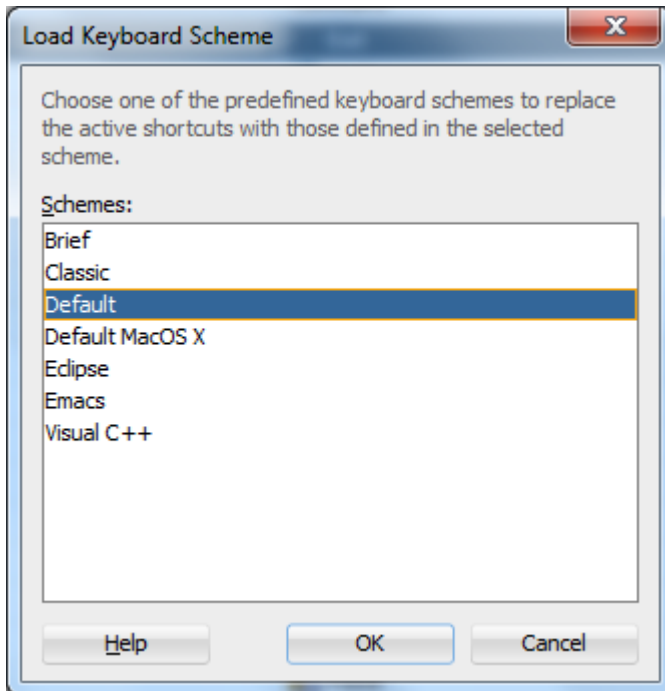


Chapter 1







Oracle SQL Developer : HR_11g

File Edit View Navigate Run Source Team Tools Window Help

Connections

HR_11g
SYSTEM

Start Page HR_11g

Worksheet Query Builder

```
DESC DEPARTMENTS
SELECT * FROM DEPARTMENTS;
```

Script Output x

Task completed in 0.74 seconds

Name	Null	Type		
DEPARTMENT_ID	NOT NULL	NUMBER(4)		
DEPARTMENT_NAME	NOT NULL	VARCHAR2(30)		
MANAGER_ID		NUMBER(6)		
LOCATION_ID		NUMBER(4)		
DEPARTMENT_ID		DEPARTMENT_NAME	MANAGER_ID	LOCATION_ID
10		Administration	200	1700
20		Marketing	201	1800
30		Purchasing	114	1700
40		Human Resources	203	2400
50		Shipping	121	1500
60		IT	103	1400
70		Public Relations	204	2700
80		Sales	145	2500

Oracle SQL Developer: Table HR.EMPLOYEES@HR_11g

File Edit View Navigate Run Team Tools Window Help

Connections: HR_11g

- Tables (Filtered)
 - COUNTRIES
 - DEPARTMENTS
 - EMPLOYEES
 - EMPLOYEE_ID
 - FIRST_NAME
 - LAST_NAME
 - EMAIL
 - PHONE_NUMBER
 - HIRE_DATE
 - JOB_ID
 - SALARY
 - COMMISSION_PC
 - MANAGER_ID
 - DEPARTMENT_ID
 - JOB_HISTORY
 - JOBS
 - LOCATIONS
 - REGIONS
- Views
- Editing Views
- Indexes
- Packages
- Procedures
- Functions
- Queues
- Queues Tables

Columns | Data | Model | Constraints | Grants | Statistics | Triggers | Flashback | Dependencies | Details | Partitions | Indexes | SQL

TRIGGER_NAME	TRIGGER_TYPE	TRIGGER_OWNER	TRIGGERING_EVENT	STATUS	TABLE_NAME
1 SECURE_EMPLOYEES	BEFORE STATEMENT	HR	INSERT OR UPDATE OR DELETE	DISABLED	EMPLOYEES
2 UPDATE_JOB_HISTORY	AFTER EACH ROW	HR	UPDATE	ENABLED	EMPLOYEES

Refresh: 0

```

TRIGGER update_job_history
AFTER UPDATE OF job_id, department_id ON employees
FOR EACH ROW
BEGIN
  add_job_history(:old.employee_id, :old.hire_date, sysdate,
                :old.job_id, :old.department_id);
END;
  
```

Oracle SQL Developer

File Edit View Navigate Run Team Tools Window Help

Connections: HR_11g

- Tables (Filtered)
 - COUNTRIES
 - DEPARTMENTS
 - EMPLOYEES
 - EMPLOYEE_ID
 - FIRST_NAME
 - LAST_NAME
 - EMAIL
 - PHONE_NUMBER
 - HIRE_DATE
 - JOB_ID
 - SALARY
 - COMMISSION_PC
 - MANAGER_ID
 - DEPARTMENT_ID
 - JOB_HISTORY
 - JOBS
 - LOCATIONS

Columns | Data | Model | Constraints | Grants | Statistics | Triggers | Flashback | Dependencies | Details | Partitions | Indexes

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE
1	Steven	King	SKING	515.123.4567	17-JUN-03
2	Neena	Kochhar	NKOCHHAR	515.123.4568	21-SEP-05
3	Lex	De Haan	LDEHAAN	515.123.4569	13-JAN-01
4	Alexander	Hunold	AHUNOLD	590.423.4567	03-JAN-06
5	Bruce	Ernst	BERNST	590.423.4568	21-MAY-07
6	David	Austin	DAUSTIN	590.423.4569	25-JUN-05
7	Valli	Pataballa	VPATABAL	590.423.4560	05-FEB-06
8	Diana	Lorentz	DLORENTZ	590.423.5567	07-FEB-07
9	Nancy	Greenberg	NGREENBE	515.124.4569	17-AUG-02

Messages - Log

Local changes cleared

Oracle SQL Developer

File Edit View Navigate Run Team Tools Window Help

Connections

- HR_11g
 - Tables (Filtered)
 - Views
 - Editing Views
 - Indexes
 - Packages
 - Procedures
 - Functions

Reports

- All Reports
 - Data Dictionary Reports
 - About Your Database
 - All Objects
 - Application Express
 - ASH and AWR
 - Database Administration
 - Data Dictionary
 - Oracle REST Data Services
 - PLSQL
 - Scheduler
 - Security
 - Streams
 - Table
 - Columns
 - Comments
 - Constraints
 - All Constraints
 - Check Constraints
 - Disabled Constraints
 - Enabled Constraints
 - Foreign Key Constraints
 - Primary Key Constraints
 - Unique Constraints

Start Page HR_11g

Worksheet Query Builder

DESC DEPARTMENTS

Script Output x Query Result x

SQL All Rows Fetched: 6 in 0.014 seconds

	LITERAL-1	OBJECT_NAME	LITERAL-2
1	literal-1	DEPARTMENTS	literal-2
2	literal-1	DEPARTMENTS_SEQ	literal-2
3	literal-1	DEPT_ID_PK	literal-2
4	literal-1	DEPT_LOCATION_IX	literal-2
5	literal-1	EMP_DEPARTMENT_IX	literal-2

Messages - Log

Local changes clear

Select Connection

Select the connection you wish to use from the list, or create a new connection.

Connection: HR_11g

Help OK Cancel

Enter Bind Values

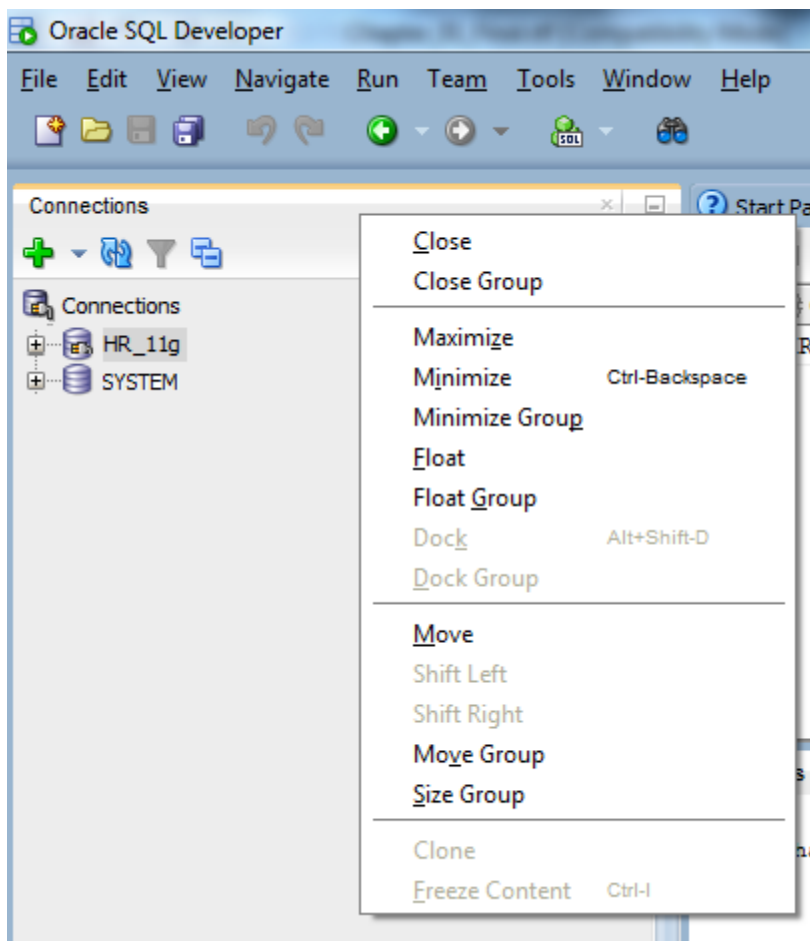
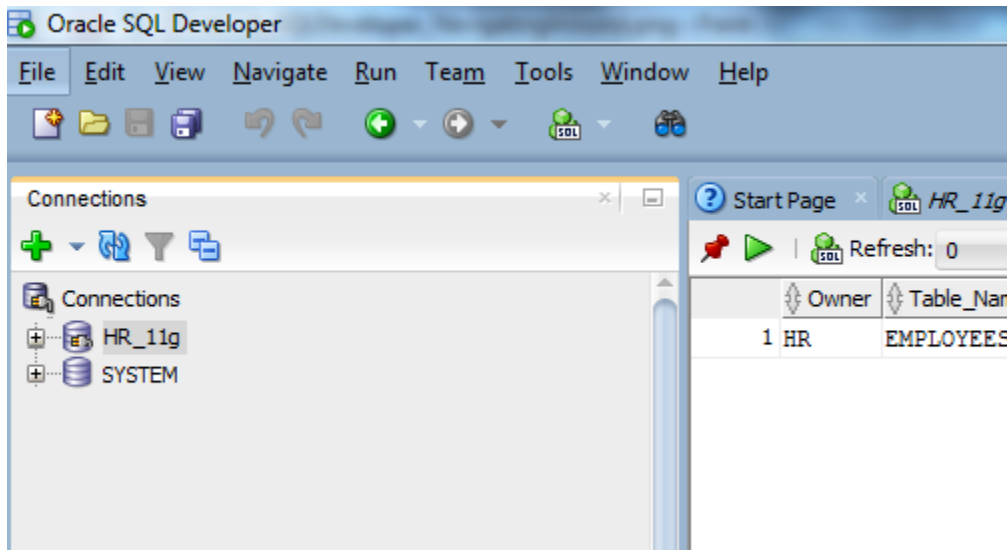
Table Name

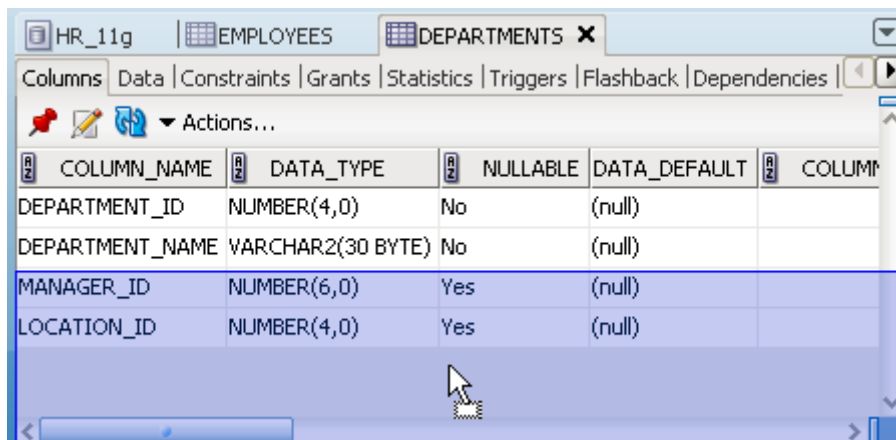
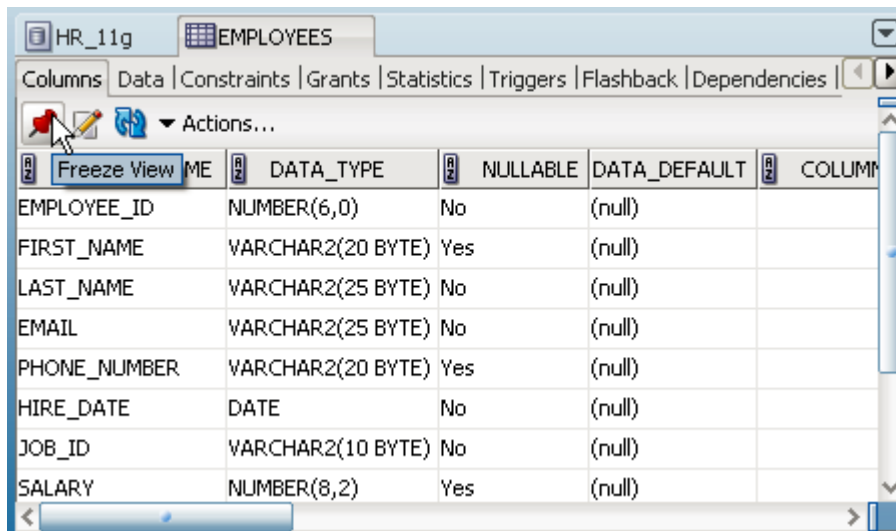
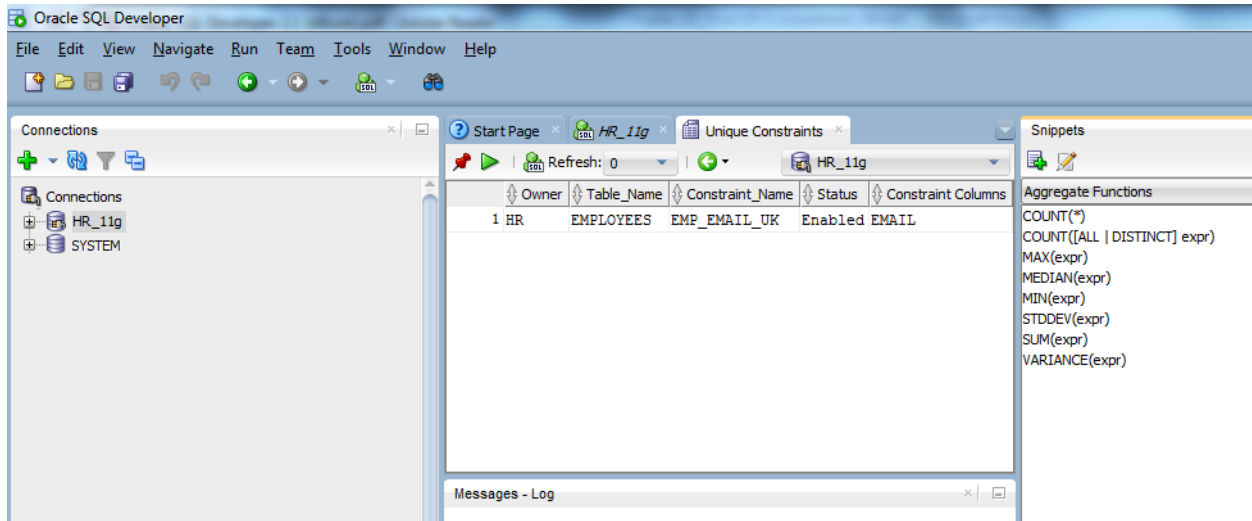
Name: Table Name

NULL

Value:

Help Apply Cancel





HR_11g EMPLOYEES DEPARTMENTS

Columns | Data | Constraints | Grants | Statistics | Triggers | Flashback | Dependencies

Actions...

COLUMN_NAME	DATA_TYPE	NULLABLE	DATA_DEFAULT	COLUMN
DEPARTMENT_ID	NUMBER(4,0)	No	(null)	
DEPARTMENT_NAME	VARCHAR2(30 BYTE)	No	(null)	
MANAGER_ID	NUMBER(6,0)	Yes	(null)	
LOCATION_ID	NUMBER(4,0)	Yes	(null)	

HR_11g EMPLOYEES

Columns | Data | Constraints | Grants | Statistics | Triggers | Flashback | Dependencies

Actions...

COLUMN_NAME	DATA_TYPE	NULLABLE	DATA_DEFAULT	COLUMN
EMPLOYEE_ID	NUMBER(6,0)	No	(null)	
FIRST_NAME	VARCHAR2(20 BYTE)	Yes	(null)	
LAST_NAME	VARCHAR2(25 BYTE)	No	(null)	
EMAIL	VARCHAR2(25 BYTE)	No	(null)	
PHONE_NUMBER	VARCHAR2(20 BYTE)	Yes	(null)	
HIRE_DATE	DATE	No	(null)	
JOB_ID	VARCHAR2(10 BYTE)	No	(null)	
SALARY	NUMBER(8,2)	Yes	(null)	

SQL History | Dbms Output

Oracle SQL Developer

File | Edit | View | Navigate | Run | Team | Tools | Window | Help

Connections

- Connections
 - BIOBRK_A
 - BIODEV
 - Bob_Apex_DB
 - CRPGL_Apps
 - CRPGL_Appsview
 - CRPGL_system
 - DEVGL_APPS
 - DEVGLF
 - DEVGLF_system
 - DEV1_A
 - DEV1_Appsview
 - DEV1_System
- Reports
 - All Reports
 - Data Dictionary Reports
 - About Your Database
 - All Objects

Start Page | HR_11g

Worksheet | Query Builder

SELECT COUNTRY_ID, COUNTRY_NAME, REGION_ID FROM COUNTRIES;

Script Output | Query Result

SQL | All Rows Fetched: 25 in 0.034 seconds

COUNTRY_ID	COUNTRY_NAME	REGION_ID
1 AR	Argentina	2
2 AU	Australia	3
3 BE	Belgium	1
4 BR	Brazil	2
5 CA	Canada	2

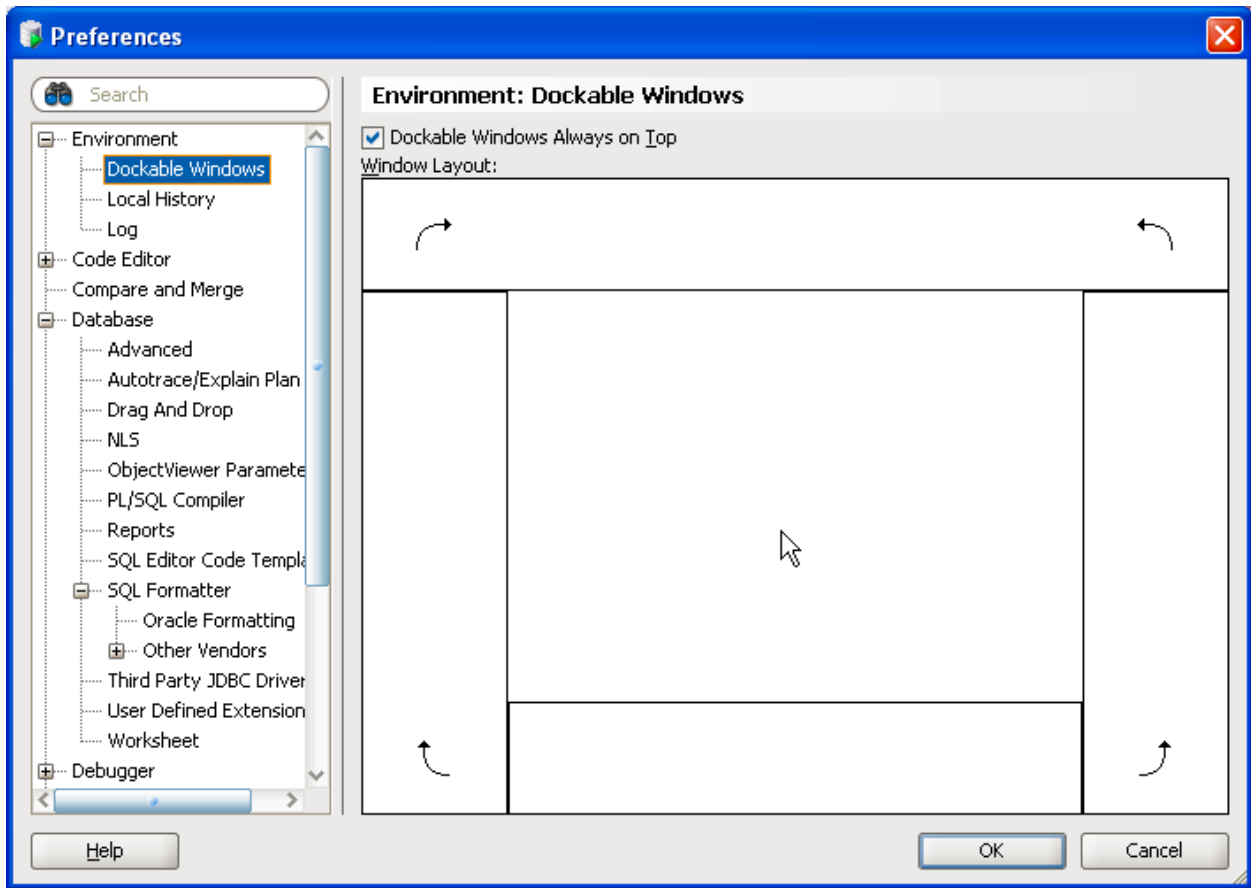
SQL History | Dbms Output

SQL

SELECT COUNTRY_ID, COUNTRY_NAME, REG

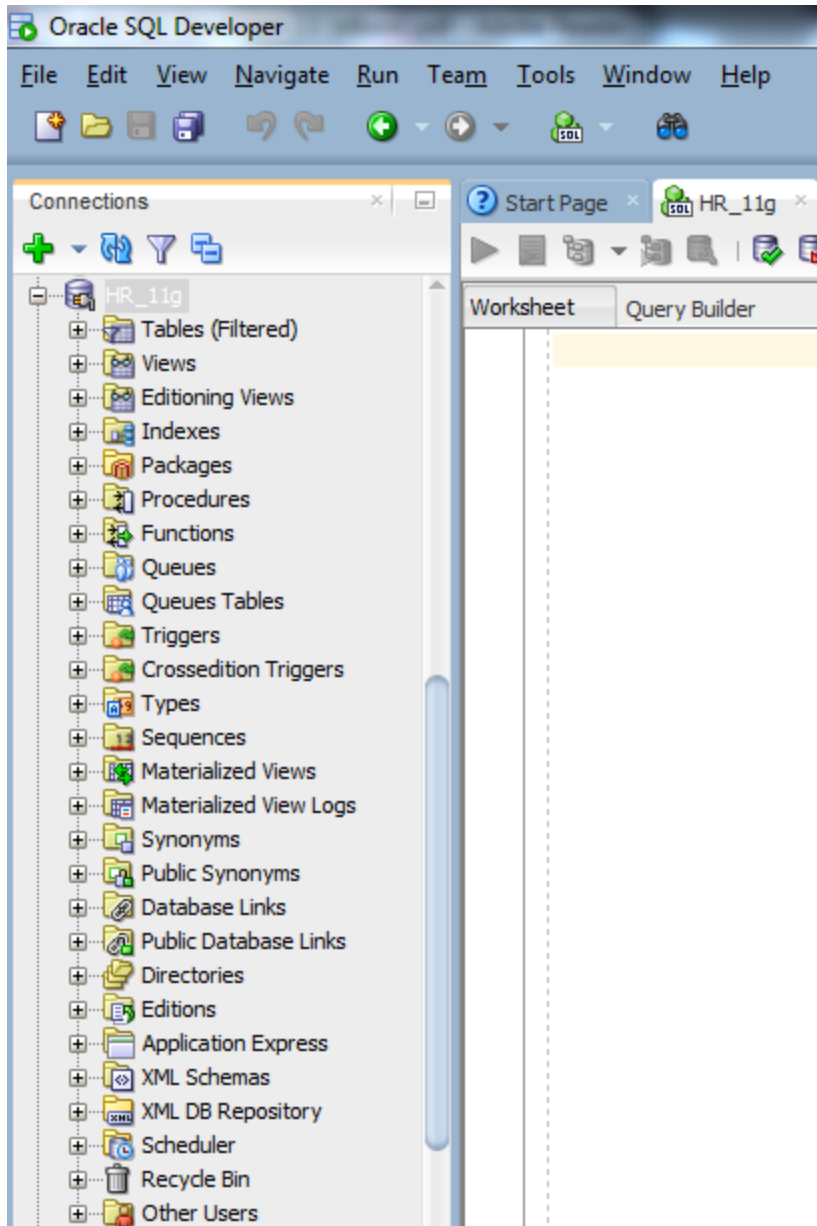
Aggregate Functions

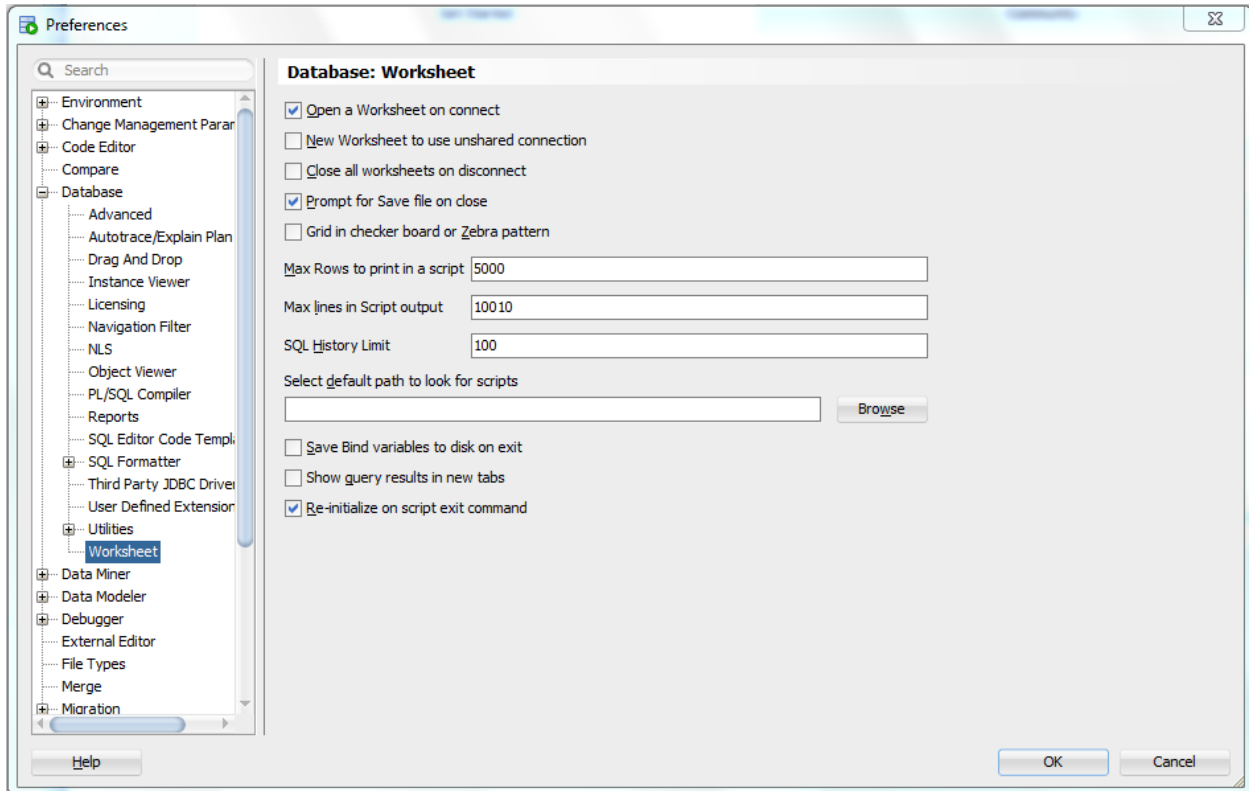
- COUNT(*)
- COUNT([ALL | DISTINCT] expr)
- MAX(expr)
- MEDIAN(expr)
- MIN(expr)
- STDDEV(expr)
- SUM(expr)
- VARIANCE(expr)



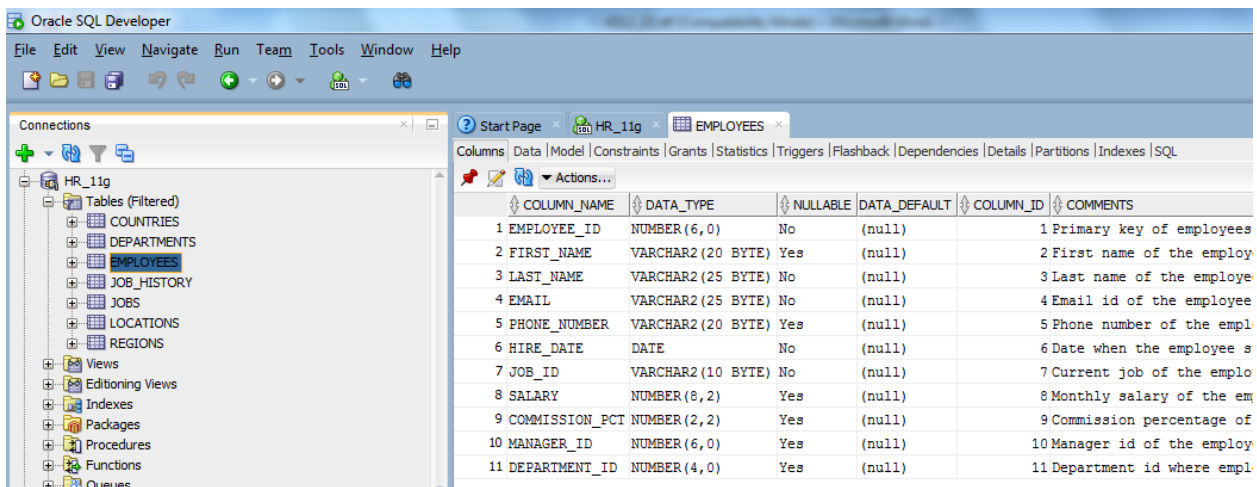
Oracle Database Certification for SQL Developer	
Product	Releases
Oracle Database	Oracle10g
	Oracle11g
	Oracle12c
Oracle Database Express Edition	Release 11.2
Non-Oracle (Third-Party) Database Certification for SQL Developer	
Database	Releases
IBM DB2	DB2 UDB
	DB2 7.x
	DB2 8.x
	DB2 9.x
Microsoft SQL Server	SQL Server 7
	SQL Server 2000
	SQL Server 2005
	SQL Server 2008
MySQL	MySQL 3.x
	MySQL 4.x
	MySQL 5.x
Sybase Adaptive Server	Sybase 12
	Sybase 15
Teradata	Teradata 12
	Teradata 13

Chapter 2





- ⊞ COUNTRIES
- ⊞ DEPARTMENTS
- ⊞ DEPT_EXT
- ⊞ DEPT_EXTERNAL
- ⊞ RANGE_SALES
- ⊞ TEMPTAB



Oracle SQL Developer : Table HR.EMPLOYEES@HR_11g

File Edit View Navigate Run Team Tools Window Help

Connections

HR_11g

- Tables (Filtered)
 - COUNTRIES
 - DEPARTMENTS
 - EMPLOYEES
 - JOB_HISTORY
 - JOBS
 - LOCATIONS
 - REGIONS
- Views
- Editing Views

Start Page | HR_11g | EMPLOYEES

Columns | Data | Model | Constraints | Grants | Statistics | Triggers | Flashback | Dependencies | Details | Partitions | Indexes | SQL

	INDEX_OWNER	INDEX_NAME	UNIQUENESS	STATUS	INDEX_TYPE	TEMPORARY	PARTITION
1	HR	EMP_JOB_IX	NONUNIQUE	VALID	NORMAL	N	NO
2	HR	EMP_NAME_IX	NONUNIQUE	VALID	NORMAL	N	NO
3	HR	EMP_EMAIL_UK	UNIQUE	VALID	NORMAL	N	NO
4	HR	EMP_EMP_ID_PK	UNIQUE	VALID	NORMAL	N	NO
5	HR	EMP_MANAGER_IX	NONUNIQUE	VALID	NORMAL	N	NO
6	HR	EMP_DEPARTMENT_IX	NONUNIQUE	VALID	NORMAL	N	NO



Start Page | HR_11g | COUNTRIES

Columns | Data | Model | Constraints | Grants | Statistics | Triggers | Flashback | Dependencies | Details | Partitions | Indexes | SQL

Actions...

```

CREATE TABLE "HR"."COUNTRIES"
( "COUNTRY_ID" CHAR(2 BYTE) CONSTRAINT "COUNTRY_ID_NN" NOT NULL ENABLE,
"COUNTRY_NAME" VARCHAR2(40 BYTE),
"REGION_ID" NUMBER,
CONSTRAINT "COUNTRY_C_ID_PK" PRIMARY KEY ("COUNTRY_ID") ENABLE,
CONSTRAINT "COUNTR_REG_FK" FOREIGN KEY ("REGION_ID")
REFERENCES "HR"."REGIONS" ("REGION_ID") ENABLE
) ORGANIZATION INDEX NOCOMPRESS PCTFREE 10 INITRANS 2 MAXTRANS 255 LOGGING
STORAGE(INITIAL 65536 NEXT 1048576 MINEXTENTS 1 MAXEXTENTS 2147483645
PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1 BUFFER_POOL DEFAULT FLASH_CACHE DEFAULT CELL_FLASH_CACHE DEFAULT)
TABLESPACE "USERS"
PCTTHRESHOLD 50;

COMMENT ON COLUMN "HR"."COUNTRIES"."COUNTRY_ID" IS 'Primary key of countries table.';
COMMENT ON COLUMN "HR"."COUNTRIES"."COUNTRY_NAME" IS 'Country name';
COMMENT ON COLUMN "HR"."COUNTRIES"."REGION_ID" IS 'Region ID for the country. Foreign key to region_id column in the de
COMMENT ON TABLE "HR"."COUNTRIES" IS 'country table. Contains 25 rows. References with locations table.';
  
```

Start Page | HR_11g | COUNTRIES

Columns | Data | Model | Constraints | Grants | Statistics | Triggers | Flashback |

Actions...

COLUMN	NAME	DATA TYPE	NULLABLE	DATA_D
1	COUNTRY		(null)	
2	COUNTRY		(null)	
3	REGION		(null)	

- Auto-fit All Columns
- Auto-fit Selected Column
- Columns...
- Sort...
- Delete Persisted Settings...
- Copy Selected Column Header(s)
- Filter Column...

	CONSTRAINT_NAME	CONSTRAINT_TYPE	SEARCH_CONDITION	OWNER
1	EMP_DEPT_FK	Foreign		
2	EMP_EMAIL_NN	Check		
3	EMP_EMAIL_UK	Unique		
4	EMP_EMP_ID_PK	Primary		
5	EMP_HIRE_DATE_NN	Check		
6	EMP_JOB_FK	Foreign		
7	EMP_JOB_NN	Check		
8	EMP_LAST_NAME_NN	Check	"LAST_NAME" IS NOT NULL	
9	EMP_MANAGER_FK	Foreign_Key	(null)	
10	EMP_SALARY_MIN	Check	salary > 0	

- Auto-fit All Columns
- Auto-fit Selected Column
- Columns...
- Sort...
- Delete Persisted Settings...
- Copy Selected Column Header(s)
- Filter Column...

	CONSTRAINT_NAME	CONSTRAINT_TYPE	SEARCH_CONDITION	OWNER
1	EMP_DEPT_FK	Foreign_Key		
2	EMP_EMAIL_NN	Check		
3	EMP_EMAIL_UK	Unique		
4	EMP_EMP_ID_PK	Primary_Key		
5	EMP_HIRE_DATE_NN	Check		
6	EMP_JOB_FK	Foreign_Key		
7	EMP_JOB_NN	Check		
8	EMP_LAST_NAME_NN	Check	"LAST_NAME" IS NOT NULL	(null)
9	EMP_MANAGER_FK	Foreign_Key	(null)	HR
10	EMP_SALARY_MIN	Check	salary > 0	(null)

- Auto-fit All Columns
- Auto-fit Selected Column
- Columns...
- Sort...
- Delete Persisted Settings...
- Copy Selected Column Header(s)
- Filter Column...

	OWNER	OBJECT_NAME	SUBOBJECT_NAME	OBJECT_ID	DATA_OBJECT_ID
1	SYS	ORA\$BASE		100	(null)
2	SYS	DUAL		116	116
3	PUBLIC	DUAL		280	(null)
4	PUBLIC	MAP_OBJECT		280	(null)
5	SYS	SYSTEM_PRIVILEGE_MAP		365	365
6	PUBLIC	SYSTEM_PRIVILEGE_MAP		367	(null)
7	SYS	TABLE_PRIVILEGE_MAP		368	368
8	PUBLIC	TABLE_PRIVILEGE_MAP		371	(null)
9	SYS	STMT_AUDIT_OPTION_MAP		373	371
10	PUBLIC	STMT_AUDIT_OPTION_MAP		373	(null)
11	SYS	DM\$EXPIMP_ID_SEQ		1255	(null)
12	SYS	STANDARD		1255	(null)
13	SYS	DBMS_STANDARD		1256	(null)
14	PUBLIC	DBMS_STANDARD		1256	(null)
15	SYS	ALL_XML_SCHEMAS		1276	(null)
16	SYS	ALL_XML_SCHEMAS2		1277	(null)

Find / Highlight

SYSTEM

Search Highlight

Options

Ignore Case Whole Word Persist Highlight

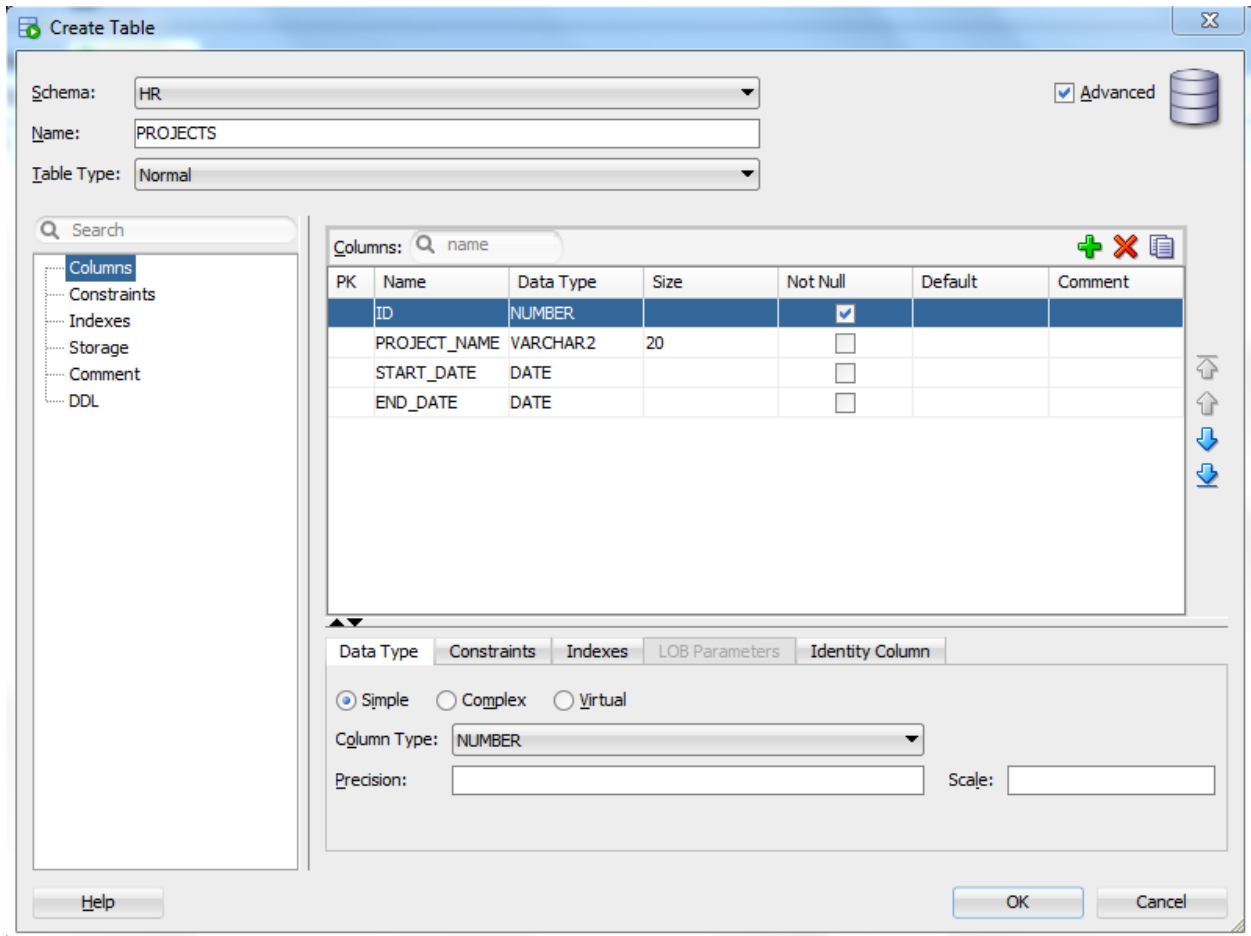
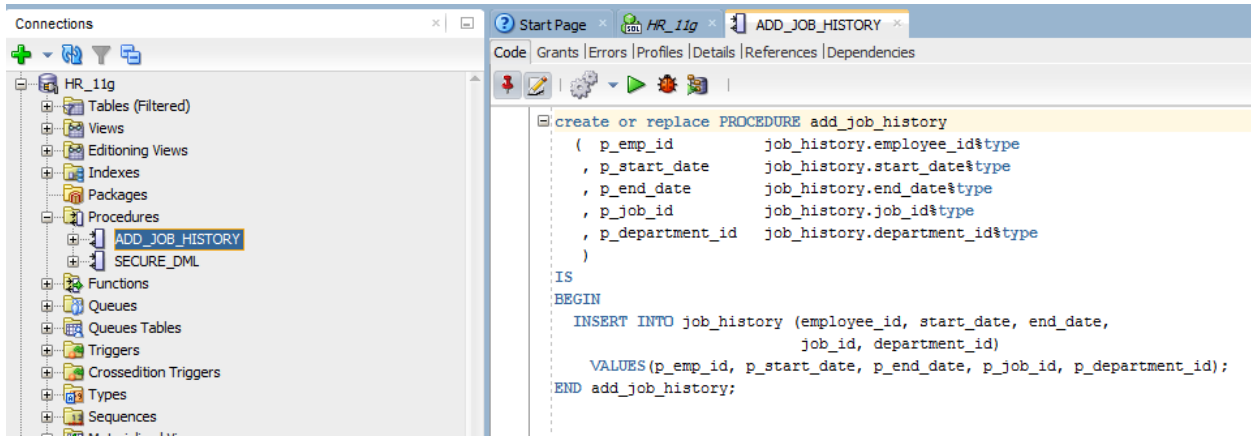
Starts With Highlight Row

Wrap Search


Persisted Highlights

SYSTEM

Found 2 matches



Edit Table




Schema: 


Name:

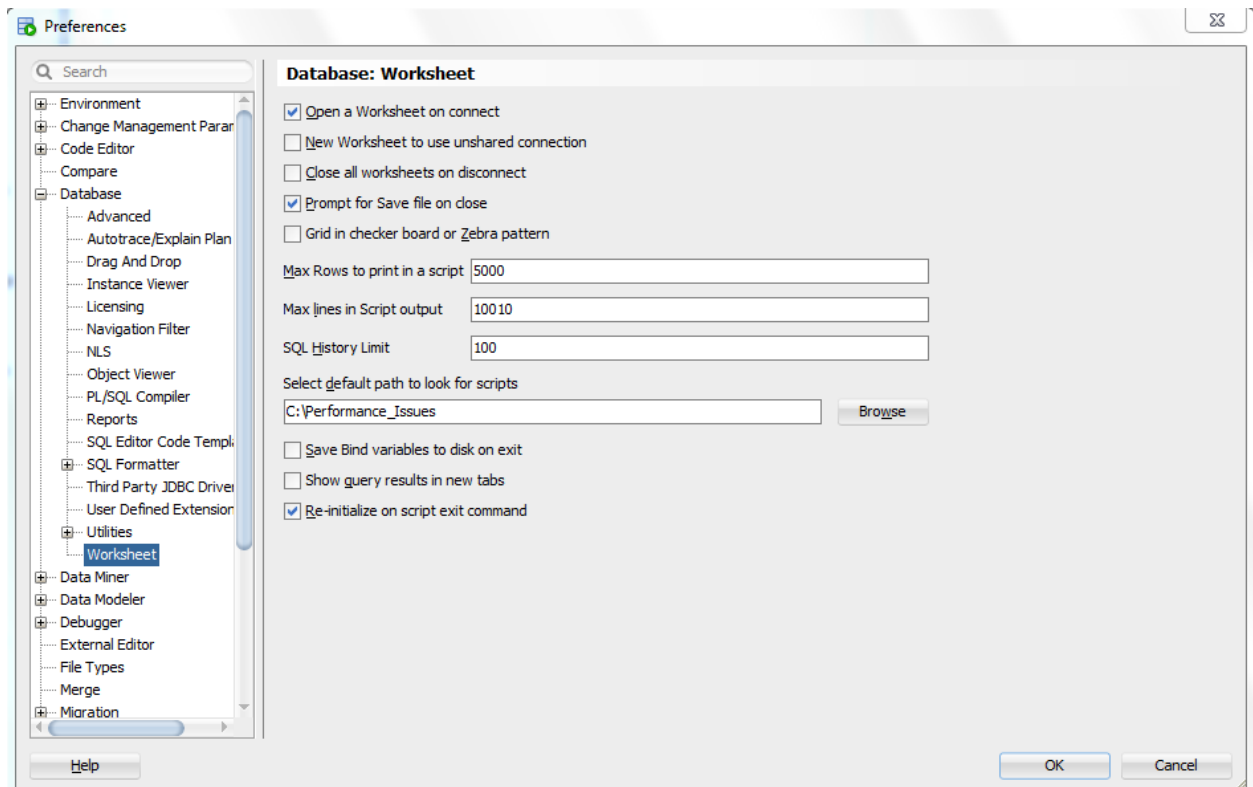
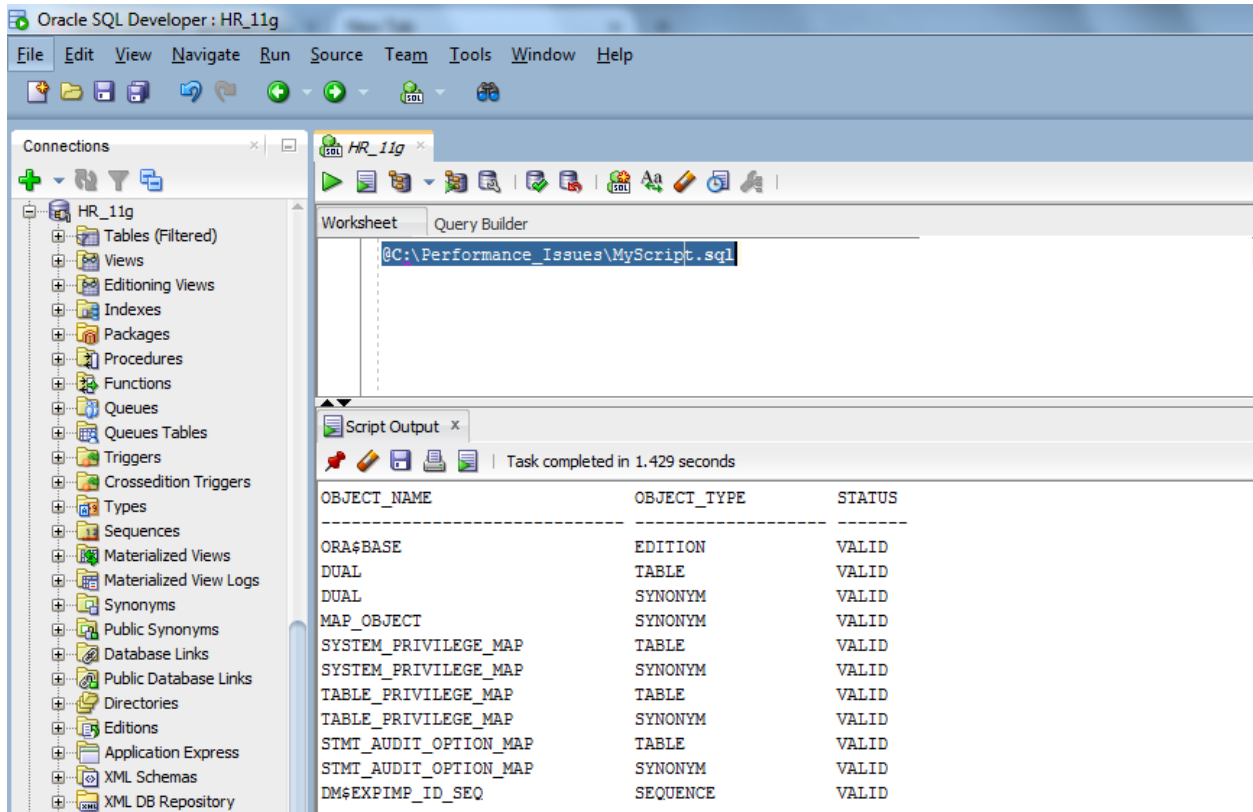
Table Type:

Search:

- Columns
- Constraints
- Indexes
- Storage
- Comment
- DDL

Columns:   

PK	Name	Data Type	Size	Not Null	Default	Comment
	EMPLOYEE_ID	NUMBER	6	<input checked="" type="checkbox"/>		Primary key of...
	FIRST_NAME	VARCHAR2	20	<input type="checkbox"/>		First name of t...
	LAST_NAME	VARCHAR2	25	<input checked="" type="checkbox"/>		Last name of t...
	EMAIL	VARCHAR2	25	<input checked="" type="checkbox"/>		Email id of the ...
	PHONE_NUMBER	VARCHAR2	20	<input type="checkbox"/>		Phone number...
	HIRE_DATE	DATE		<input checked="" type="checkbox"/>		Date when the...
	JOB_ID	VARCHAR2	10	<input checked="" type="checkbox"/>		Current job of ...
	SALARY	NUMBER	8	<input type="checkbox"/>		Monthly salary...
	COMMISSION...	NUMBER	2	<input type="checkbox"/>		Commission pe...
	MANAGER_ID	NUMBER	6	<input type="checkbox"/>		Manager id of ...
	DEPARTMENT_ID	NUMBER	4	<input type="checkbox"/>		Department id ...



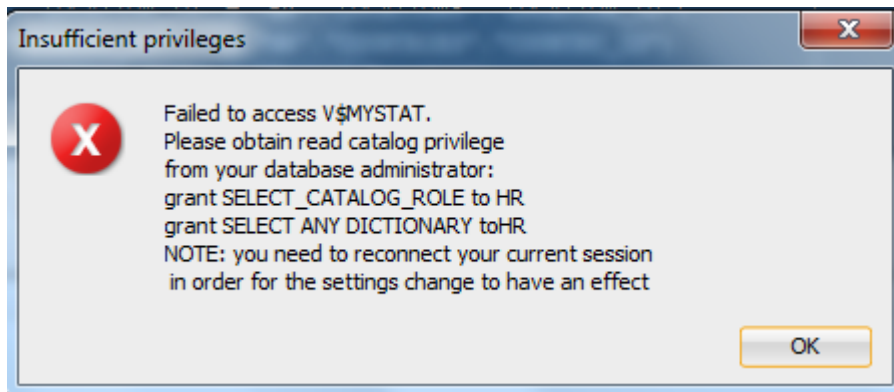
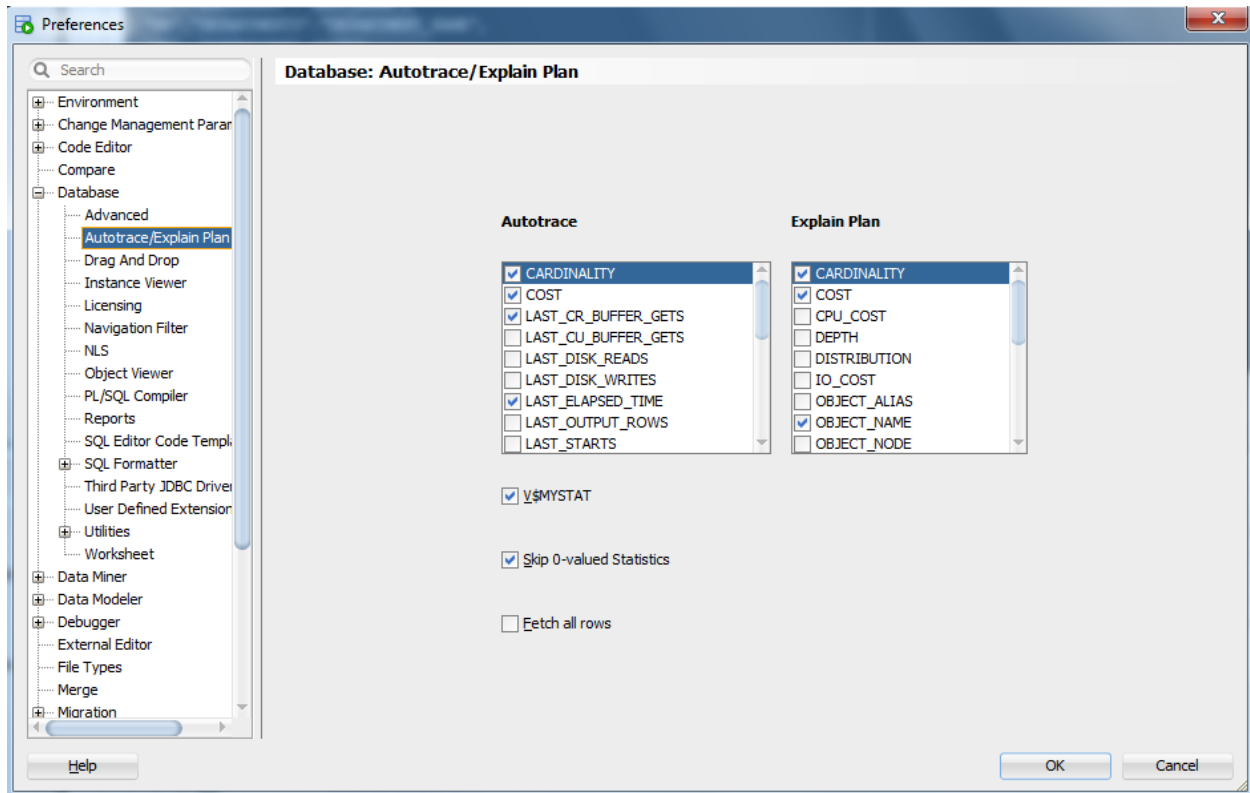
```

SELECT
  "HR"."EMPLOYEES"."LAST_NAME",
  "HR"."DEPARTMENTS"."DEPARTMENT_NAME",
  "HR"."LOCATIONS"."CITY",
  "HR"."COUNTRIES"."COUNTRY_NAME"
FROM
  "HR"."EMPLOYEES",
  "HR"."DEPARTMENTS",
  "HR"."LOCATIONS",
  "HR"."COUNTRIES"
WHERE ("HR"."EMPLOYEES"."DEPARTMENT_ID" =
       "HR"."DEPARTMENTS"."DEPARTMENT_ID")
AND ("HR"."DEPARTMENTS"."MANAGER_ID" = "HR"."EMPLOYEES"."EMPLOYEE_ID")
AND ("HR"."DEPARTMENTS"."LOCATION_ID" = "HR"."LOCATIONS"."LOCATION_ID")
AND ("HR"."LOCATIONS"."COUNTRY_ID" = "HR"."COUNTRIES"."COUNTRY_ID")
AND (("HR"."COUNTRIES"."COUNTRY_NAME" = 'United Kingdom')
     OR ("HR"."LOCATIONS"."CITY" = 'Seattle')
     OR ("HR"."LOCATIONS"."CITY" LIKE '%San Francisco%'))

```

Script Output x Explain Plan x
 SQL | 0.695 seconds

OPERATION	OBJECT_NAME	CARDINALITY	COST
SELECT STATEMENT		1	5
NESTED LOOPS		1	5
NESTED LOOPS		1	4
NESTED LOOPS		1	3
TABLE ACCESS (FULL)	LOCATIONS	23	3
INDEX (UNIQUE SCAN)	COUNTRY_C_ID_PK	1	0
Access Predicates			
LOCATIONS.COUNTRY_I			
Filter Predicates			
OR			
COUNTRIES.COUNTF			
LOCATIONS.CITY='S			
LOCATIONS.CITY LIK			
TABLE ACCESS (BY INDEX ROWID)	DEPARTMENTS	1	1
Filter Predicates			
DEPARTMENTS.MANAGER_ID			
INDEX (RANGE SCAN)	DEPT_LOCATION_IX	4	0
Access Predicates			
DEPARTMENTS.LOCATIO			
INDEX (UNIQUE SCAN)	EMP_EMP_ID_PK	1	0
Access Predicates			
DEPARTMENTS.MANAGER_ID=EN			
TABLE ACCESS (BY INDEX ROWID)	EMPLOYEES	1	1



SYSTEM_11g HR_11g | 0.542 seconds

Worksheet Query Builder

```

SELECT
  "HR"."EMPLOYEES"."LAST_NAME",
  "HR"."DEPARTMENTS"."DEPARTMENT_NAME",
  "HR"."LOCATIONS"."CITY",
  "HR"."COUNTRIES"."COUNTRY_NAME"
FROM
  "HR"."EMPLOYEES",
  "HR"."DEPARTMENTS",
  "HR"."LOCATIONS",
  "HR"."COUNTRIES"
WHERE ("HR"."EMPLOYEES"."DEPARTMENT_ID" =
       "HR"."DEPARTMENTS"."DEPARTMENT_ID")
AND ("HR"."DEPARTMENTS"."MANAGER_ID" = "HR"."EMPLOYEES"."EMPLOYEE_ID")
AND ("HR"."DEPARTMENTS"."LOCATION_ID" = "HR"."LOCATIONS"."LOCATION_ID")

```

Autotrace x

SQL HotSpot | 0.542 seconds

OPERATION	OBJECT_NAME	CARDINALITY	COST	LAST_CR_BUFFER_GETS
SELECT STATEMENT				5
NESTED LOOPS				
NESTED LOOPS			1	5
NESTED LOOPS			1	4
NESTED LOOPS			3	3
TABLE ACCESS (FULL)	LOCATIONS		23	3

V\$STATNAME Name	V\$MYSTAT Value
buffer is not pinned count	24
buffer is pinned count	61
bytes received via SQL*Net from client	1075
bytes sent via SQL*Net to client	24762
calls to get snapshot scn: kcmgss	2
calls to kcmgcs	1
cell physical IO interconnect bytes	98304
consistent gets	25
consistent gets - examination	12
consistent gets from cache	25
consistent gets from cache (fastpath)	9
CPU used when call started	2
cursor authentications	1
DB time	12
enqueue releases	2
enqueue requests	2
execute count	2
file io wait time	22312
free buffer requested	12

Dbms Output | Buffer Size: 20000

Select Connection

Select the connection you wish to use from the list or create a new connection.

Connection: HR_11g

Help OK Cancel

The screenshot displays the Oracle SQL Developer environment. At the top, there are two tabs: 'HR_11g' and 'SYSTEM_11g'. Below the tabs is a toolbar with various icons for execution and editing. The main workspace is titled 'Worksheet' and contains a PL/SQL script. The script is as follows:

```
DECLARE
  lines dbms_output.chararr;
  num_lines number;
BEGIN
  -- enable the buffer with default size 20000
  dbms_output.enable;

  dbms_output.put_line('Hi Friend!');
  dbms_output.put_line('Hope you are enjoying reading this book!');
  num_lines := 2;

  dbms_output.get_lines(lines, num_lines);

  FOR i IN 1..num_lines LOOP
    dbms_output.put_line(lines(i));
  END LOOP;
END;
```

Below the script editor is a 'Script Output' window. It shows a status bar with the text 'Task completed in 0.009 seconds'. Below this, the 'Dbms Output' window is visible, showing the output of the script:

```
Hi Friend!
Hope you are enjoying reading this book!
```

The screenshot displays the Oracle SQL Developer environment. At the top, a window titled "HR_11g" is open. Below the title bar is a toolbar with various icons for execution and editing. The main workspace is divided into two tabs: "Worksheet" and "Query Builder". The "Worksheet" tab is active, showing a PL/SQL script with the following code:

```
DECLARE
EMP_NAME VARCHAR2(10);
CURSOR C1 IS SELECT LAST_NAME FROM EMPLOYEES
WHERE DEPARTMENT_ID = 30;
BEGIN
OPEN C1;
LOOP
FETCH C1 INTO EMP_NAME;
EXIT WHEN C1%NOTFOUND;
HTP.PRINT(EMP_NAME);
END LOOP;
END;
```

The "Script Output" window below the script shows the execution results:

Task completed in 0.021 seconds
PL/SQL procedure successfully completed.

The "OWA Output" window shows the output of the script:

```
Raphaely
Khoo
Baida
Tobias
Himuro
Colmenares
```

Connections

HR_11g

Tables (Filtered)

- COUNTRIES
- DEPARTMENTS
- EMPLOYEES
- JOB_HISTORY
- JOBS
- LOCATIONS
- REGIONS

Views

- Editing Views
- Indexes
- Packages
- Procedures
- Functions
- Queues
- Queue Tables
- Crossed Join Triggers
- Types
- Sequences
- Materialized Views
- Materialized View Logs
- Synonyms
- Public Synonyms
- Database Links
- Public Database Links
- Directories
- Editions
- Application Express
- XML Schemas
- XML DB Repository
- Scheduler
- Recycle Bin
- Other Users

Worksheet Query Builder

Main

#	Output	Expression	Aggregate	Alias	Sort Type	Sort Order	Grouping	Criteria	Or
<input checked="" type="checkbox"/>		EMPLOYEES.EMPLOYEE_ID					<input type="checkbox"/>		
<input checked="" type="checkbox"/>		EMPLOYEES.FIRST_NAME					<input type="checkbox"/>	= EMPLOYEES.LAST_NAME = 'Smith'	
<input checked="" type="checkbox"/>		EMPLOYEES.LAST_NAME					<input type="checkbox"/>		
<input checked="" type="checkbox"/>		COUNTRIES.COUNTRY_ID		COUNTRY_ID1			<input type="checkbox"/>		
<input checked="" type="checkbox"/>		COUNTRIES.COUNTRY_NAME					<input type="checkbox"/>		
<input checked="" type="checkbox"/>		JOBS.MIN_SALARY					<input type="checkbox"/>	> 1000	

HR_11g

0.067 seconds

Worksheet Query Builder

```
SELECT /*cav*/ * FROM EMPLOYEES;
```

Script Output x Query Result x

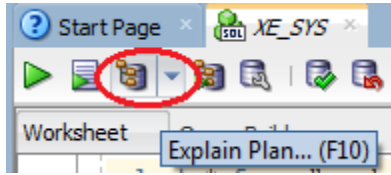
Task completed in 0.067 seconds

```
169, "Harrison", "Bloom", "HBLOOM", "011.44.1343.829268", 23-MAR-06, "SA_REP", 10000, 0.2, 148, 80
170, "Tayler", "Fox", "TFOX", "011.44.1343.729268", 24-JAN-06, "SA_REP", 9600, 0.2, 148, 80
171, "William", "Smith", "WSMITH", "011.44.1343.629268", 23-FEB-07, "SA_REP", 7400, 0.15, 148, 80
172, "Elizabeth", "Bates", "EBATES", "011.44.1343.529268", 24-MAR-07, "SA_REP", 7300, 0.15, 148, 80
173, "Sundita", "Kumar", "SKUMAR", "011.44.1343.329268", 21-APR-08, "SA_REP", 6100, 0.1, 148, 80
```

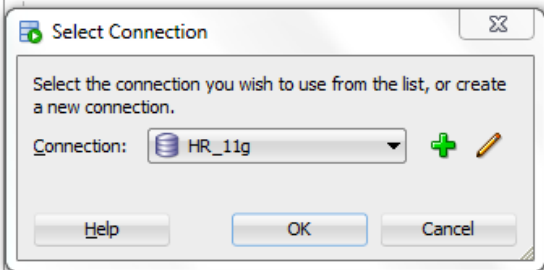
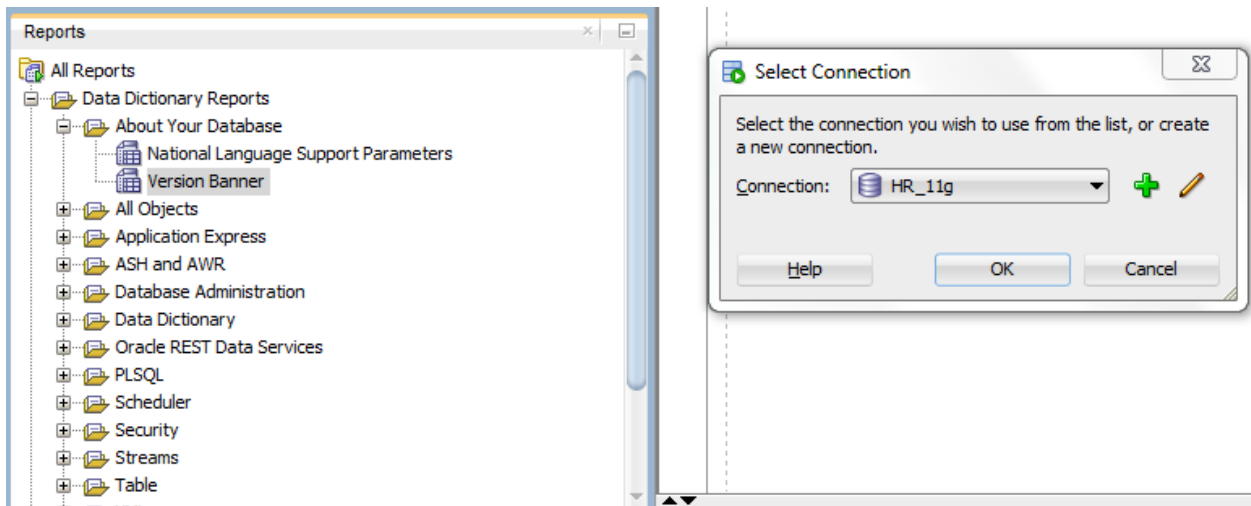
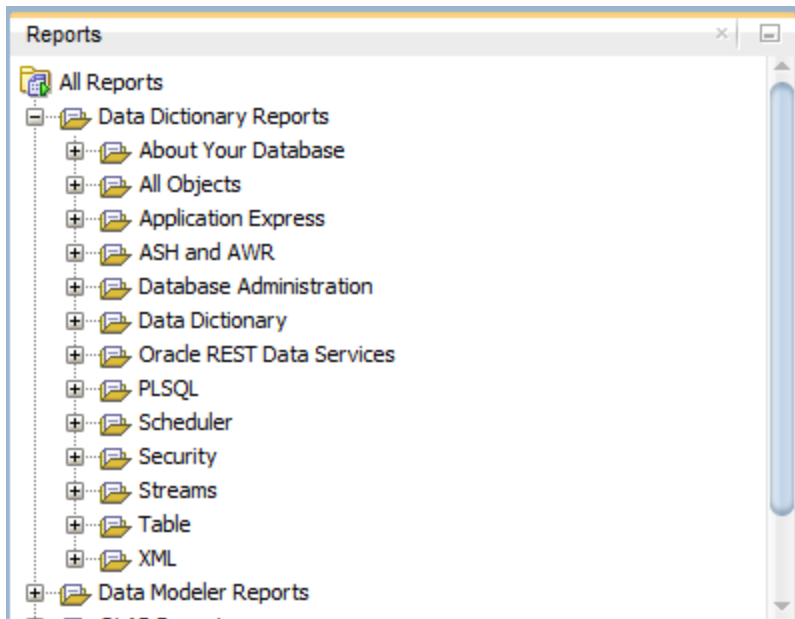
Columns | Data | Model | Constraints | Grants | Statistics | Triggers | **Flashback** | Dependencies | Details | Partitions | Indexes | SQL

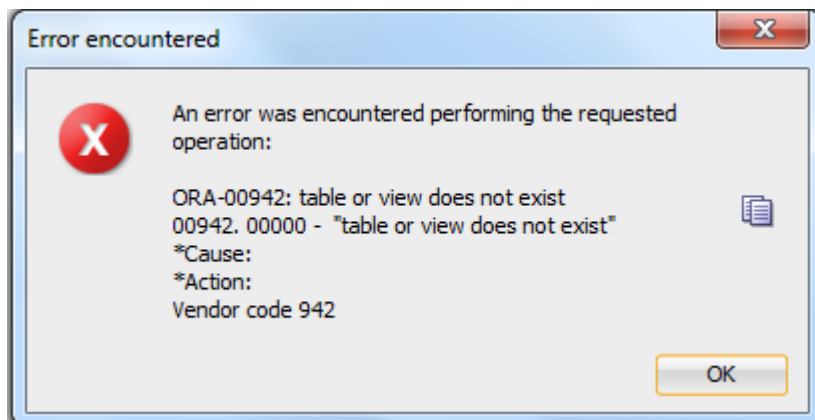
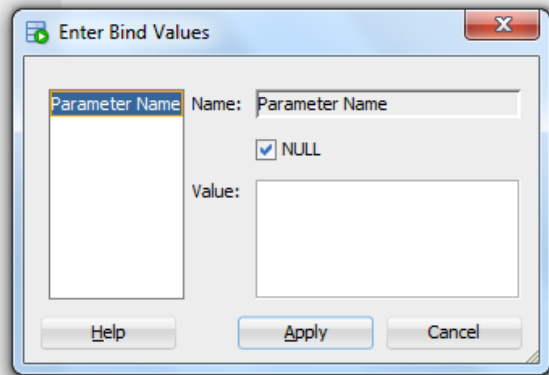
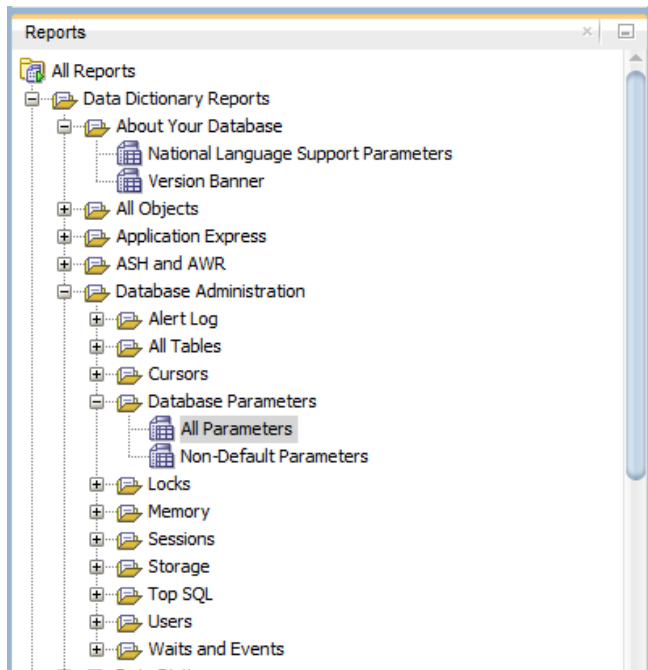
Actions...

Operation	VERSIONS_XID	VERSION...	VERSION...	ROW_ID	NOW_SCN
-----------	--------------	------------	------------	--------	---------



Chapter 3





Start Page | All Parameters

Refresh: 0

Parameter_Name	TYPE	Value
1 07_DICTIONARY_ACCESSIBILITY	Boolean	FALSE
2 _b_tree_bitmap_plans	Boolean	FALSE
3 _fast_full_scan_enabled	Boolean	FALSE
4 _like_with_bind_as_equality	Boolean	TRUE
5 _optimizer_autostats_job	Boolean	FALSE
6 _sort_elimination_cost_ratio	Integer	5
7 _system_trig_enabled	Boolean	TRUE
8 _trace_files_public	Boolean	FALSE
9 active_instance_count	Integer	(null)
10 aq_tm_processes	Integer	1
11 archive_lag_target	Integer	0
12 asm_diskgroups	String	(null)
13 asm_diskstring	String	(null)

STGITG_system

- HR_11g
- cognoscube
- sampledb_1122
- Apex_DB
- GL_Apps
- GL_Appsview
- GL_system
- DEVGLF

Reports

- All Reports
 - Data Dictionary Reports
 - About Your Database
 - All Objects
 - Application Express
 - ASH and AWR
 - Database Administration
 - Data Dictionary
 - Dictionary View Columns
 - Dictionary Views

Connections | Start Page | Dictionary Views | Dictionary View Columns

Refresh: 0

Data_Dictionary_View_Name	Comments
1 ALL_CUBE_DIMENSIONALITY	OLAP Cube Dimensionality in the database accessible to the user
2 ALL_CUBE_DIMENSIONS	OLAP Cube Dimensions in the database accessible by the user
3 ALL_DIMENSIONS	Description of the dimension objects accessible to the DBA
4 USER_CUBE_DIMENSIONALITY	OLAP Cube Dimensionality owned by the user in the database
5 USER_CUBE_DIMENSIONS	OLAP Cube Dimensions owned by the user in the database
6 USER_DIMENSIONS	Description of the dimension objects accessible to the DBA

Connections | Start Page | Dictionary Views | Dictionary View Columns

Refresh: 0

Data_Dictionary_View_Name	Column_Name	Comments
1 ALL_CUBE_DIMENSIONS	OWNER	Owner of the OLAP Cube Dimension
2 ALL_CUBE_DIMENSIONS	DIMENSION_NAME	Name of the OLAP Cube Dimension
3 ALL_CUBE_DIMENSIONS	DIMENSION_TYPE	Type of the OLAP Cube Dimension
4 ALL_CUBE_DIMENSIONS	AW_NAME	Name of the Analytic Workspace which owns the OLAP Cube Dimension
5 ALL_CUBE_DIMENSIONS	DEFAULT_HIERARCHY_NAME	Default Hierarchy name of the OLAP Cube Dimension
6 ALL_CUBE_DIMENSIONS	DESCRIPTION	Long Description of the OLAP Cube Dimension

Connections

Reports

- All Reports
 - Data Dictionary Reports
 - About Your Database
 - All Objects
 - Application Express
 - ASH and AWR
 - Database Administration
 - Alert Log
 - All Tables
 - Cursors
 - Database Parameters
 - All Parameters
 - Non-Default Parameters

All Parameters

Refresh: 0

Parameter Name	TYPE	Value	Default	Session Modifiable	System Modifiable	Description
1 open_cursors	Integer	300	FALSE	FALSE	IMMEDIATE	max # cursors per session
2 session_cached_cursors	Integer	50	TRUE	TRUE	FALSE	Number of cursors to cache in a session.

Connections

Reports

- All Reports
 - Data Dictionary Reports
 - About Your Database
 - All Objects
 - Application Express
 - ASH and AWR
 - Database Administration
 - Data Dictionary
 - Oracle REST Data Services
 - PLSQL
 - Scheduler
 - Security
 - Auditing
 - Encryption
 - Grants and Privileges
 - Column Privileges
 - Object Grants
 - Role Privileges
 - System Privileges

Object Grants

Refresh: 0

Grantor	Grantee	Table Name	Privilege	Grantable
1 SYS	HR	DBMS_STATS	EXECUTE	No

Connections

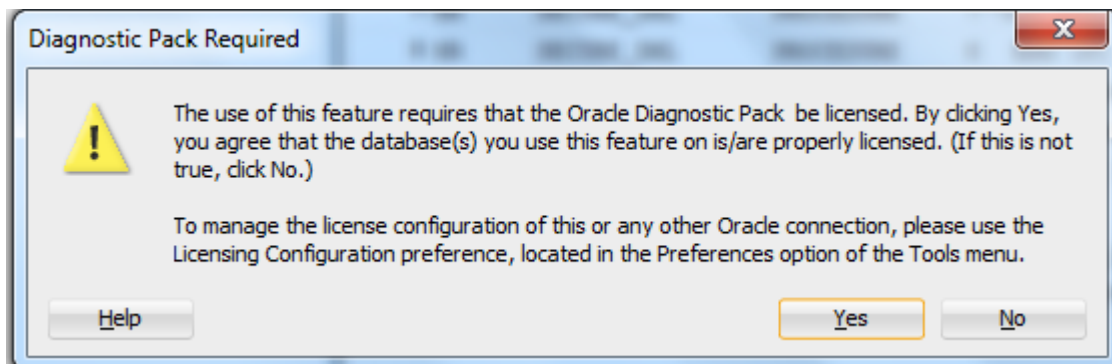
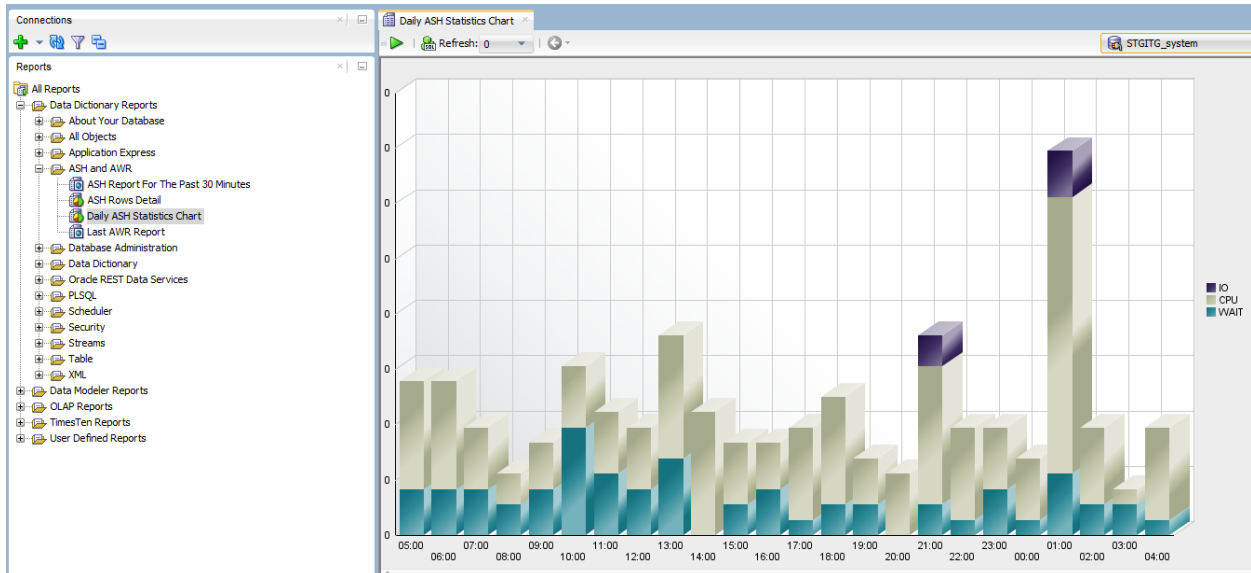
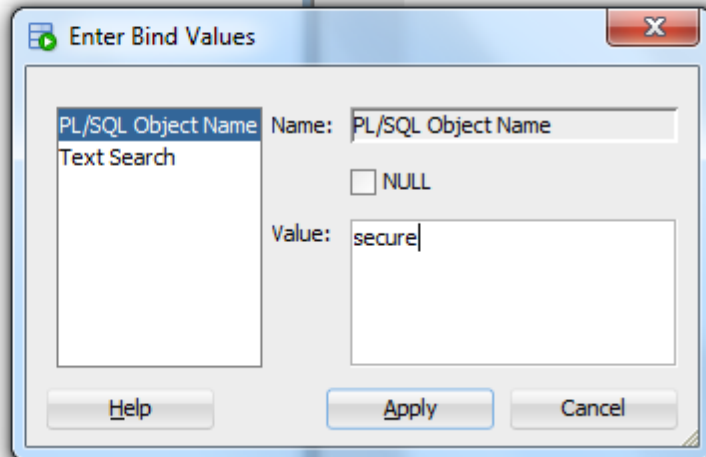
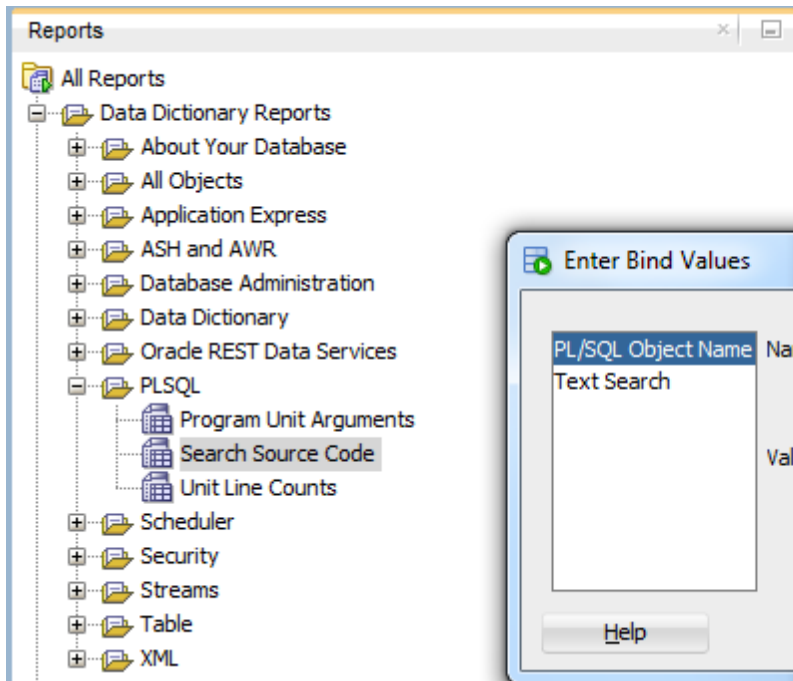
Reports

- Data Dictionary Reports
 - About Your Database
 - All Objects
 - Application Express
 - ASH and AWR
 - Database Administration
 - Data Dictionary
 - Oracle REST Data Services
 - PLSQL
 - Scheduler
 - Security
 - Streams
 - Table
 - Columns
 - Comments
 - Constraints
 - Indexes
 - Organization
 - Quality Assurance
 - Tables without Indexes
 - Tables without Primary Keys
 - Tables with Unindexed Foreign Keys

Tables with Unindexed Foreign Keys

Refresh: 0

Owner	Table Name	Constraint Name	Foreign Key Column_1	Foreign Key Column_2
1 HR	COUNTRIES	COUNTR_REG_FK	REGION_ID	(null)
2 HR	DEPARTMENTS	DEPT_MGR_FK	MANAGER_ID	(null)



SID	SERIAL	SQL_ID	Username	Seconds in Wait	Command	Machine
1	11	39095 (null)	HR	(null)	(null)	HCA-PK1MTZE
2	14	19423 (null)	AN	(null)	(null)	(null)
3	47	11105 (null)	AN	(null)	(null)	(null)
4	53	15689 49caa761x35qd	SY	(null)	(null)	HCA-PK1MTZE
5	140	4515 (null)	AN	(null)	(null)	(null)
6	143	3677 (null)	AN	(null)	(null)	(null)
7	144	3629 (null)	AN	(null)	(null)	(null)

Oracle SQL Developer : Sessions

File Edit View Navigate Run Team Tools Window Help

- Data Modeler
- Database Copy...
- Database Diff...
- Database Export...
- Migration
- Monitor SQL...
- Monitor Sessions...**
- SQL Worksheet Alt-F10
- Unit Test
- Data Miner
- OLAP
- REST Data Services
- External Tools...
- Features...
- Preferences...

SID	SERIAL	SQL_ID	Username	Seconds in Wait	Command	Machine
11	39095	49caa761x35qd	HR	0	SELECT	HCA-PK1MTZE
14	19423	(null)	ANONYMOUS	(null)	(null)	(null)
47	11105	(null)	ANONYMOUS	(null)	(null)	(null)
53	15689	(null)	SYSTEM	(null)	(null)	HCA-PK1MTZE
140	4515	(null)	ANONYMOUS	(null)	(null)	(null)
143	3677	(null)	ANONYMOUS	(null)	(null)	(null)
144	3629	(null)	ANONYMOUS	(null)	(null)	(null)

Active SQL Explain Plan Waits Server Client Application Contention Long Ops

Refresh: 0

No Text Available

STGITG_system		Target	Current				
Maximum System Global Area (SGA) Size		2048	2,039				
Program Global Area (PGA) Aggregate Target		1024	491				
Current Configuration: (SGA + PGA)		3072		Refresh			
TABLESPACE_NAME	PERCENT_USED	PCT_USED	ALLOCATED	USED	FREE	DATAFILES	
1 APPS_UNDOTS1		97.41	1705	1660.88	44.13	1	
2 APPS_TS_TX_DATA		94.52	6108.25	5773.38	334.88	4	
3 SYSTEM		93.5	12085	11299.27	785.73	11	
4 APPS_TS_TX_IDX		89.4	8940.875	7992.88	948	5	
5 CTXD		88.59	23	20.38	2.63	1	
6 APPS_TS_SEED		87.67	3036	2661.75	374.25	2	
7 APPS_TS_SUMMARY		87.36	1051	918.13	132.88	1	
8 APPS_TS_MEDIA		86.19	1373	1183.38	189.63	1	
9 APPS_TS_INTERFACE		71.65	1100	788.13	311.88	1	
10 APPS_TS_ARCHIVE		66.53	750	499	251	1	
11 APPS_TS_NOLOGGING		64.58	60	38.75	21.25	1	
12 SYSAUX		63.68	1000	636.75	363.25	1	
13 USERS		61.25	10	6.13	3.88	1	
14 OLAP		30.75	100	30.75	69.25	1	
15 CLM_TBS_INDX		25.63	30	7.69	22.31	1	
16 ODM		14.5	100	14.5	85.5	1	
17 HPPPM_TS_TX_802_IDX		12.52	5000.0625	626.06	4374	1	
18 HPPPM_TS_TX_802_DATA		8.62	5000.0625	431.06	4569	1	
19 APPS_TS_QUEUES		8.19	1000	81.88	918.13	2	
20 CLM_TBS_INTF		7.81	60	4.69	55.31	1	
21 CLM_TBS_ARCH		1.67	60	1	59	1	
22 PORTAL		1.38	100	1.38	98.63	1	
23 OWAPUB		1.25	10	0.13	9.88	1	
24 HPPPM_TS_TX_802_LOB		1.08	5000.0625	54.06	4946	1	
25 COGNOSCOPE_DATA		0.22	2040	0	2040	1	

STATUS	DURATION	SQL_ID	SESSION_ID	SESSION_SERIAL	INSTANCE_DOP	CPU_TIME	IO_TIME	START_TIME
EXECUTING	100.55	6hb8z	582	23963	1 0	52.02	135.31	07-JUN-2015
DONE		j857x	376	7099	1 0	104.55	396.88	07-JUN-2015
DONE		zbptc	508	5107	1 0	38.2	167.38	07-JUN-2015
DONE (ALL		dp0c1	508	5107	1 0	26.14	154.96	07-JUN-2015
DONE		zbptc	252	46311	1 0	12.07	5.06	07-JUN-2015
DONE (ALL		f0uts	252	46311	1 0	11.5	5.04	07-JUN-2015
DONE		zbptc	754	1427	1 0	11.49	6.27	07-JUN-2015
DONE (ALL ROWS)	17.8w1xdvadf0uts		754	1427	1 0	10.96	6.26	07-JUN-2015

Real Time SQL Monitoring

Refresh | Refresh 0

Overview

SQL Id: **f5xbxac76hb8z**
 Execution Started: **06/07/2015 11:09:34**
 Last Refresh time: **06/07/2015 11:16:59**
 Execution Id: **16777216**
 Session: **582**
 Fetch Calls: **1**
 Run Status: **DONE (FIRST N ROWS)**

User Information:

User Name: **APPS**
 OS User: **212391205**
 Process: **11632**
 Machine: **HCA-PK1MTZE**
 Program: **SQL Developer**
 Module: **SQL Developer**
 Client Info:

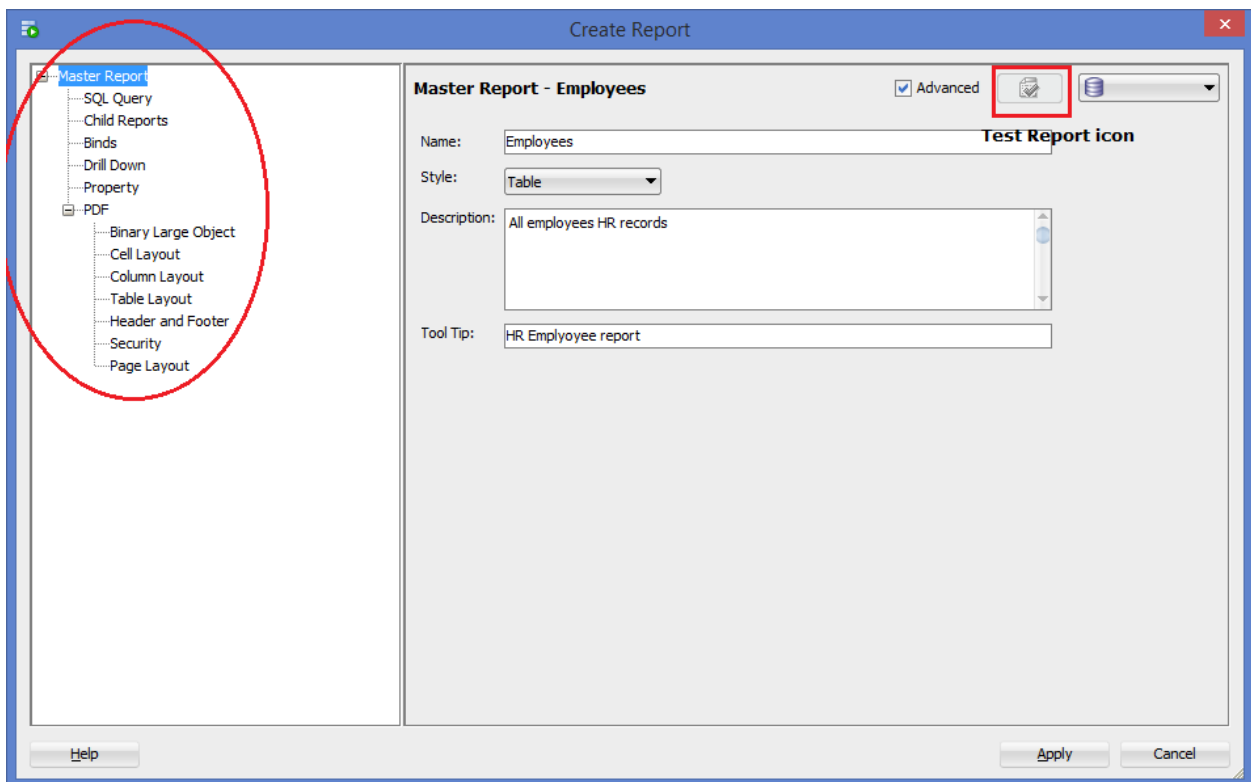
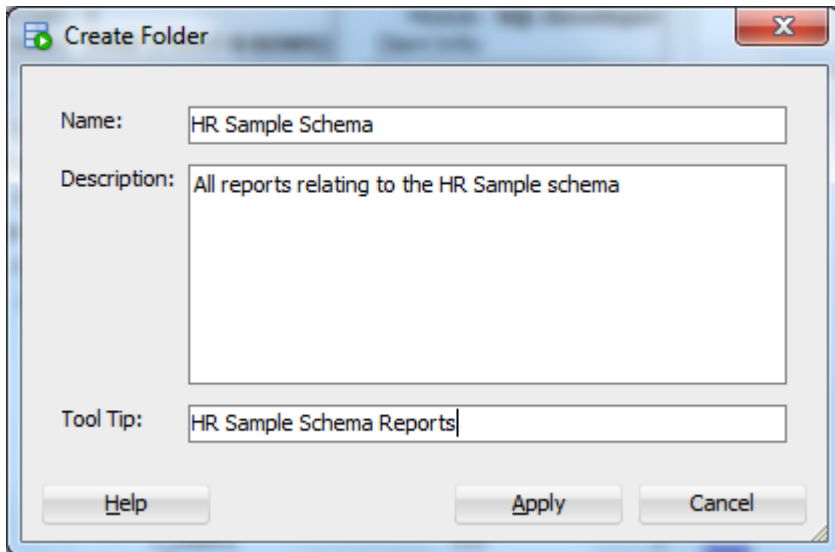
```

/* + NO_PARALLEL */select owner
                                "Owner",
                                initcap(object_type) "Object Type",
                                count(*)           "Object Count"
from sys.all_objects
where substr(object_name,1,4) != 'BIN$'
and substr(object_name,1,3) != 'DR$'
      
```

OPERATION	NAME	ESTIMATED_R...	COST	TIMELINE	EXECUTIONS	ACTUAL_ROWS	MEMORY/MEM...	TEMP/TEMP(MAX)	CPU
SELECT STATEMENT					723	0/0	0/0		
TABLE ACCESS (SUM\$	1	2		723	0/0	0/0		
INDEX (UNIC	I_SUM\$_1	1	1		723	723/0	0/0		
HASH (GROUP B		21	673		1	50/1373184	0/0		2.17
VIEW	ALL_OBJECTS	21	672		1	347613/0	0/0		
FILTER					1	347613/0	0/0		6.52
HAS		133	672		1	354913/36771840	0/0		4.35
					1	354913/0	0/0		
	USER\$	133	671		1	354913/0	0/0		
					1	320/0	0/0		
	I_OBJ5	4	18		1961	354913/0	0/0		6.52
	OBJ\$	4	21		366373	354913/0	0/0		15.22
	I_USER2	335	1		1	320/0	0/0		
	IND\$	1	2		50834	48399/0	0/0		6.52
	I_IND1	1	1		50834	50834/0	0/0		
	NES				1345	6/0	0/0		
		1	9		1345	6/0	0/0		
		1	6		1345	6/0	0/0		
		1	4		1345	18758/0	0/0		
		1	3		1345	18758/0	0/0		
	I_OBJ5	1	3		1345	1345/0	0/0		
		2			1345	18758/2048	0/0		
	X\$KZSRO	2			1345	18830/0	0/0		
	I_USER2	1	1		18758	18758/0	0/0		
	I_OBJ1AUTH1	1	2		18758	6/0	0/0		

Reports

- All Reports
 - Data Dictionary Reports
 - Data Modeler Reports
 - OLAP Reports
 - TimesTen Reports
 - User Defined Reports
 - New... Ctrl-N
 - New Report...
 - New Folder...**
 - Copy
 - Paste
 - Open Report...



Reports

Employees - HR_11g

Refresh: 0

DEPARTMENT_ID	DEPARTMENT_NAME	FIRST_NAME	LAST_NAME	PHONE_NUMBER	HIRE_DATE	SALARY	JOB_TITLE
1	110 Accounting	Shelley	Higgins	515.123.8080	07-JUN-02	12008	Accounting Manager
2	10 Administration	Jennifer	Whalen	515.123.4444	17-SEP-03	4400	Administration Assistant
3	90 Executive	Steven	King	515.123.4567	17-JUN-03	24000	President
4	100 Finance	Nancy	Greenberg	515.124.4569	17-AUG-02	12008	Finance Manager
5	40 Human Resources	Susan	Mavris	515.123.7777	07-JUN-02	6500	Human Resources Representative
6	60 IT	Alexander	Hunold	590.423.4567	03-JAN-06	9000	Programmer
7	20 Marketing	Michael	Hartstein	515.123.5555	17-FEB-04	13000	Marketing Manager
8	70 Public Relations	Hermann	Baer	515.123.8888	07-JUN-02	10000	Public Relations Representative
9	30 Purchasing	Den	Raphaely	515.127.4561	07-DEC-02	11000	Purchasing Manager
10	80 Sales	John	Russell	011.44.1344.429268	01-OCT-04	14000	Sales Manager
11	50 Shipping	Adam	Fripp	650.123.2234	10-APR-05	8200	Stock Manager

Enter Bind Values

JOB_NAME Name:

NULL

Value:

JOB_NAME

Help Apply Cancel

```

FROM HR.DEPARTMENTS D,
HR.EMPLOYEES A,
HR.JOBS C
WHERE A.EMPLOYEE_ID = B.MANAGER_ID
AND B.DEPARTMENT_ID = A.DEPARTMENT_ID
AND C.JOB_ID = A.JOB_ID
AND UPPER (C.JOB_TITLE) LIKE UPPER (:JOB_NAME)

```

Apply Cancel

Edit Report

- Master Report
 - SQL Query
 - Child Reports
 - Binds**
 - Drill Down
 - Property
 - PDF

Binds - Employees

Name	Prompt	Default	ToolTip
JOB_NAME	Enter Job Name	sales%	This is job title, Use wildcard in your search

Owner	Table_Name	Constraint_Name	Constraint_Type	Status
1 HR	COUNTRIES	COUNTRY_C_ID_PK	Primary_Key	Enabled
2 HR	COUNTRIES	COUNTRY_ID_NN	Check	Enabled
3 HR	COUNTRIES	COUNTR_REG_FK	Foreign_Key	Enabled
4 HR	DEPARTMENTS	DEPT_ID_PK	Primary_Key	Enabled
5 HR	DEPARTMENTS	DEPT_NAME_UK	Foreign_Key	Enabled
6 HR	DEPARTMENTS	DEPT_LOC_FK	Foreign_Key	Enabled
7 HR	DEPARTMENTS	DEPT_JOB_FK	Check	Enabled
8 HR	EMPLOYEES	EMP_HIRE_DATE_NN	Foreign_Key	Enabled
9 HR	EMPLOYEES	EMP_JOB_FK	Check	Enabled
10 HR	EMPLOYEES	EMP_JOB_NN	Check	Enabled
11 HR	EMPLOYEES	EMP_LAST_NAME_NN	Unique	Enabled
12 HR	EMPLOYEES	EMP_HIRE_DATE_NN	Primary_Key	Enabled
13 HR	EMPLOYEES	EMP_HIRE_DATE_NN	Check	Enabled
14 HR	EMPLOYEES	EMP_JOB_FK	Foreign_Key	Enabled
15 HR	EMPLOYEES	EMP_JOB_NN	Check	Enabled
16 HR	EMPLOYEES	EMP_LAST_NAME_NN	Check	Enabled

- Go To DEPARTMENTS...
- Save Grid as Report...
- Single Record View...
- Count Rows...
- Find/Highlight...
- Publish to APEX...
- Export...

Edit Report

Master Report
 SQL Query
 Child Reports
 Binds
 Drill Down
 Property
 PDF

Drill Down - All Departments

Name: Find all employees of a particular dept

Report:

- User Defined Reports
 - HR Sample Schema
 - Employees
 - All Departments
 - Employees Of Dept
 - Data Modeler Reports
 - Design Content
 - Logical Model

Oracle SQL Developer : All Departments

File Edit View Navigate Run Team Tools Window Help

Reports

- All Reports
 - Data Dictionary Reports
 - Data Modeler Reports
 - OLAP Reports
 - TimesTen Reports
 - User Defined Reports
 - HR Sample Schema
 - All Departments
 - Employees
 - Employees Of Dept

DEPARTMENT_ID	DEPARTMENT_NAME	LOCATION_ID
1	10 Administration	1700
2	20 Marketing	
3	30 Purchasing	
4	40 Human Resources	
5	50 Shipping	
6	60 IT	
7	70 Public Aff	
8	80 Sales	
9	90 Executive	1700

- Find all employees of a particular dept
- Save Grid as Report...
- Single Record View...
- Count Rows...
- Find/Highlight...
- Publish to APEX...
- Export...

Employees Of Dept | HR_11g

Refresh: 0

EMPLOYEE_ID	FIRST	All_Deptments	DEPARTMENT_ID	
1	200 Jennifer	Whalen	JWHALEN	10

Reports | Active Sessions | HR_11g

Refresh: 0

INST_ID	PROGRAM	MODULE	EVENT	SQL_ID	MACHINE	UP_TIME
1	SQL Developer	SQL Developer	SQL*Net message to client	5jadburcq2bhc	HCA-PK1MTZE	1:41:34

SQL Text | Explain Plan | Bind Variables | Long Opsq

Refresh: 0

Query Plan	Rows	Rowsource Time(s)
1 SELECT STATEMENT Cost = 1		0
2 NESTED LOOPS	1	0
3 NESTED LOOPS	1	0
4 FIXED TABLE FULL X\$KSUSE	1	0
5 FIXED TABLE FIXED INDEX X\$KSLWT (ind:1)	1	0
6 FIXED TABLE FIXED INDEX X\$KSLED (ind:2)	1	0

Create Report

Master Report - Employees Per Department

Name: Employees Per Department

Style: Table

Description: Master-Detail report for all employees per department

Tool Tip: Employees Per Department

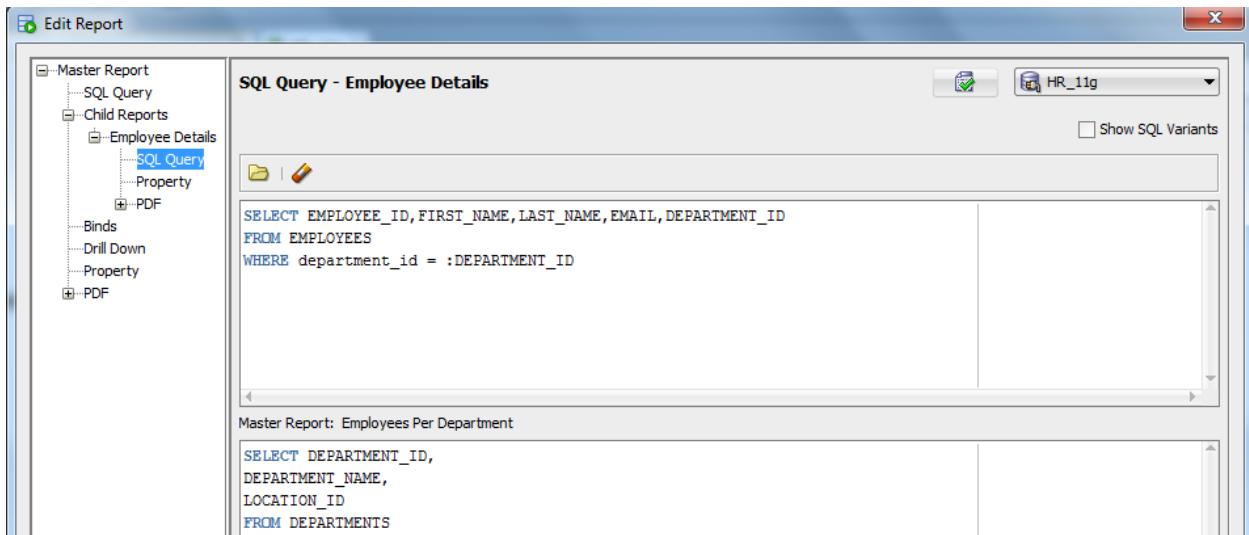
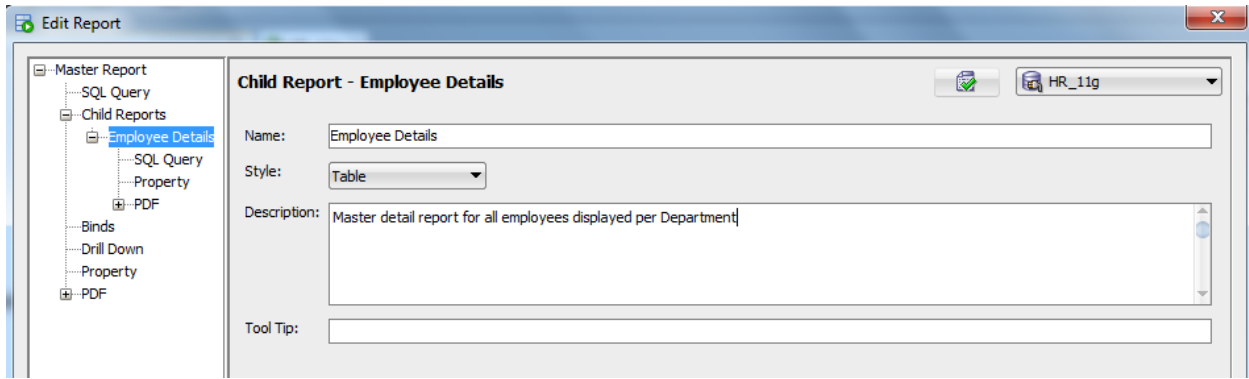
SQL:

```
SELECT DEPARTMENT_ID,
DEPARTMENT_NAME,
LOCATION_ID
FROM DEPARTMENTS
```

Test Report

Refresh: 0

DEPARTMENT_ID	DEPARTMENT_NAME	LOCATION
1	10 Administration	
2	20 Marketing	
3	30 Purchasing	
4	40 Human Resources	
5	50 Shipping	
6	60 IT	
7	70 Public Relations	
8	80 Sales	
9	90 Executive	
10	100 Finance	
11	110 Accounting	
12	120 Treasury	
13	130 Corporate Tax	
14	140 Control And Credit	
15	150 Shareholder Services	
16	160 Benefits	
17	170 Manufacturing	



	DEPARTMENT_ID	DEPARTMENT_NAME	LOCATION_ID
1	10	Administration	1700
2	20	Marketing	1800
3	30	Purchasing	1700
4	40	Human Resources	2400
5	50	Shipping	1500
6	60	IT	1400
7	70	Public Relations	2700
8	80	Sales	2500
9	90	Executive	1700

Employee Details					
	EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	DEPARTMENT_ID
1	103	Alexander	Hunold	AHUNOLD	60
2	104	Bruce	Ernst	BERNST	60
3	105	David	Austin	DAUSTIN	60
4	106	Valli	Pataballa	VPATABAL	60
5	107	Diana	Lorentz	DLORENTZ	60

Create Report

Master Report - Salary Per Department Advanced

Name:

Style:

Description:

Tool Tip:

SQL:

```
SELECT DEPARTMENT_ID, LAST_NAME, SALARY FROM EMPLOYEES
```

Help

Create Report

Master Report
 Property
 Data
 Titles
 Plot Area
 X-Axis
 Y-Axis

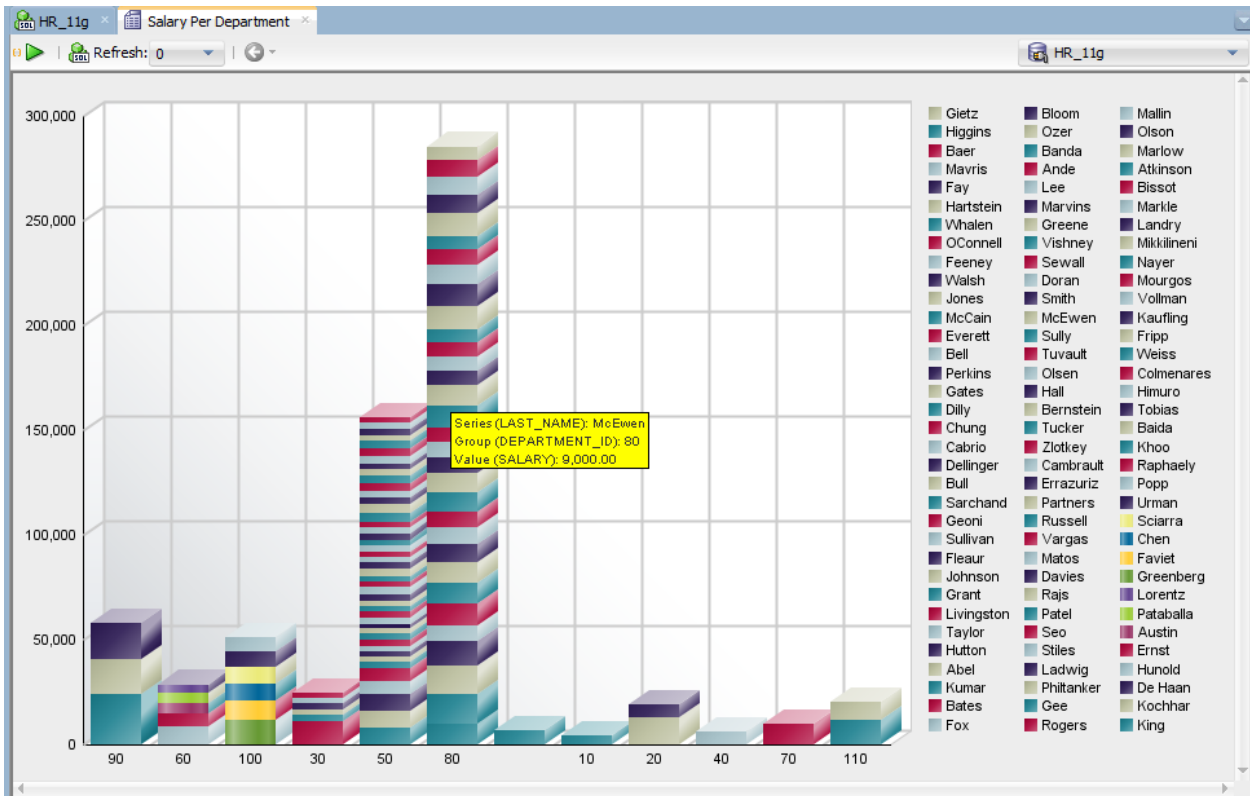
Property - Salary Per Department

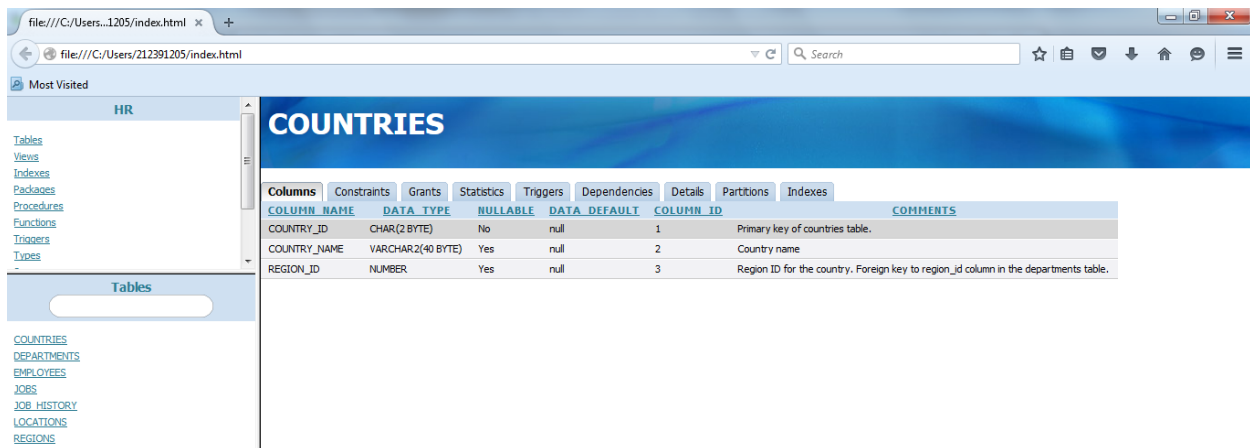
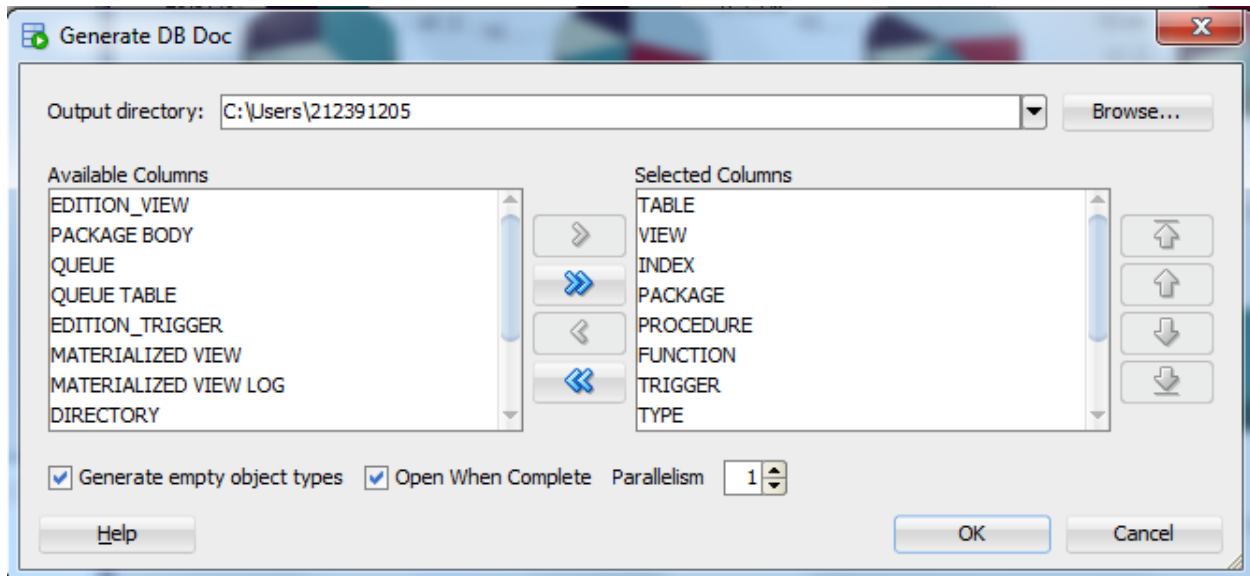
Advanced

Chart Type: Bar - Vertical Stack

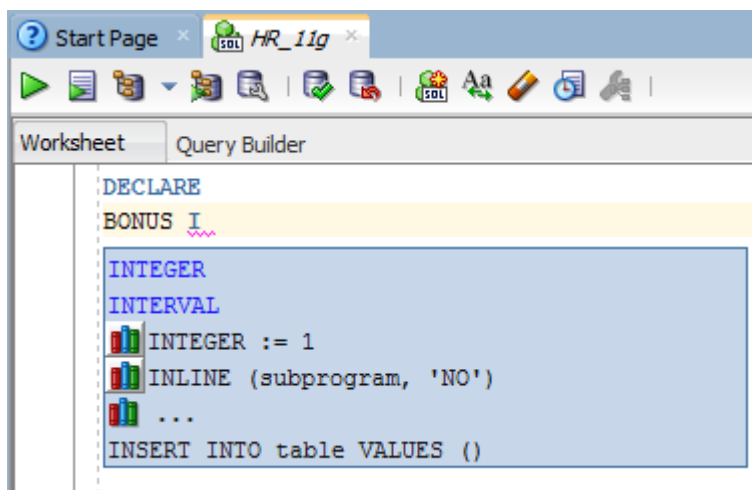
Style: Regatta

Default Grid: Default Line Width: Thinner





Chapter 4



The image shows a screenshot of a database query editor window. The window has a title bar with two tabs: "Start Page" and "HR_11g". Below the title bar is a toolbar with various icons for execution, saving, and editing. The main area of the window is divided into two tabs: "Worksheet" and "Query Builder". The "Worksheet" tab is active, displaying a PL/SQL script. The script starts with a "DECLARE" block containing four variables: "BONUS NUMBER;", "SAL NUMBER;", "COMM NUMBER;", and "EMP_NAME VARCHAR2 (20);". This is followed by a "BEGIN" block. The first line of the "BEGIN" block is "EMP_ACTIONS.", which is highlighted in yellow. Below this line, there are two lines of code: "EMP_ACTIONS.FIRE_EMPLOYEE" and "EMP_ACTIONS.HIRE_EMPLOYEE", each preceded by a small icon of a hand holding a document.

```
DECLARE
  BONUS NUMBER;
  SAL NUMBER;
  COMM NUMBER;
  EMP_NAME VARCHAR2 (20);
BEGIN
  EMP_ACTIONS.
  EMP_ACTIONS.FIRE_EMPLOYEE
  EMP_ACTIONS.HIRE_EMPLOYEE
```


The image shows a screenshot of the Oracle SQL Developer interface. The top window is titled "HR_11g" and contains a "Worksheet" tab with a "Query Builder" sub-tab. The main area displays a PL/SQL script for a cursor loop. The script is as follows:

```
DECLARE
  ***
  TYPE my_cursor IS REF CURSOR;
  the_cursor my_cursor;
BEGIN
  OPEN the_cursor FOR '...' ;
  LOOP
    FETCH the_cursor INTO ...;
    EXIT WHEN the_cursor%NOTFOUND;
    ...
  END LOOP;
  CLOSE the_cursor;
END;
```

The bottom pane is titled "Snippets" and contains a list of PL/SQL programming techniques. The "Cursor" snippet is currently selected and highlighted in blue. The list includes:

- PL/SQL Programming Techniques
- CASE
- Cursor
- DBMS_OUTPUT.PUT_LINE
- IF-THEN-ELSE
- IF-THEN-ELSEIF
- Loop: FOR LOOP
- Loop: WHILE LOOP
- RAISE_APPLICATION_ERROR [example]
- RAISE_APPLICATION_ERROR(-number, 'error-text')
- Random number: NORMAL()

Create Trigger

Schema: 

Name:

Add New Source In Lowercase

Base Type:

Base Object Schema:

Base Object:

Timing:

Events:

Available Events:		Selected Events:
DELETE	>	INSERT
	<<	UPDATE
	<	
	<<	

Columns:

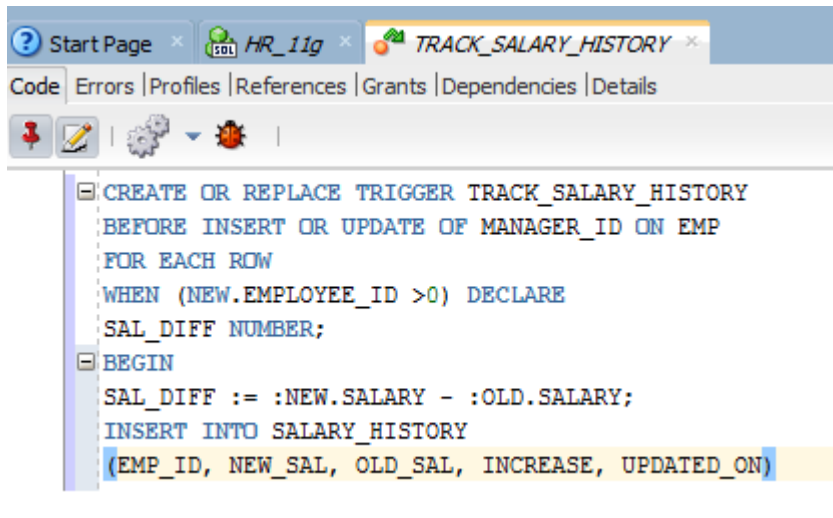
Available Columns:		Selected Columns:
JOB_ID	>	MANAGER_ID
LAST_NAME	<	
PHONE_NUMBER	<	
SALARY	<	

Referencing Old As:

Referencing New As:

Statement Level


When Clause:



The screenshot shows a software interface with a tab titled "TRACK_SALARY_HISTORY". Below the tab is a menu bar with "Code", "Errors", "Profiles", "References", "Grants", "Dependencies", and "Details". A toolbar contains icons for a pushpin, a pencil, a gear, a dropdown arrow, a bug, and a vertical line. The main area displays SQL code for a trigger:

```
CREATE OR REPLACE TRIGGER TRACK_SALARY_HISTORY
BEFORE INSERT OR UPDATE OF MANAGER_ID ON EMP
FOR EACH ROW
WHEN (NEW.EMPLOYEE_ID >0) DECLARE
SAL_DIFF NUMBER;
BEGIN
SAL_DIFF := :NEW.SALARY - :OLD.SALARY;
INSERT INTO SALARY_HISTORY
(EMP_ID, NEW_SAL, OLD_SAL, INCREASE, UPDATED_ON)
```


Create Trigger [X]

Schema: 

Name:

Add New Source In Lowercase

Base Type:

Base Object Schema:

Base Object:

Timing:

Events:

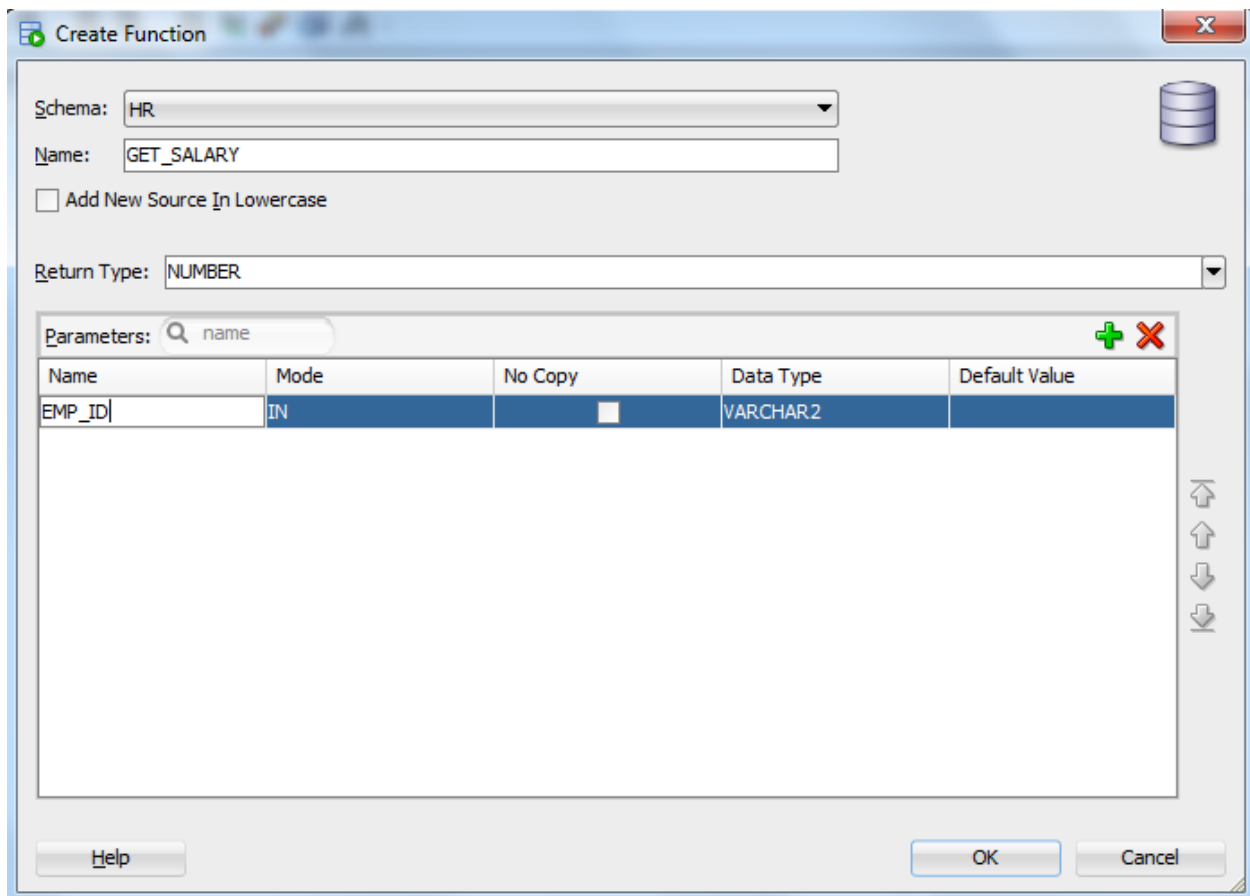
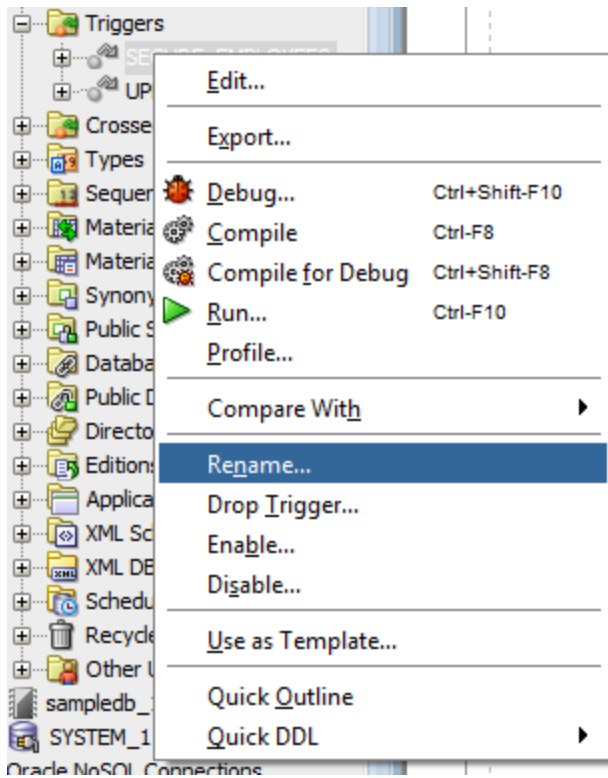
Available Events:	Selected Events:
DELETE	UPDATE
INSERT	

Navigation: > >> < <<

Referencing Old As:

Referencing New As:

Buttons: Help OK Cancel



```
Start Page | HR_11g | GET_SALARY
Code | Errors | Profiles | References | Grants | Dependencies | Details
CREATE OR REPLACE FUNCTION GET_SALARY
(
  EMP_ID IN NUMBER
) RETURN NUMBER AS
BEGIN
  RETURN NULL;
END GET_SALARY;
```

```
Start Page | HR_11g | EMP_ACTIONS Body
Code | Errors | Profiles | References | Grants | Dependencies | Details
DEPARTMENT_ID NUMBER) IS
BEGIN
  INSERT INTO emp VALUES (empno_seq.NEXTVAL, FIRST_NAME, LAST_NAME,
    EMAIL, PHONE_NUMBER, SYSDATE , JOB_ID, SALARY, COMMISSION_PCT, MANAGER_ID, DEPARTMENT_ID );
END hire_employees;
PROCEDURE fire_employee (emp_id NUMBER) IS
BEGIN
  DELETE FROM emp WHERE employee_id = emp_id;
```

18:1

Compiler - Log

Project: C:\Users\212391205\AppData\Roaming\SQL Developer\system4.1.0.19.07\o.sqldeveloper.12.2.0.19.7\projects\IdeConnections#HR_11g.jpr

Package Body HR.EMP_ACTIONS@HR_11g

Error(18,8): PLS-00113: END identifier 'HIRE_EMPLOYEES' must match 'HIRE_EMPLOYEE' at line 4, column 14

```
Start Page | HR_11g | EMP_PROGUNITS
Code | Errors | Profiles | References | Grants | Dependencies | Details
CREATE OR REPLACE
PACKAGE EMP_PROGUNITS AS

  /* TODO enter package declarations (types, exceptions, methods etc) here */

END EMP_PROGUNITS;
```

The image shows a screenshot of a software development environment with two tabs: GET_SALARY and EMP_PROGUNITS. The EMP_PROGUNITS tab is active, displaying a SQL package definition. A context menu is open over the code, with the 'Create Body...' option highlighted by a mouse cursor.

Code: Grants | Details | Dependencies | Profiles | Referen

Find

```
CREATE OR REPLACE
PACKAGE EMP_PROGUNITS AS
TYPE EMPRECTYP IS
RECORD (EMP_ID INT, SALARY REAL
CURSOR DESC_SALARY
RETURN EMPRECTYP;

```

Run EMP_PROGUNITS Ctrl-F11

Compile

Compile for Debug

Profile...

Use as Template...

Order Members By

Drop Package...

Create Body...

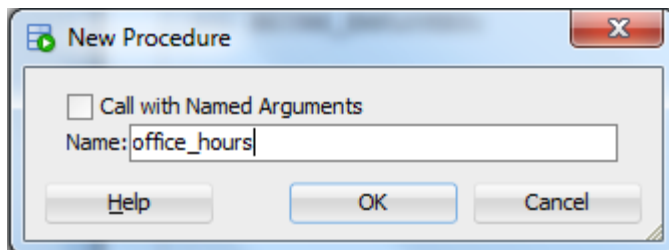
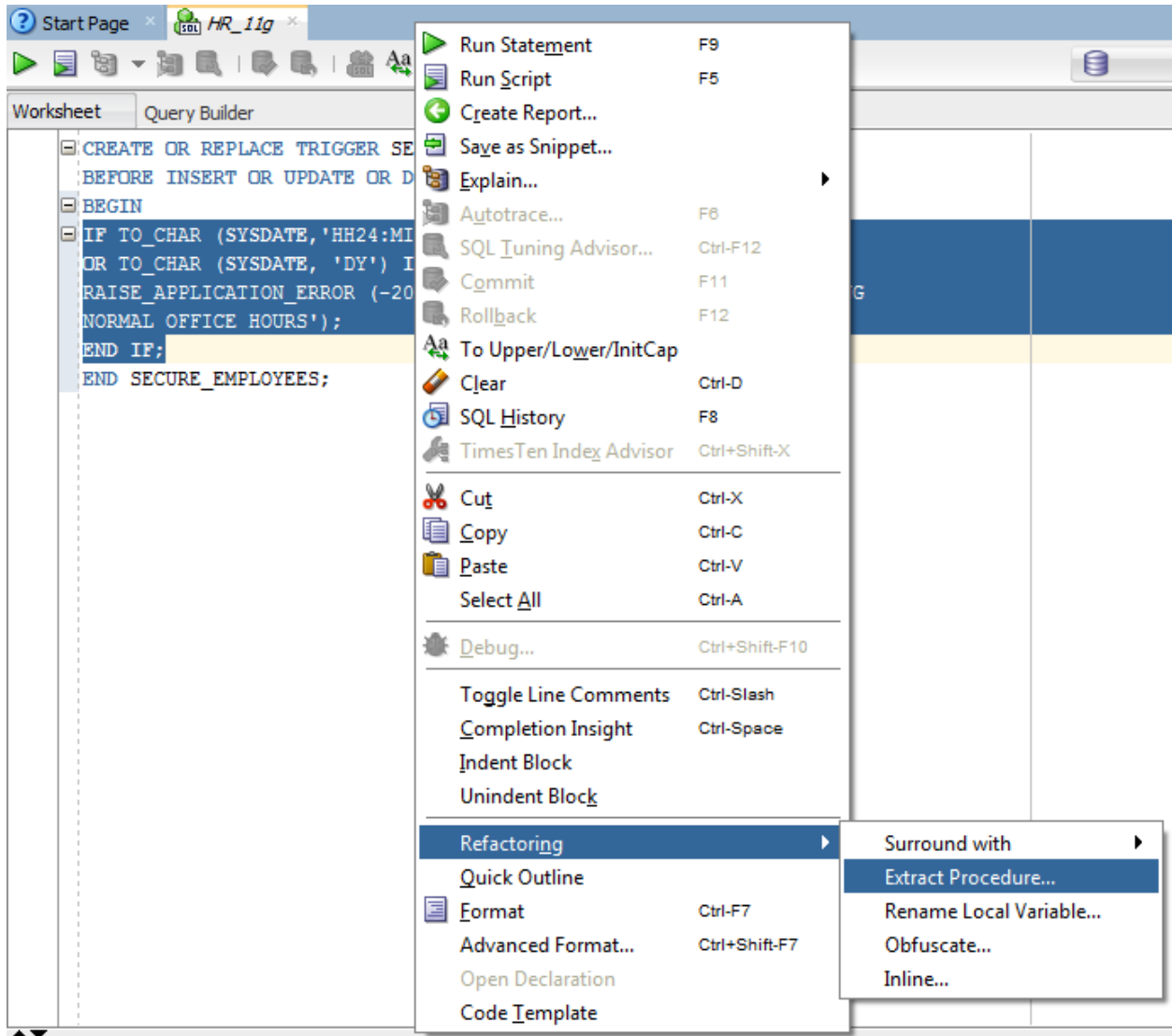
Grant...

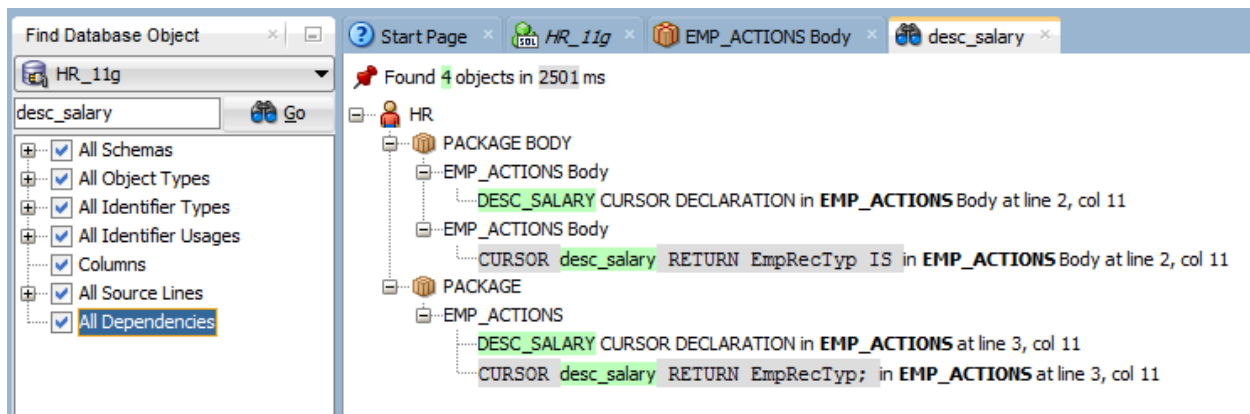
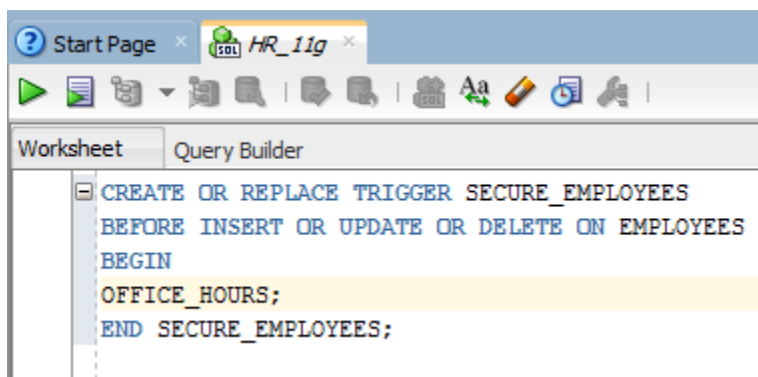
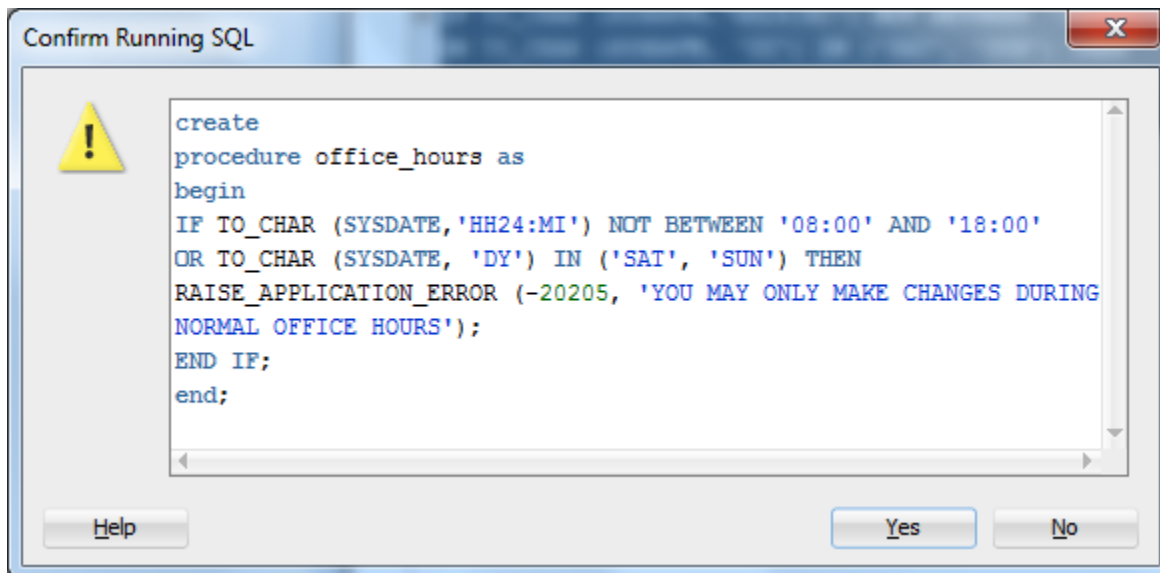
Format

Revoke...

Save Package Spec and Body...

Export DDL





Start Page | HR_11g | EMP_DEPTS

Code | Errors | Profiles | References | Grants | Dependencies | Details

HR_11g

Compile for Debug
Compile

```
AS
CURSOR EMPDEPT_CURSOR IS
SELECT D.DEPARTMENT_NAME, E.LAST_NAME, J.JOB_TITLE
FROM DEPARTMENTS D, EMPLOYEES E, JOBS J
WHERE D.DEPARTMENT_ID = E.DEPARTMENT_ID
AND E.JOB_ID = J.JOB_ID;
EMP_RECORD EMPDEPT_CURSOR % ROWTYPE;
TYPE EMP_TAB_TYPE IS TABLE OF EMPDEPT_CURSOR % ROWTYPE INDEX BY BINARY_INTEGER;
EMP_TAB EMP_TAB_TYPE;
I NUMBER := 1;
BEGIN
OPEN EMPDEPT_CURSOR;
FETCH EMPDEPT_CURSOR
INTO EMP_RECORD;
EMP_TAB(I) := EMP_RECORD;
WHILE ((EMPDEPT_CURSOR % FOUND) AND (I <= P_MAXROWS))
LOOP I := I + 1;
FETCH EMPDEPT_CURSOR
INTO EMP_RECORD;
EMP_TAB(I) := EMP_RECORD;
END LOOP;
CLOSE EMPDEPT_CURSOR; FOR J IN REVERSE 1 .. I
LOOP DBMS_OUTPUT.PUT_LINE('THE EMPLOYEE ' || EMP_TAB(J).LAST_NAME || ' WORKS IN DEPARTMENT ' || EMP_TAB(J).DEPARTMENT_NAME);
END LOOP;
END;
PROCEDURE EMP_DEPTS
(P_MAXROWS VARCHAR2)
AS
```

HR_11g

- Tables (Filtered)
- Views
- Editing Views
- Indexes
- Packages
- Procedures
 - ADD_JOB_HISTORY
 - EMP_DEPTS
 - SECURE_DML

```
BEGIN
OPEN EMPDEPT_CURSOR;
FETCH EMPDEPT_CURSOR
INTO EMP_RECORD;
EMP_TAB(I) := EMP_RECORD;
WHILE ((EMPDEPT_CURSOR % FOUND) AND (I <= P_MAXROWS))
LOOP I := I + 1;
FETCH EMPDEPT_CURSOR
INTO EMP_RECORD;
```

Debugging: HR_11g - Log Breakpoints

Connecting to the database HR_11g.
Executing PL/SQL: ALTER SESSION SET PLSQL_DEBUG=TRUE
Executing PL/SQL: CALL DBMS_DEBUG_JDWP.CONNECT_TCP('127.0.0.1', '4611'
Debugger accepted connection from database on port 4611.
Source breakpoint occurred at line 15 of EMP_DEPTS.pls.

Preferences

Search

- Environment
- Change Management Parar
- Code Editor
- Compare
- Database
- Data Miner
- Data Modeler
- Debugger**
 - Breakpoints
 - Data
 - Inspector
 - Smart Data
 - Stack
 - ToolTip
 - Watches
- External Editor
- File Types
- Merge
- Migration
- Mouse Actions
- OLAP
- Shortcut Keys
- SSH
- Unit Test Parameters
- Usage Reporting
- Versioning
- Web Browser and Proxy
- XML Schemas

Debugger

- Show Tool Tip in Code Editor While Debugging
- Use toString for Data Values
 - Only When Object.toString() has been Overridden
 - Only When No Expression is Defined
- Show Action Buttons in Log Window While Debugging
- Connection Retry Setting: 90
- Prompt for Debugger Host for Database Debugging
- Attempt to Break Method Evaluation Deadlocks
- Debugging Port Range
 - Minimum: 4000 Maximum: 4999
- Start Debugging Option:
 - Run Until a Breakpoint Occurs
 - Step Over
 - Step Into
- Enable Change Tracking
 - Changed item Background Color
 - Changed item Foreground Color

Help OK Cancel

HR_11g x

1.10899997 seconds

Worksheet Explain Plan... (F10)

```
select * from employees;
```

Explain Plan x

SQL | 1.109 seconds

OPERATION	OBJECT_NAME	CARDINALITY	COST
SELECT STATEMENT		107	3
TABLE ACCESS (FULL)	EMPLOYEES	107	3

HR_11g x

0.935 seconds

Worksheet Query Builder

```
select first_name, last_name from employees
where department_id < 102;
```

Explain Plan x

SQL | 0.935 seconds

OPERATION	OBJECT_NAME	CARDINALITY	COST
SELECT STATEMENT		105	3
VIEW	index\$_join\$_001	105	3
Filter Predicates	DEPARTMENT_ID < 102		
HASH JOIN			
Access Predicates			
INDEX (RANGE SCAN)	EMP_DEPARTMENT_IX	105	1
INDEX (FAST FULL SCAN)	EMP_NAME_IX	105	1

SQL | 0.935 seconds

OPERATION	OBJECT_NAME	CARDINALITY	COST
SELECT STATEMENT		105	3
VIEW	index\$_join\$_001	105	3
Filter Predicates	DEPARTMENT_ID < 102		
HASH JOIN			
Access Predicates	ROWID = ROWID		
INDEX (RANGE SCAN)	EMP_DEPARTMENT_IX	105	1
Access Predicates	DEPARTMENT_ID < 102		
INDEX (FAST FULL SCAN)	EMP_NAME_IX	105	1

Preferences

Database: Autotrace/Explain Plan

Autotrace

- CARDINALITY
- COST
- LAST_CR_BUFFER_GETS
- LAST_CU_BUFFER_GETS
- LAST_DISK_READS
- LAST_DISK_WRITES
- LAST_ELAPSED_TIME
- LAST_OUTPUT_ROWS
- LAST_STARTS
- %\$MYSTAT
- Skip 0-valued Statistics
- Fetch all rows

Explain Plan

- CARDINALITY
- COST
- CPU_COST
- DEPTH
- DISTRIBUTION
- IO_COST
- OBJECT_ALIAS
- OBJECT_NAME
- OBJECT_NODE

Help OK Cancel

Reports HR_11g Most Rows

Refresh: 0

	Owner	Table Name	Last Analyzed	Rows	Average Row Length	Table Type
1	HR	EMP	17-JUN-15	107	69	HEAP
2	HR	EMPLOYEES	29-MAY-14	107	69	HEAP
3	HR	DEPARTMENTS	29-MAY-14	27	21	HEAP
4	HR	COUNTRIES	29-MAY-14	25	15	HEAP
5	HR	LOCATIONS	29-MAY-14	23	49	HEAP
6	HR	JOBS	29-MAY-14	19	33	HEAP
7	HR	JOB_HISTORY	29-MAY-14	10	31	HEAP
8	HR	REGIONS	29-MAY-14	4	14	HEAP

Reports Top SQL by CPU

Refresh: 0

```

SQL
1 call dbms_stats.gather_database_stats_job_proc ( )
2 DECLARE job BINARY_INTEGER := :job; next_date TIMESTAMP WITH TIME ZONE := :mydate; bro
3 SELECT VALUE FROM V$PARAMETER WHERE NAME='compatible'
4 SELECT /* parallel */ EXTRACTVALUE(VALUE(T), '/select_list_item/pos') + 1 POS, EXTRACTV
5 DECLARE job BINARY_INTEGER := :job; next_date TIMESTAMP WITH TIME ZONE := :mydate; bro
6 DECLARE job BINARY_INTEGER := :job; next_date TIMESTAMP WITH TIME ZONE := :mydate; bro
7 delete from ncomp_dll$ where obj#=1 returning dllname into :2
8 MERGE /*+ dynamic_sampling(ST 4) dynamic_sampling_est_cdn(ST) */ INTO STATS_TARGET$ ST U
9 delete from idl_sb4$ where obj#=1 and part=:2
10 delete from dependency$ where d_obj#=1
11 delete from idl_ub2$ where obj#=1 and part=:2

```

Reports Last AWR Report

Refresh: 0

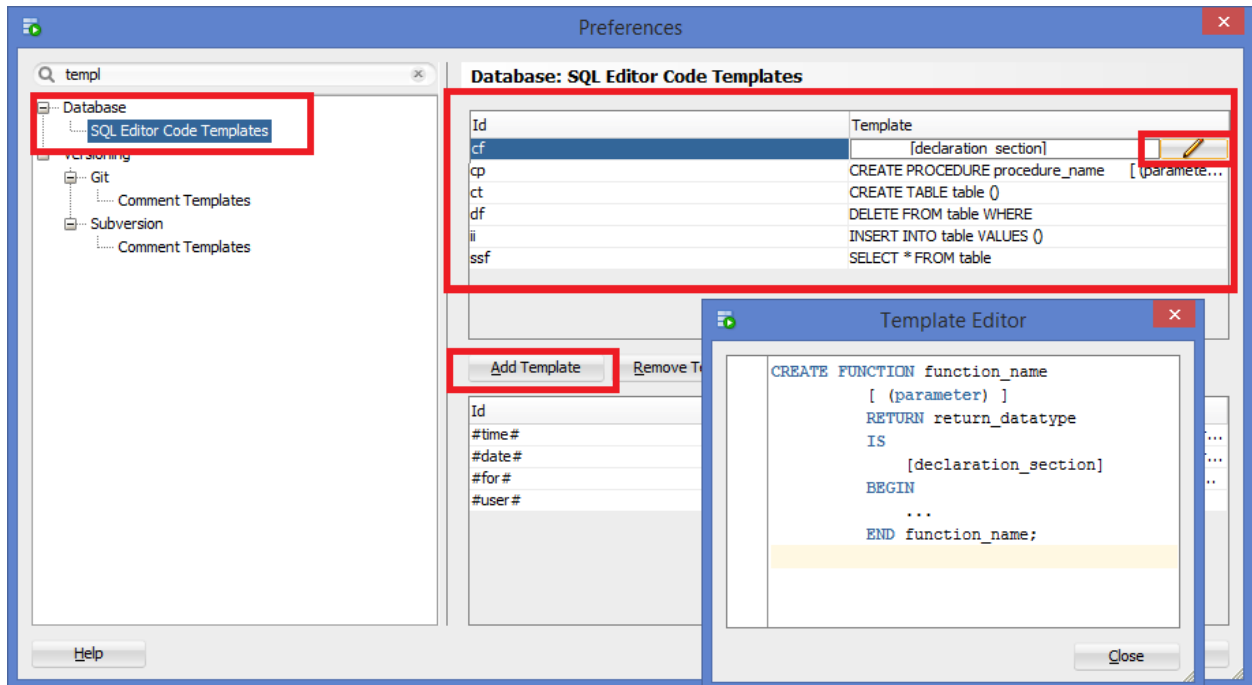
WARNING: Since the DB Time is less than one second, there was minimal foreground activity in the snapshot period. Some of the percentage values will be invalid.

WORKLOAD REPOSITORY report for

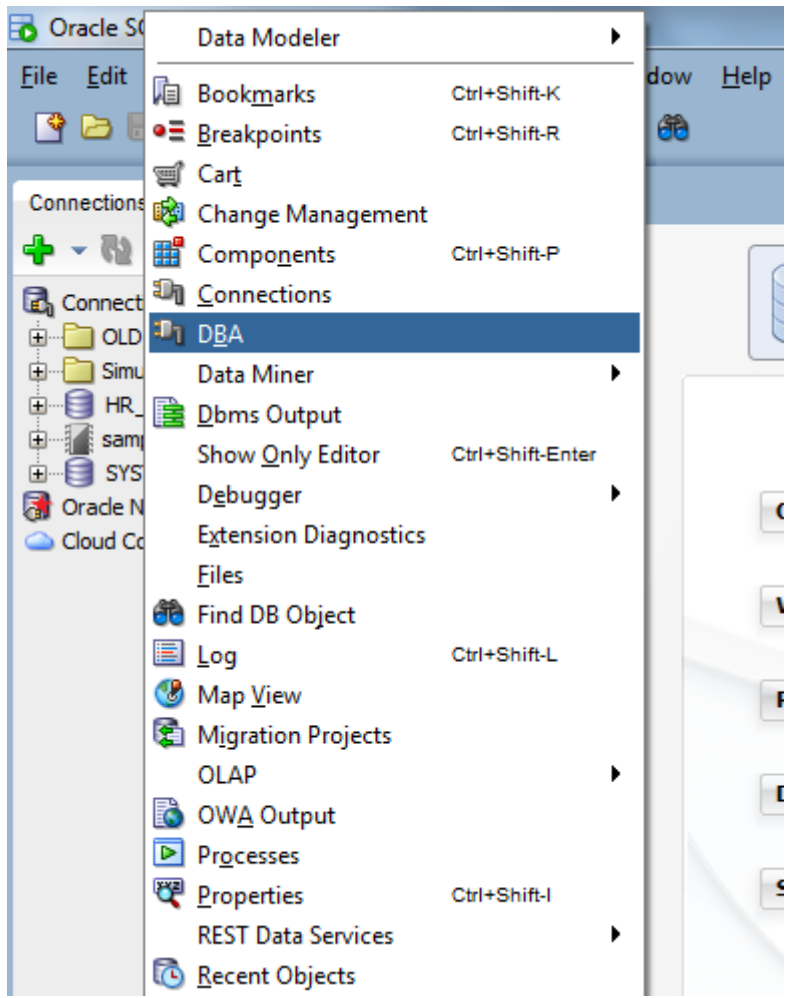
DB Name	DB Id	Instance	Inst Num	Startup Time	Release	RAC
XE	2755988123	xe	1	17-Jun-15 13:15	11.2.0.2.0	NO

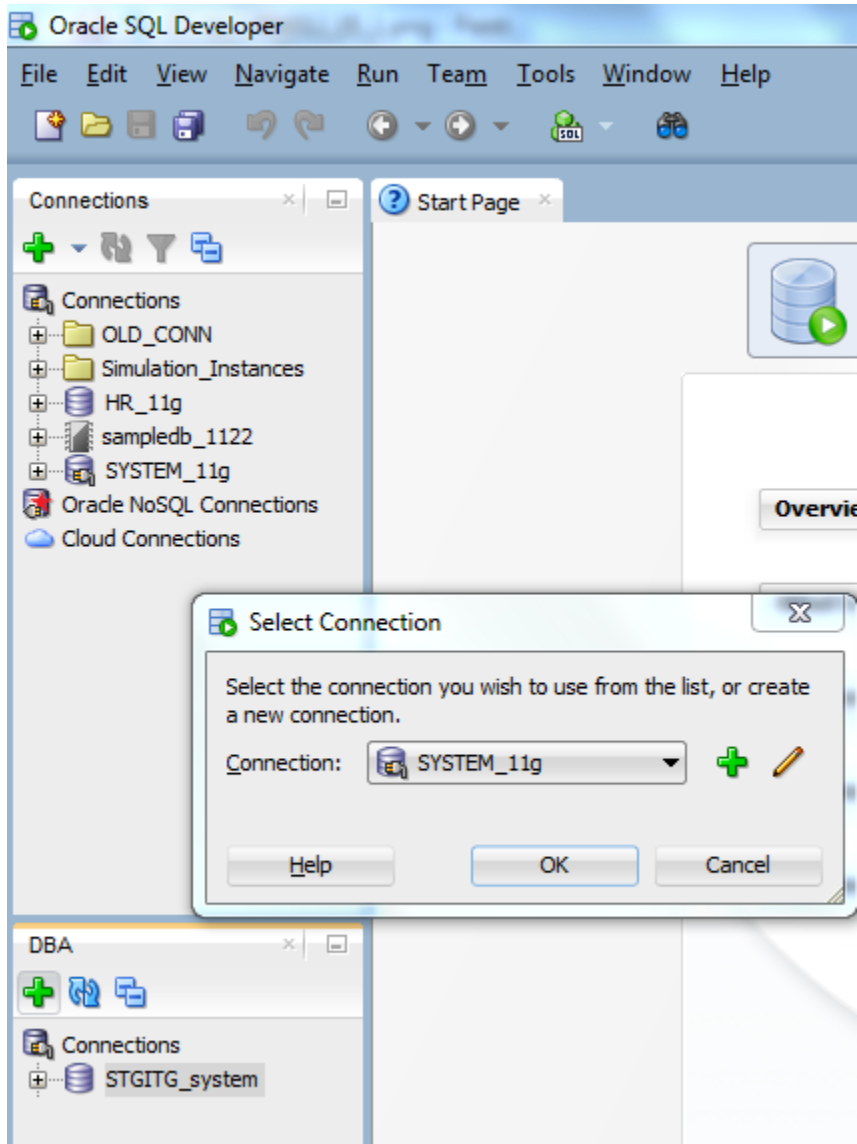
Host Name	Platform	CPUs	Cores	Sockets	Memory (GB)
HCA-36M4HZ1	Microsoft Windows x86 64-bit				.00

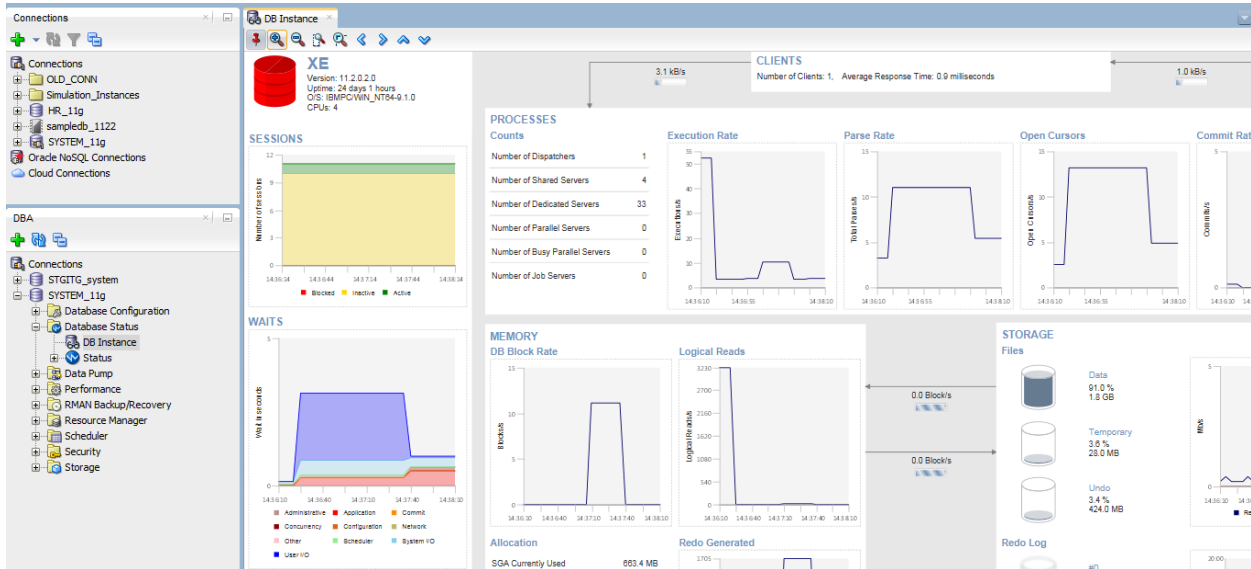
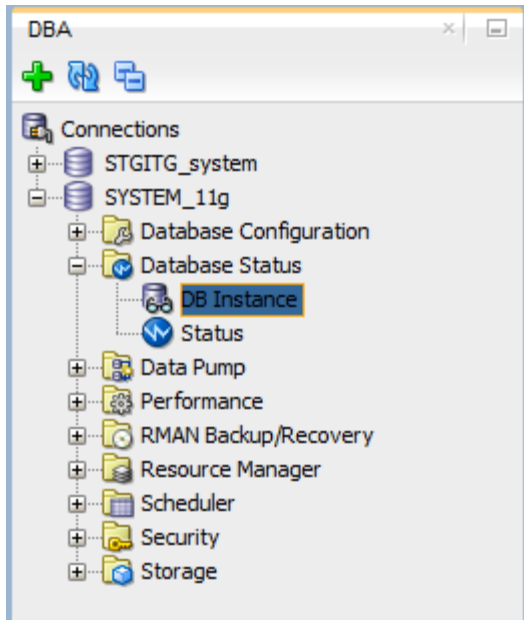
	Snap Id	Snap Time	Sessions	Curs/Sess
Begin Snap:	2205	24-Jun-15 18:30:41		
End Snap:	2206	24-Jun-15 19:30:54		
Elapsed:		60.22 (mins)		
DB Time:		0.00 (mins)		



Chapter 5







Find Database Object

SYSTEM_11g

LOG%

All Schemas
 All Object Types
 All Identifier Types
 All Identifier Usages
 Columns
 All Source Lines
 All Dependencies

Found 202 objects in 270 ms

SYSTEM

INDEX

- LOGMNRC_DBNAME_UID_MAP_PK
- LOGMNRC_GSBA_PK
- LOGMNRC_GSII_PK
- LOGMNRC_GTCS_PK
- LOGMNRC_GTLO_PK
- LOGMNRC_I2GTCS
- LOGMNRC_I2GTLO
- LOGMNRC_I3GTLO
- LOGMNRP_CTAS_PART_MAP_I
- LOGMNRP_CTAS_PART_MAP_PK
- LOGMNR_T_MDDL\$_PK
- LOGMNR_AGE_SPILL\$_PK
- LOGMNR_I1ATTRCOL\$

DBA

SYSTEM_11g

Initialization Parameters

Parameter	Value
1 07_DICTIONARY_ACCESSIBILITY	FALSE
2 active_instance_count	(null)
3 aq_tm_processes	0
4 archive_lag_target	0
5 asm_diskgroups	(null)
6 asm_diskstring	(null)
7 asm_power_limit	1
8 asm_preferred_read_failure_groups	(null)
9 audit_file_dest	C:\ORACLE\APP\ORACLE\ADMIN\XE\ADUMP
10 audit_sys_operations	FALSE
11 audit_trail	NONE
12 background_core_dump	partial
13 background_dump_dest	C:\oracle\app\oracle\diag\rdbms\xe\xe\trace
14 backup_tape_io_slaves	FALSE

DBA

SYSTEM_11g

Initialization Parameters

Open
 Refresh Ctrl-R
 Recovery Settings
 Help

Edit Instance Recovery Settings...
 Edit Media Recovery Settings...
 Edit Flash Recovery Settings...

Parameter
1 07_DICTIONARY_ACCESSIBILITY
2 active_instance_count
3 aq_tm_processes
4 archive_lag_target
5 asm_diskgroups
6 asm diskstring
10 audit sys operations

DBA SYSTEM_11g Automatic Undo Management

Information:

Tablespace:	UNDOTBS1	Current Size (mb):	425
AutoExtend:	TRUE	Maximum Size (mb):	500
Retention (min):	15	Guarantee:	FALSE
Auto Tune:	Enabled		

Advisors:

From: Jul 12, 2015 5:17:38 To Date: Jul 19, 2015 5:17:41

Problem: No problem found

Recommendation:

Rationale:

Retention: 0

UTB Size: 0

RBU Migration: 29

Best Possible Retention: 1078887

Longest query: 1184

Required Retention: 1184

Undo Advisor: Finding 1: The undo tablespace is OK.

Retention:

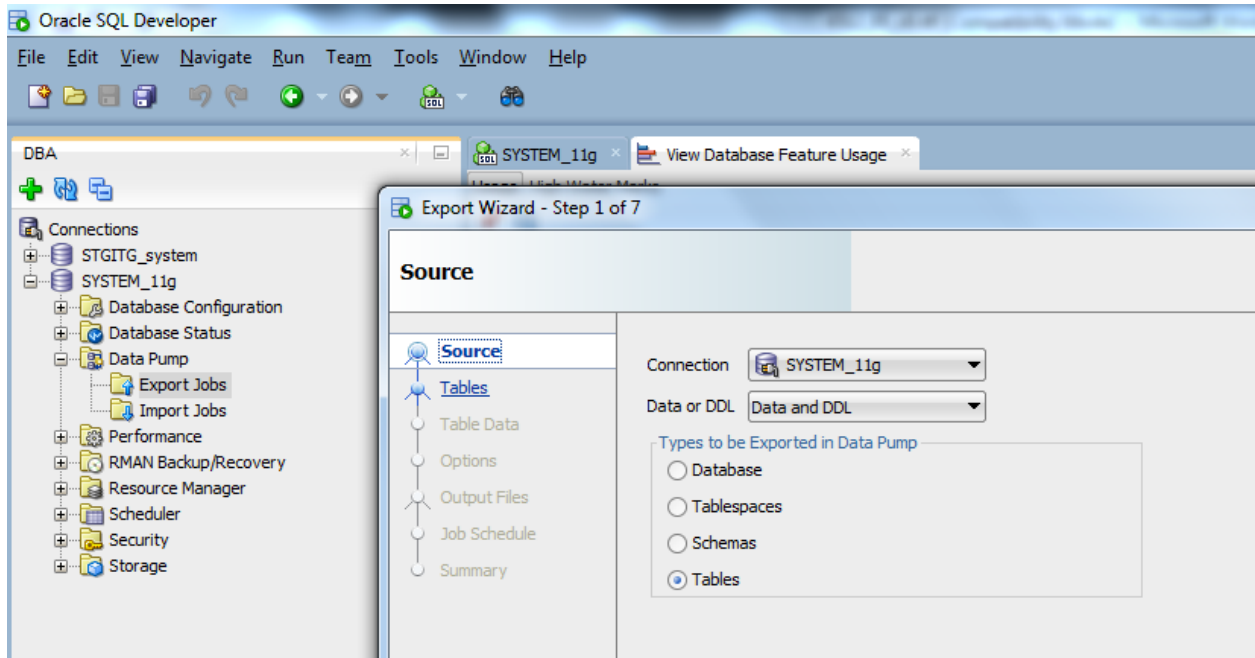
Required Undo Size: 499

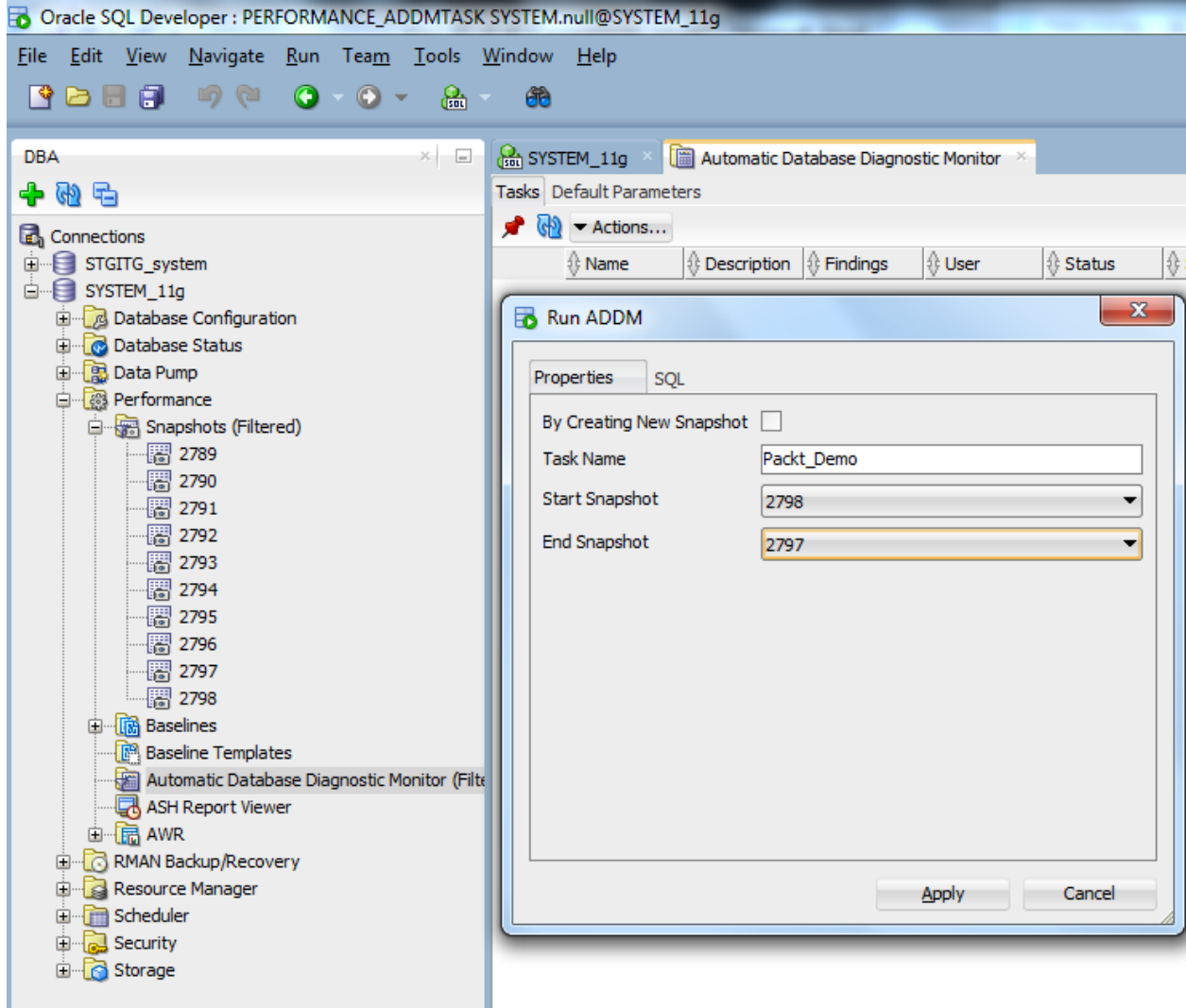
DBA SYSTEM_11g Current Database Properties

PROPERTY_NAME	PROPERTY_VALUE	DESCRIPTION
1	DICTIONARY.BASE	2 dictionary base tables version #
2	DEFAULT_TEMP_TABLESPACE	TEMP Name of default temporary tablespace
3	DEFAULT_PERMANENT_TABLESPACE	SYSTEM Name of default permanent tablespace
4	DEFAULT_EDITION	ORA\$BASE Name of the database default edition
5	Flashback Timestamp TimeZone	GMT Flashback timestamp created in GMT
6	TDE_MASTER_KEY_ID	(null) (null)
7	WORKLOAD_REPLAY_MODE	(null) PREPARE implies external replay clients c
8	DST_UPGRADE_STATE	NONE State of Day Light Saving Time Upgrade
9	DST_PRIMARY_IT_VERSION	14 Version of primary timezone data file
10	DST_SECONDARY_IT_VERSION	0 Version of secondary timezone data file
11	DEFAULT_TBS_TYPE	SMALLFILE Default tablespace type
12	NLS_LANGUAGE	AMERICAN Language
13	NLS_TERRITORY	AMERICA Territory
14	NLS_CURRENCY	€ Local currency

DBA SYSTEM_11g Restore Points

Restore Point Name	Restore Point Time	Restore Point Type	Storage Size	Creation SCN
1 Demo_For_Pack	JUL 19, 2015 11:15:50 AM	NORMAL	0	7276148





DBA SYSTEM_11g ASH Report Viewer

ASH Report For /

DB Name	DB Id	Instance	Inst num	Release	RAC	Host
	672354624		1			

CPUs	SGA Size	Buffer Cache	Shared Pool	ASH Buffer Size
	M (100%)	M (%)	M (%)	M (%)

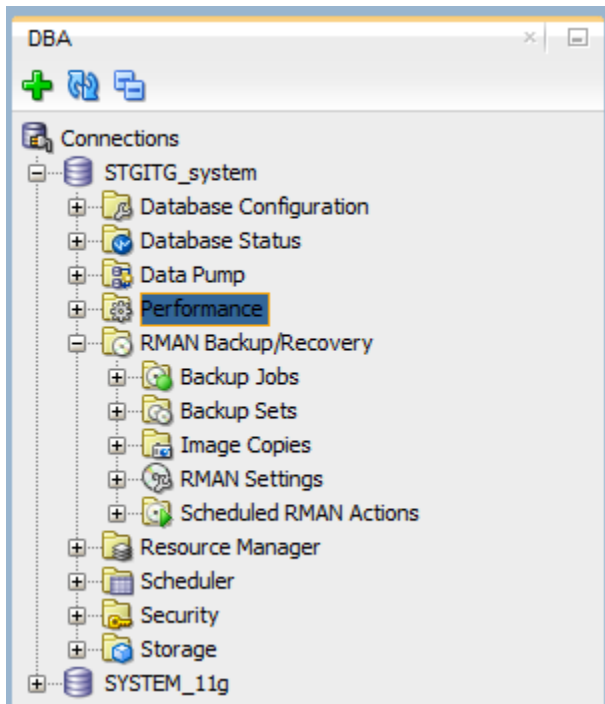
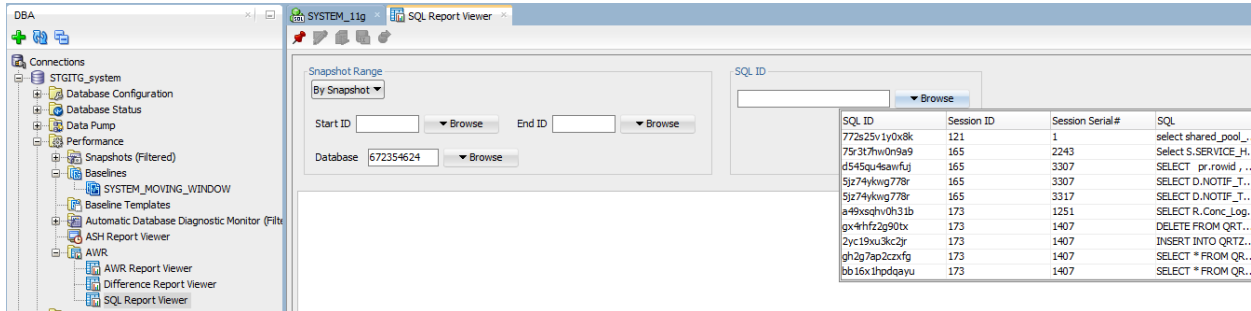
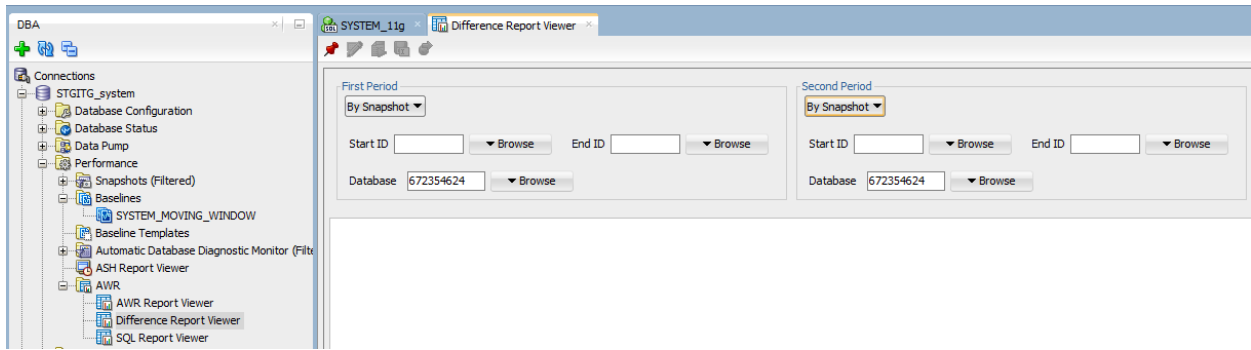
	Sample Time	Data Source
Analysis Begin Time:	19-Jul-15 12:43:49	DBA_HIST_ACTIVE_SESS_HISTORY in AWR snapshot
Analysis End Time:	19-Jul-15 12:48:49	DBA_HIST_ACTIVE_SESS_HISTORY in AWR snapshot
Elapsed Time:	5.0 (mins)	

DBA SYSTEM_11g AWR Report Viewer

Snapshot Range

By Baseline
 By Baseline
 By Snapshot

Database



DBA SYSTEM_11g Consumer Group Mappings

Connections

- STGITG_system
 - Database Configuration
 - Database Status
 - Data Pump
 - Performance
 - RMAN Backup/Recovery
 - Resource Manager
 - Consumer Group Mappings
 - Consumer Groups
 - Plans
 - Settings
 - Statistics
 - Scheduler
 - Security
 - Storage

Attribute	Priority	Value	Consumer Group
1 EXPLICIT	1	(null)	(null)
2 SERVICE_MODULE_ACTION	2	(null)	(null)
3 SERVICE_MODULE	3	(null)	(null)
4 MODULE_NAME_ACTION	4	(null)	(null)
5 MODULE_NAME	5	(null)	(null)
6 SERVICE_NAME	6	(null)	(null)
7 ORACLE_USER	7	SYS	SYS_GROUP
8 ORACLE_USER	7	SYSTEM	SYS_GROUP
9 CLIENT_PROGRAM	8	(null)	(null)
10 CLIENT_OS_USER	9	(null)	(null)
11 CLIENT_MACHINE	10	(null)	(null)
12 CLIENT_ID	11	(null)	(null)

DBA SYSTEM_11g Consumer Groups

Connections

- STGITG_system
 - Database Configuration
 - Database Status
 - Data Pump
 - Performance
 - RMAN Backup/Recovery
 - Resource Manager
 - Consumer Group Mappings
 - Consumer Groups
 - Plans
 - Settings
 - Statistics
 - Scheduler
 - Security
 - Storage

Consumer Group	Mandatory	Description
1 AUTO_TASK_CONSUMER_GROUP	NO	System maintenance task consumer group
2 BATCH_GROUP	NO	Consumer group for batch operations
3 DSS_CRITICAL_GROUP	NO	Consumer group for critical DSS queries
4 DSS_GROUP	NO	Consumer group for DSS queries
5 ETL_GROUP	NO	Consumer group for ETL
6 INTERACTIVE_GROUP	NO	Consumer group for interactive, OLTP operations
7 LOW_GROUP	NO	Group of low priority sessions
8 SYS_GROUP	YES	Consumer group for system administrators

DBA SYSTEM_11g Plans

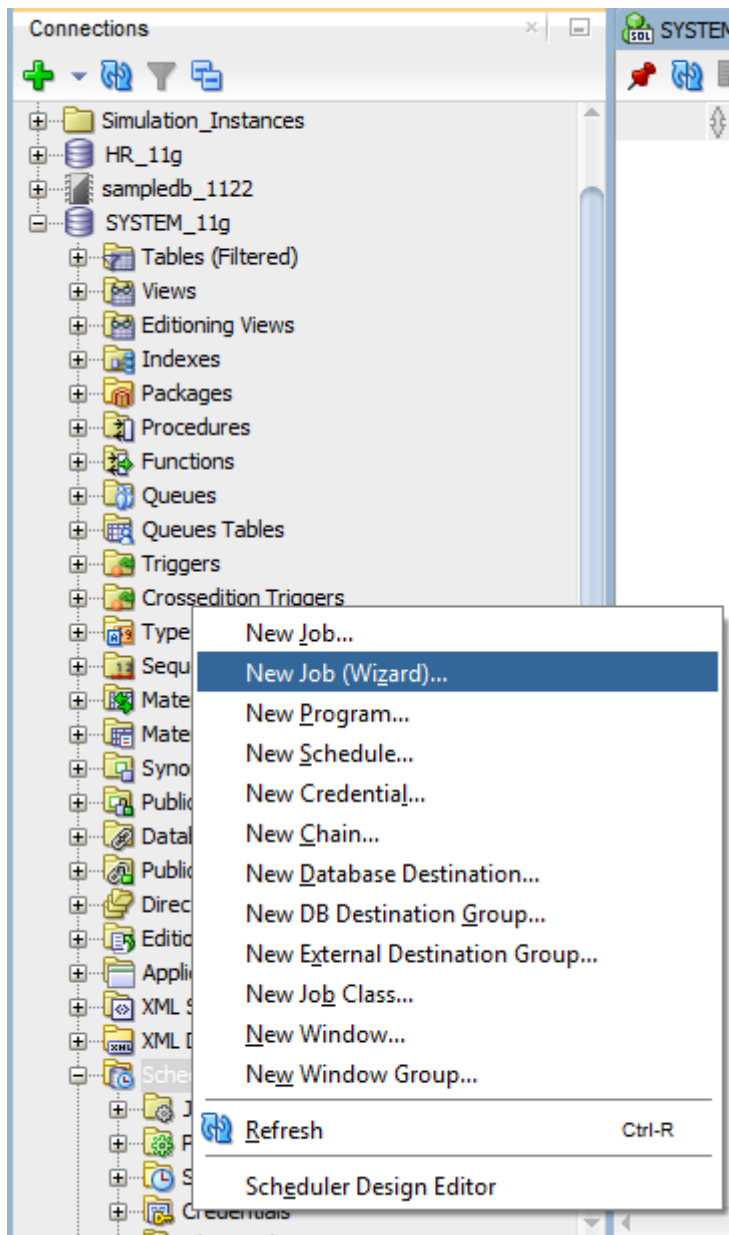
Connections

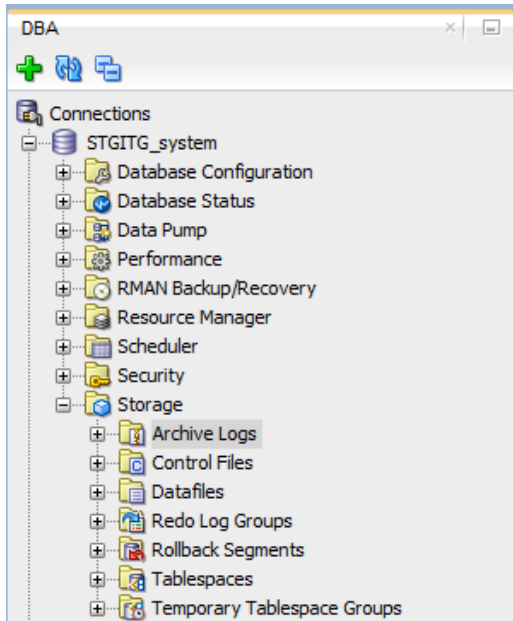
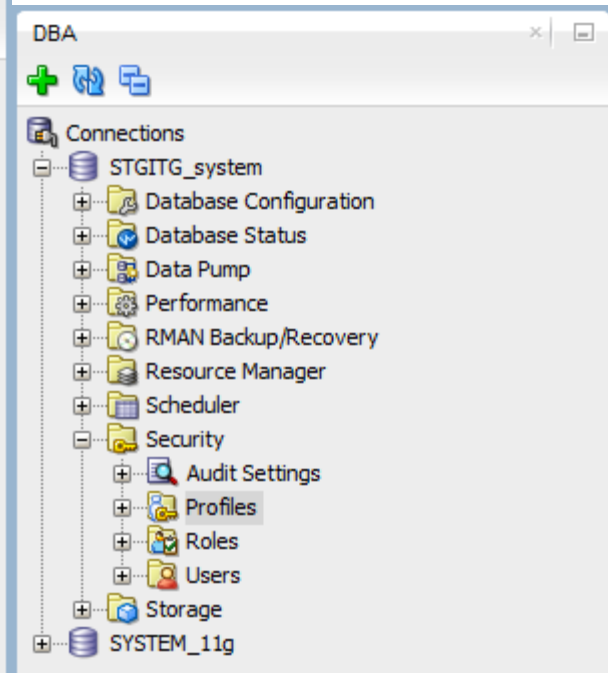
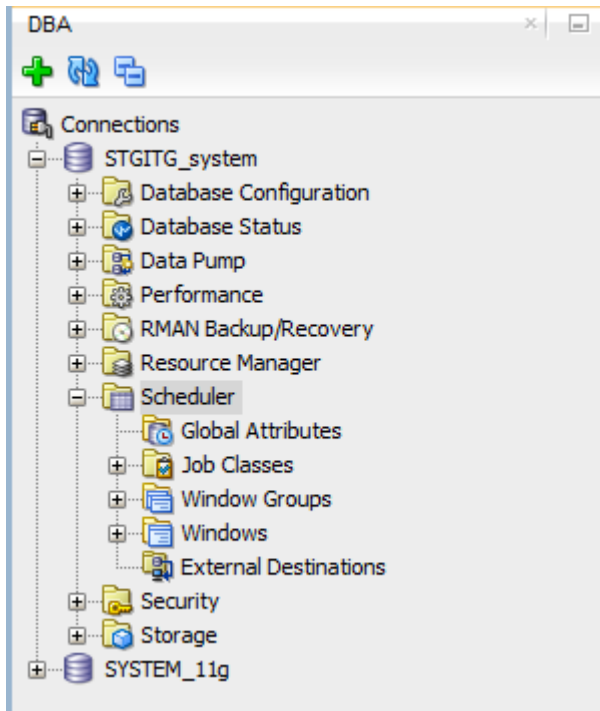
- STGITG_system
 - Database Configuration
 - Database Status
 - Data Pump
 - Performance
 - RMAN Backup/Recovery
 - Resource Manager
 - Consumer Group Mappings
 - Consumer Groups
 - Plans
 - Settings
 - Statistics
 - Scheduler
 - Security
 - Storage

Plan	Status	Description
1 DEFAULT_MAINTENANCE_PLAN		Default plan for maintenance windows that prioritizes SYS_GROUP operations and allocates the remaining 5% to diag
2 DEFAULT_PLAN		Default, basic, pre-defined plan that prioritizes SYS_GROUP operations and allocates minimal resources for automa
3 DSS_PLAN		Example plan for DSS workloads that prioritizes DSS queries over ETL.
4 ETL_CRITICAL_PLAN		Example plan for DSS workloads that prioritizes ETL and critical DSS queries.
5 MIXED_WORKLOAD_PLAN		Example plan for a mixed workload that prioritizes interactive operations over batch operations.
6 SYSTEM_PLAN		Plan to give system sessions priority

The screenshot displays the Oracle Enterprise Manager interface. On the left, the 'DBA' tree view is expanded to show the 'Settings' folder under the 'Resource Manager' section. The right pane shows the configuration for the 'Active Resource Plan', which is currently set to 'INTERNAL_PLAN'.

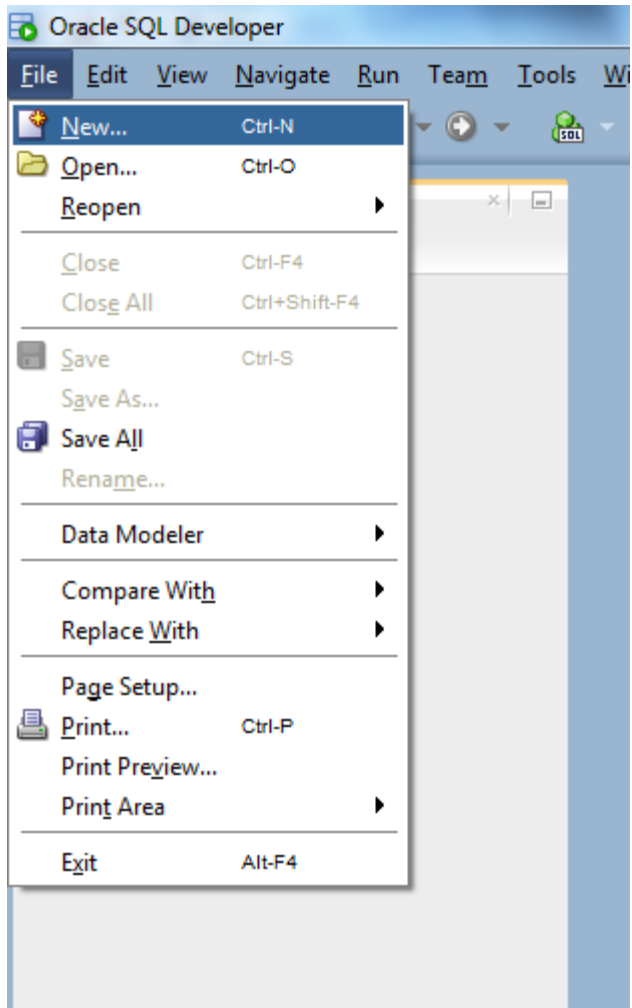
Active Resource Plan
1 INTERNAL_PLAN

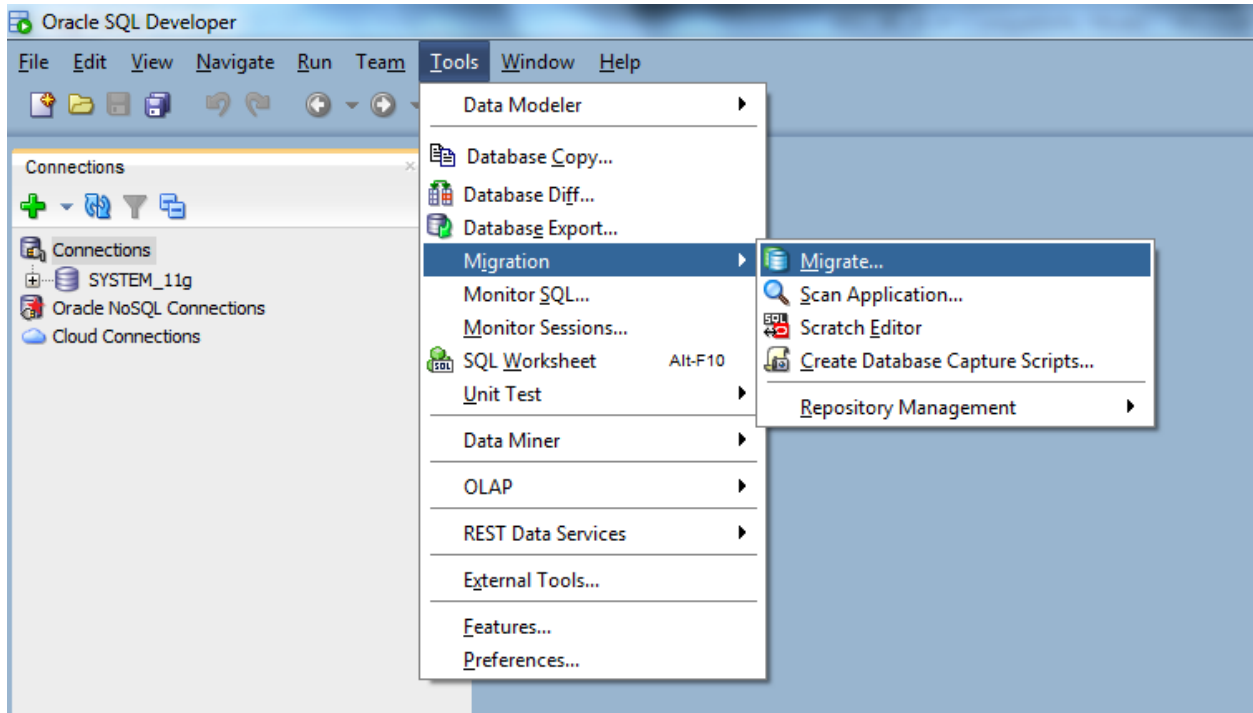


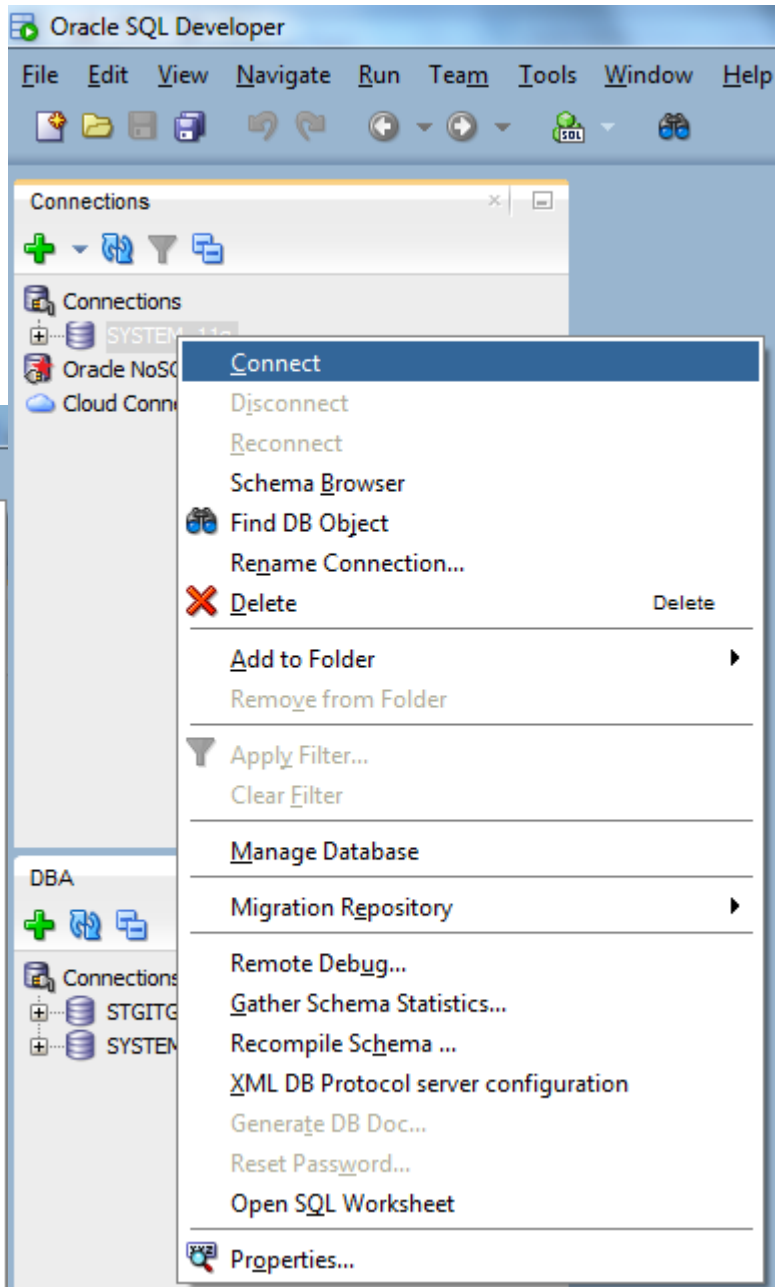
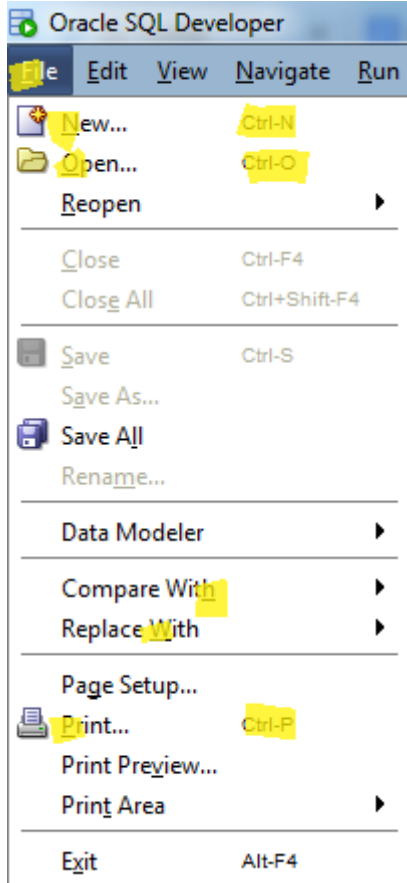


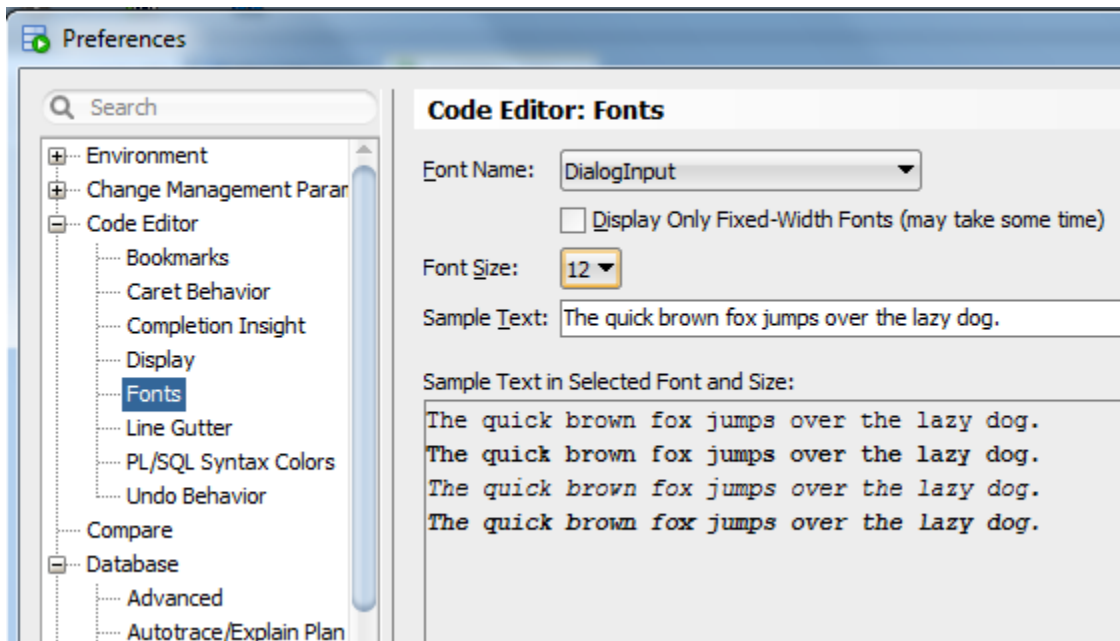
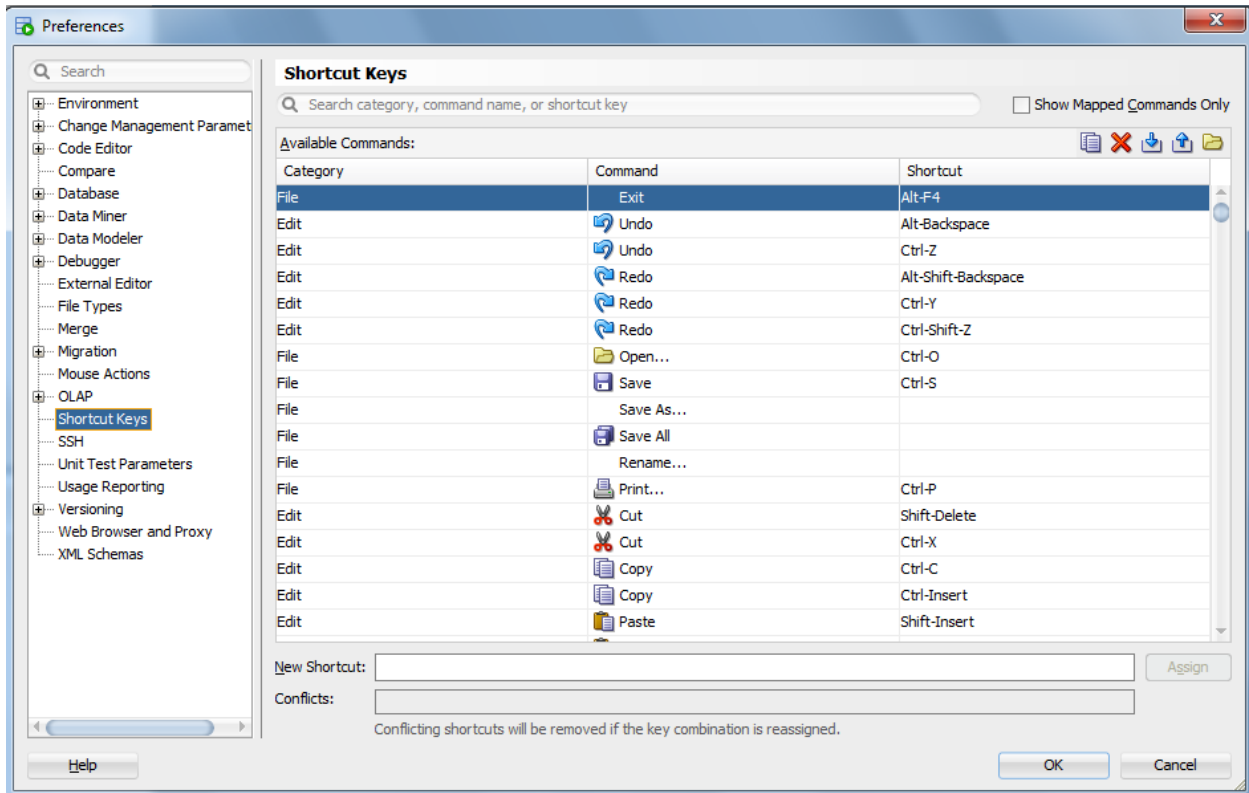
	NAME	Sec
1	/u99/backup/rman_archive/stgitg/1_1_867618396.arc	
2	/u99/backup/rman_archive/stgitg/1_2_867618396.arc	
3	/u99/backup/rman_archive/stgitg/1_3_867618396.arc	
4	/u99/backup/rman_archive/stgitg/1_4_867618396.arc	
5	/u99/backup/rman_archive/stgitg/1_5_867618396.arc	
6	/u99/backup/rman_archive/stgitg/1_6_867618396.arc	
7	/u99/backup/rman_archive/stgitg/1_7_867618396.arc	
8	/u99/backup/rman_archive/stgitg/1_8_867618396.arc	
9	/u99/backup/rman_archive/stgitg/1_9_867618396.arc	
10	/u99/backup/rman_archive/stgitg/1_10_867618396.arc	
11	/u99/backup/rman_archive/stgitg/1_11_867618396.arc	
12	/u99/backup/rman_archive/stgitg/1_12_867618396.arc	
13	/u99/backup/rman_archive/stgitg/1_13_867618396.arc	
14	/u99/backup/rman_archive/stgitg/1_14_867618396.arc	
15	/u99/backup/rman_archive/stgitg/1_15_867618396.arc	

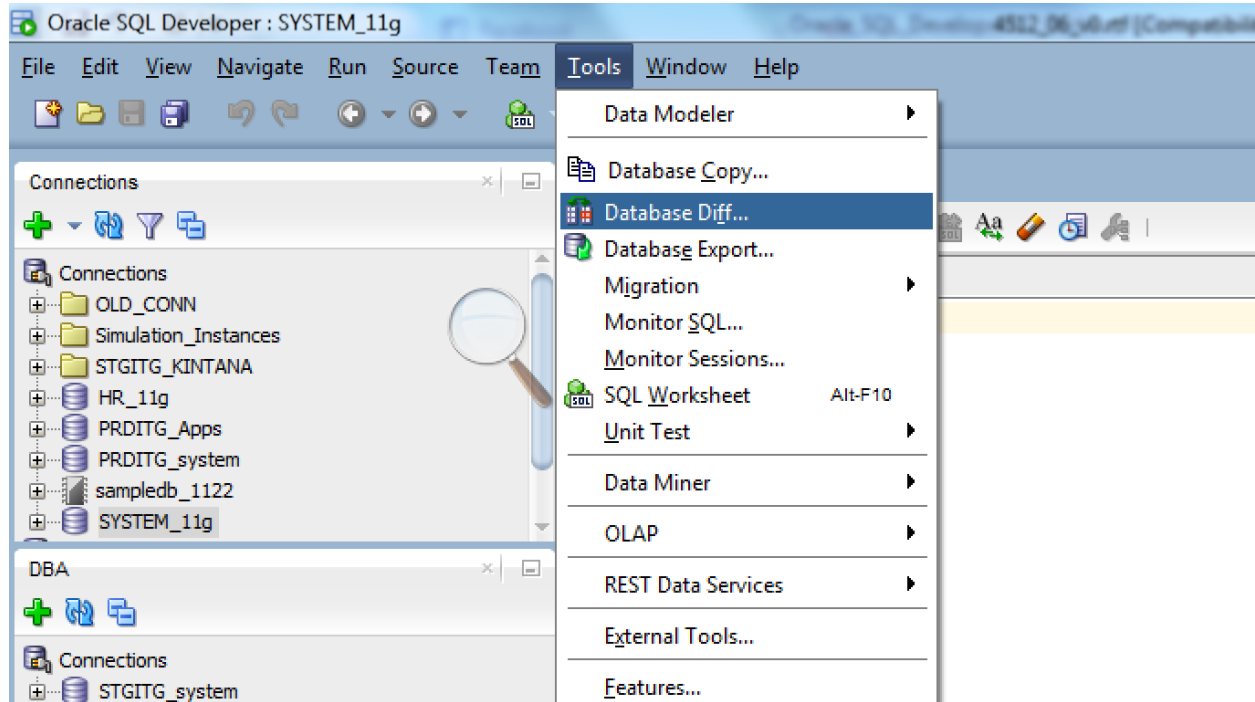
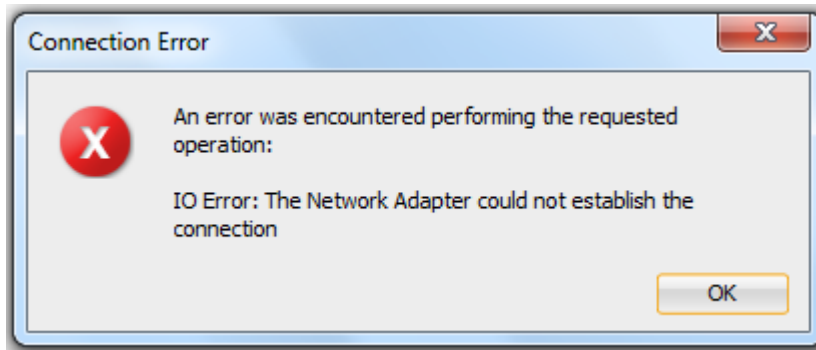
Chapter 6

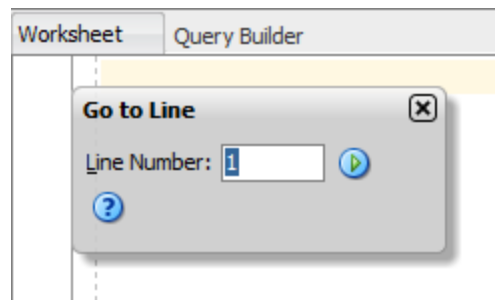
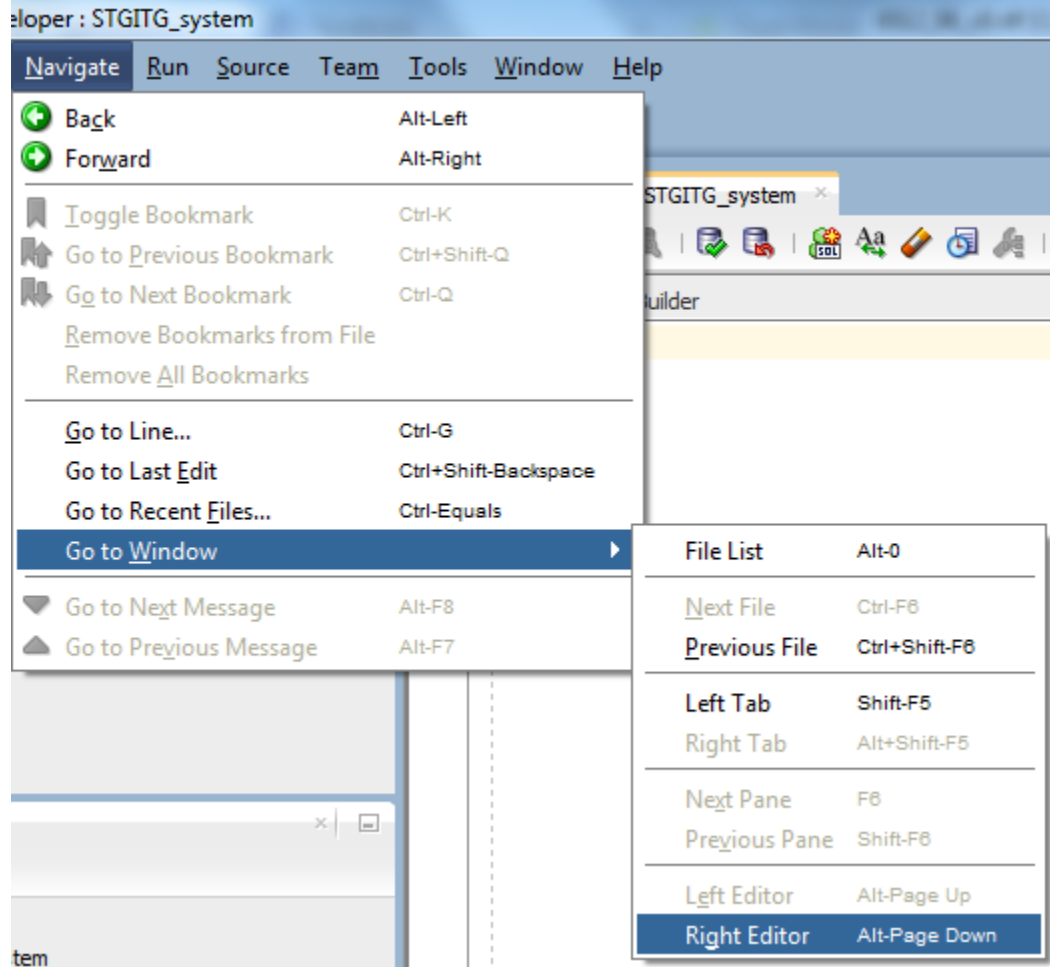



















Category	Command	Shortcut
File	Exit	Alt-F4
Edit	 Undo	Alt-Backspace
Edit	 Undo	Ctrl-Z
Edit	 Redo	Alt-Shift-Backspace
Edit	 Redo	Ctrl-Y
Edit	 Redo	Ctrl-Shift-Z
File	 Open...	Ctrl-O
File	 Save	Ctrl-S
File	 Print...	Ctrl-P
Edit	 Cut	Shift-Delete
Edit	 Cut	Ctrl-X
Edit	 Copy	Ctrl-C
Edit	 Copy	Ctrl-Insert
Edit	 Paste	Shift-Insert
Edit	 Paste	Ctrl-V
Edit	 Delete	Ctrl-Shift-D
Edit	 Delete	Delete
Edit	Select All	Ctrl-A
Search	 Find...	Ctrl-F
Search	Replace...	Ctrl-R

Preferences

Search

- Environment
 - Local History
 - Log
- Change Management Paramet
- Code Editor
- Compare
- Database
- Data Miner
- Data Modeler
- Debugger
- External Editor
- File Types
- Merge
- Migration
- Mouse Actions
- OLAP
- Shortcut Keys

Environment

Save All When Deactivating or Exiting

Automatically Reload Externally Modified Files

Silently Reload When File Is Unmodified

Check for Externally Modified Files on Startup

Undo Level:

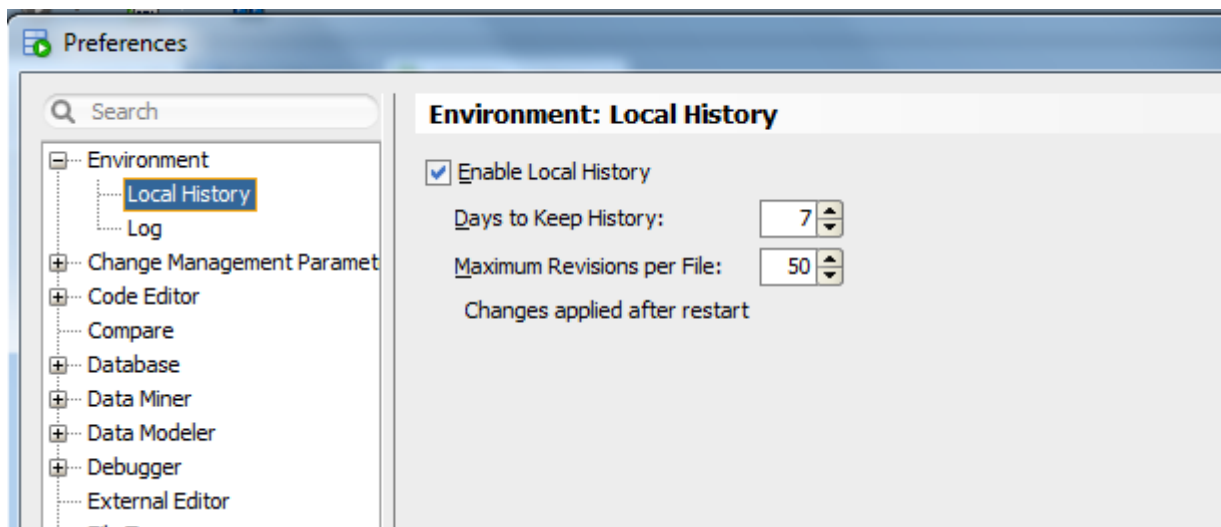
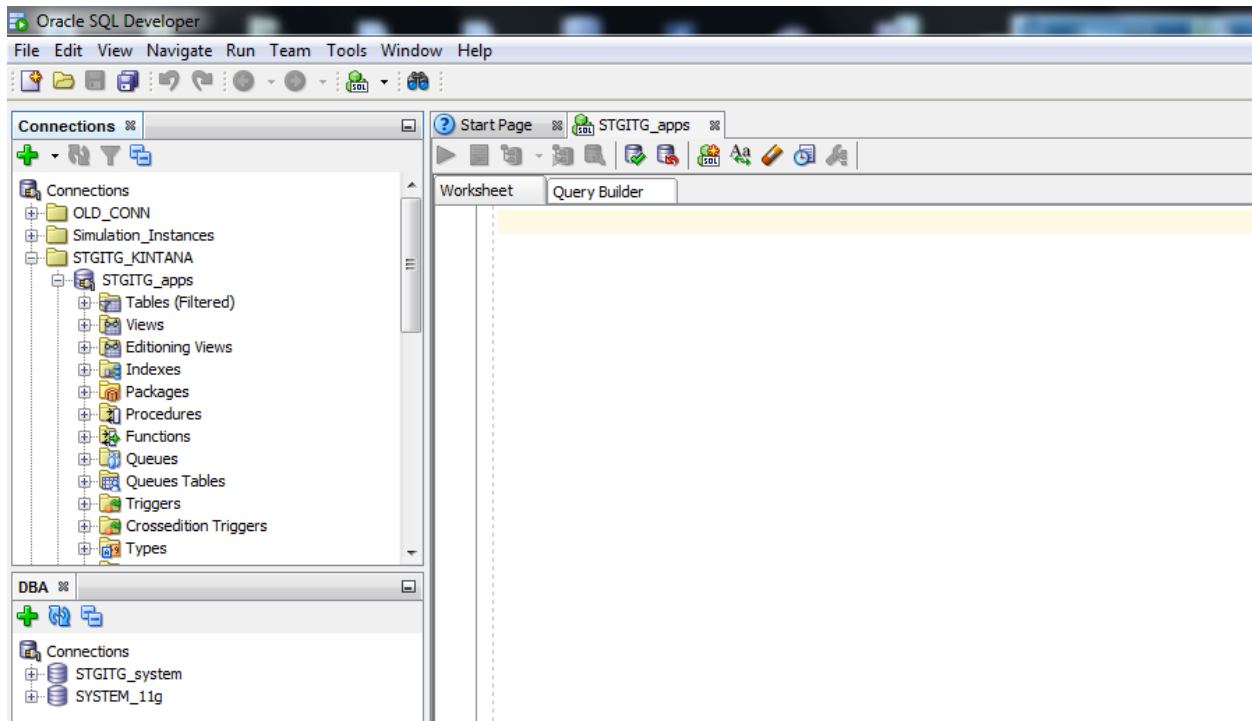
Navigation Level:

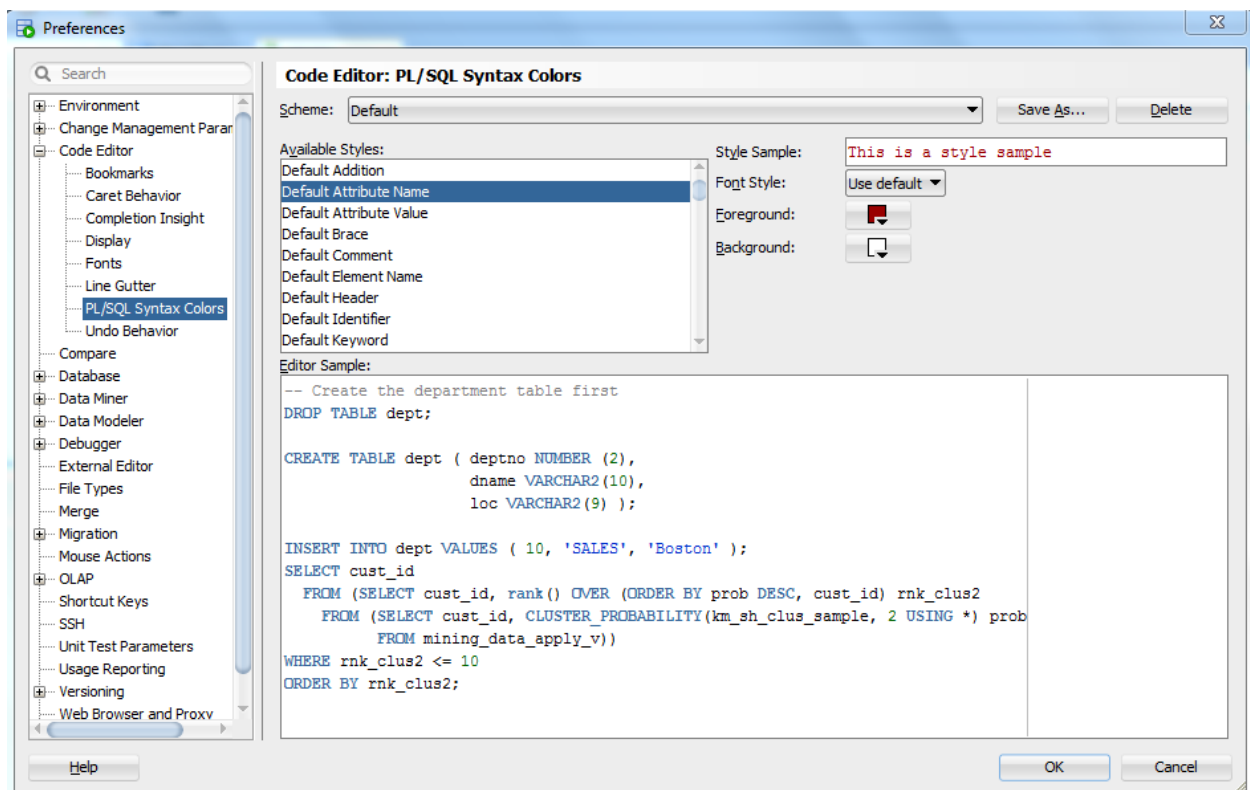
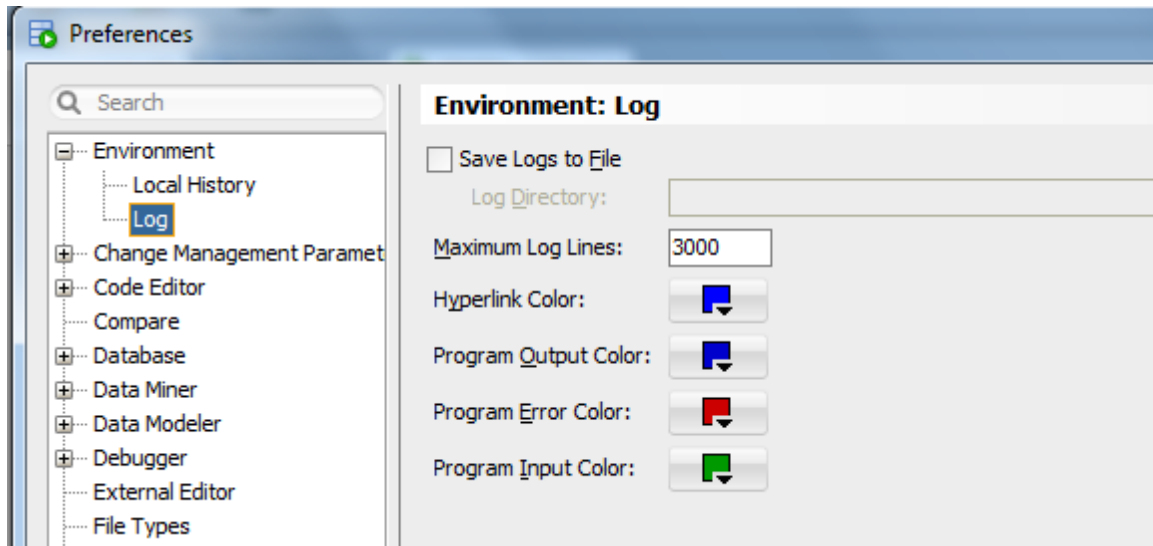
Look and Feel:

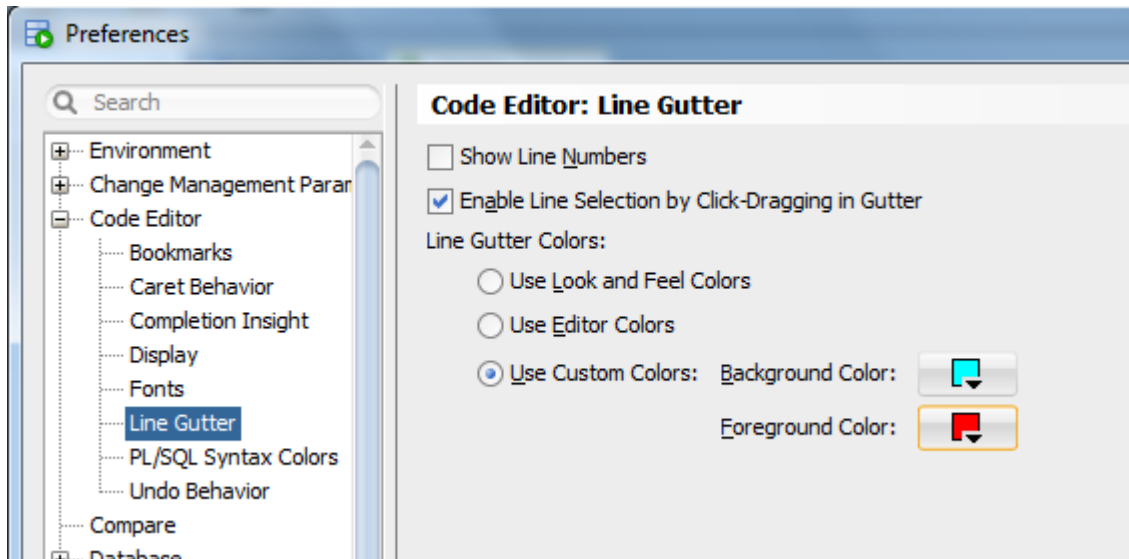
Line Terminator:

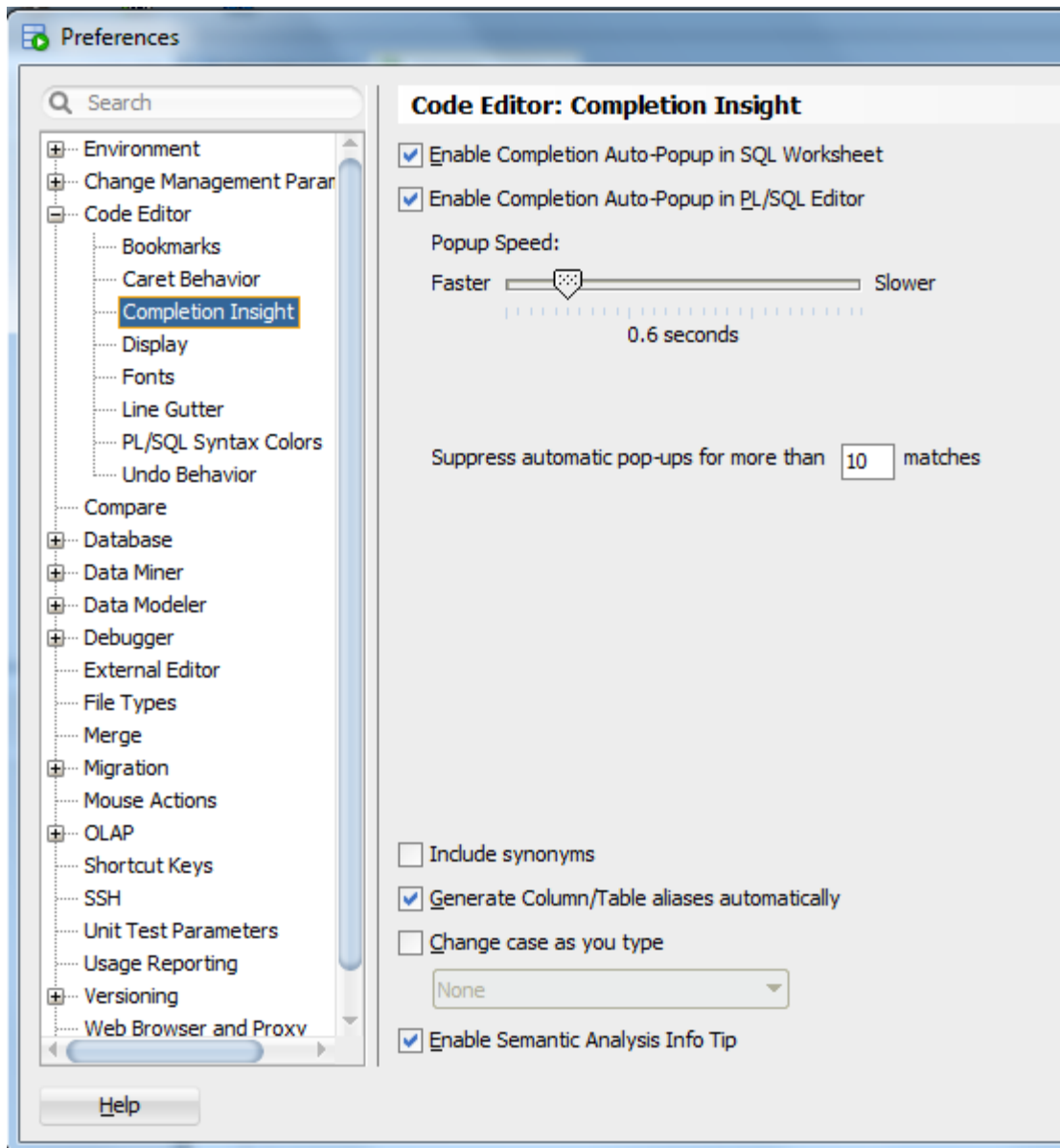
 Applies to new files only

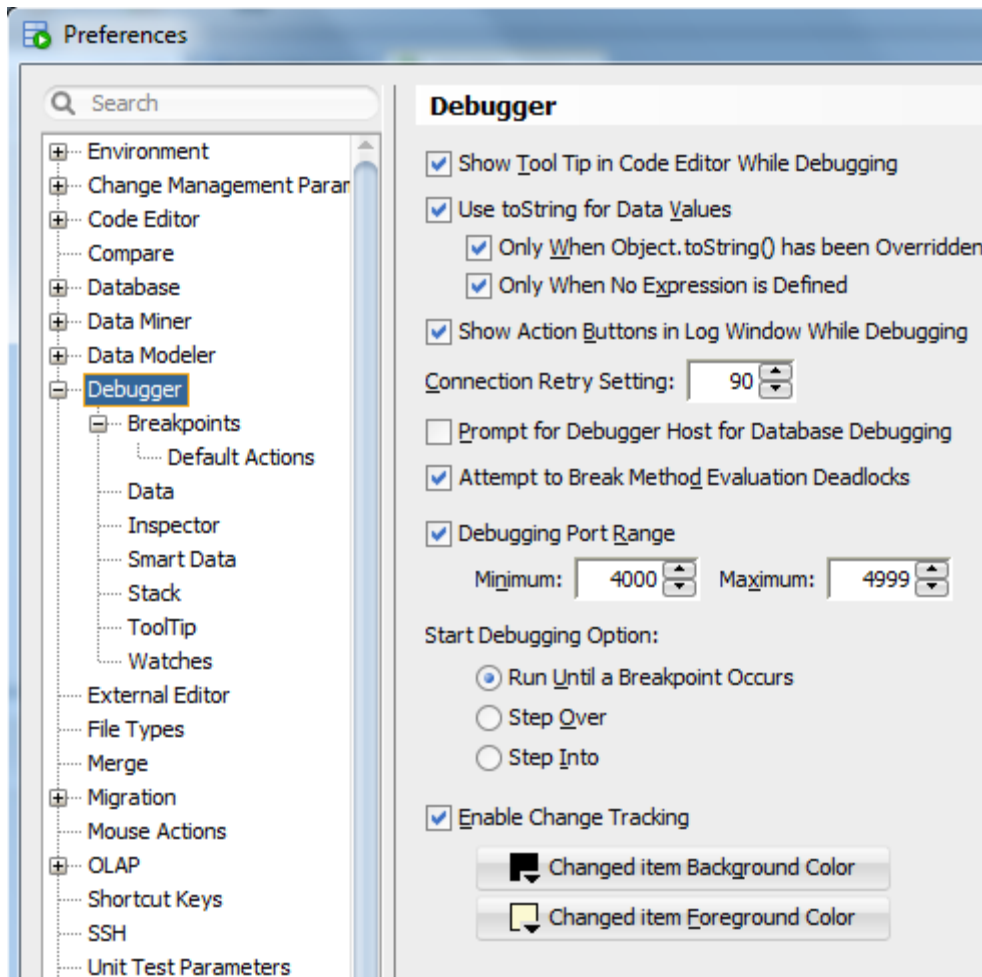
Encoding:











Chapter 7

❖ COLUMN_NAME	❖ DATA_TYPE	❖ NULLABLE	DATA_DEFAULT	❖ COLUMN_ID	❖ COMMENTS
EMPLOYEE_ID	NUMBER(6,0)	No	(null)	1	Primary key of
FIRST_NAME	VARCHAR2(20 BYTE)	Yes	(null)	2	First name of
LAST_NAME	VARCHAR2			3	Last name of t
EMAIL	VARCHAR2			4	Email id of th
PHONE_NUMBER	VARCHAR2			5	Phone number c
HIRE_DATE	DATE			6	Date when the
JOB_ID	VARCHAR2			7	Current job of
SALARY	NUMBER(8			8	Monthly salary
COMMISSION_PCT	NUMBER(2,2)	Yes	(null)	9	Commission per
MANAGER_ID	NUMBER(6,0)	Yes	(null)	10	Manager id of
DEPARTMENT_ID	NUMBER(4,0)	Yes	(null)	11	Department id

Export Wizard - Step 1 of 2

Source/Destination

Source/Destination
Export Summary

Connection: HR_11g

Export Data

Format: **csv** Header
Delimiter: delimited
Line Terminator: environment default
Left Enclosure: excel 2003+ (xlsx)
Right Enclosure: "
excel 95-2003 (xls)
excel.xml
Save As: Single fixed compressed Encoding: Cp1252
File: C:\Users\insert Browse...
 Proceed to summary.

Help < Back Next > Finish Cancel

Export Wizard - Step 1 of 2

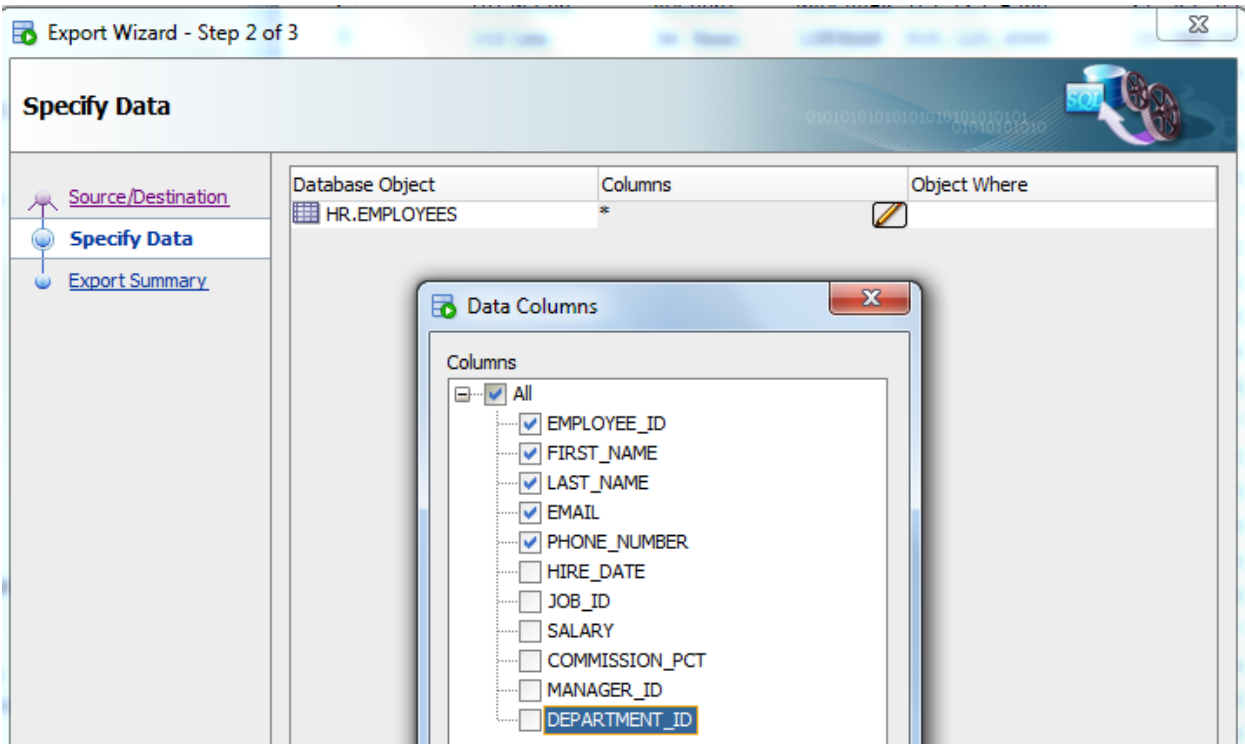
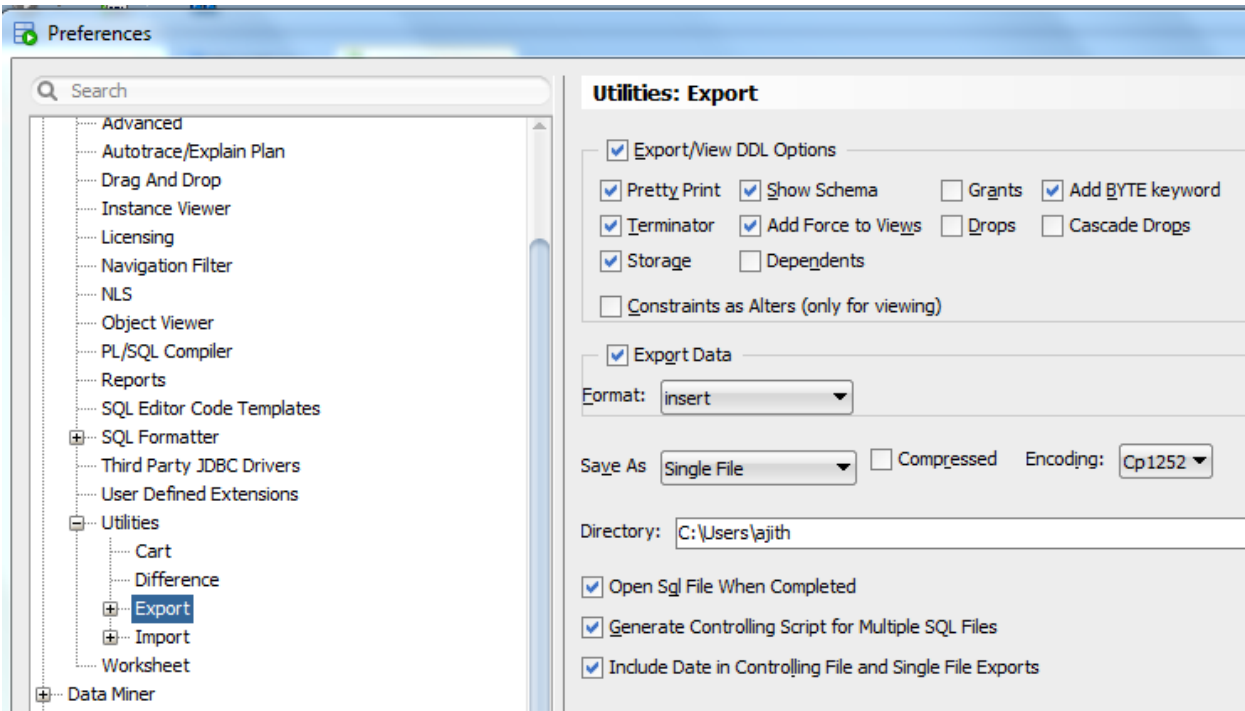
Source/Destination

Source/Destination
Export Summary

Connection: SYSTEM_11g

Export Data

Format: insert
Line Terminator: environment default
Table Name: EXPORT_TABLE
 Include Commit Every 100 Rows
Save As: Single File Compressed Encoding: Cp1252
File: C:\Users\212391205\export.sql Browse...
 Proceed to summary.



Data Where

Global Where:

Object Where: AND

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER
152	Peter	Hall	PHALL	011.44.1344.478968
201	Michael	Hartstein	MHARTSTE	515.123.5555
205	Shelley	Higgins	SHIGGINS	515.123.8080
118	Guy	Himuro	GHIMURO	515.127.4565
103	Alexander	Hunold	AHUNOLD	590.423.4567
175	Alyssa	Hutton	AHUTTON	011.44.1644.429266

Sample data:

Start Page | EMPLOYEES | HR_11g

Worksheet | Query Builder

```

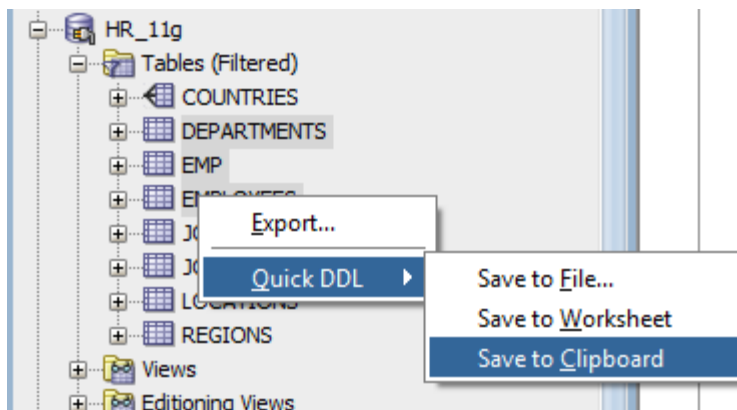
REM INSERTING into HR.EMPLOYEES
SET DEFINE OFF;
Insert into HR.EMPLOYEES (EMPLOYEE_ID, FIRST_NAME, LAST_NAME, EMAIL, PHONE_NUMBER, HIRE_DATE, JOB_ID, SAL
Insert into HR.EMPLOYEES (EMPLOYEE_ID, FIRST_NAME, LAST_NAME, EMAIL, PHONE_NUMBER, HIRE_DATE, JOB_ID, SAL
Insert into HR.EMPLOYEES (EMPLOYEE_ID, FIRST_NAME, LAST_NAME, EMAIL, PHONE_NUMBER, HIRE_DATE, JOB_ID, SAL
Insert into HR.EMPLOYEES (EMPLOYEE_ID, FIRST_NAME, LAST_NAME, EMAIL, PHONE_NUMBER, HIRE_DATE, JOB_ID, SAL
Insert into HR.EMPLOYEES (EMPLOYEE_ID, FIRST_NAME, LAST_NAME, EMAIL, PHONE_NUMBER, HIRE_DATE, JOB_ID, SAL
Insert into HR.EMPLOYEES (EMPLOYEE_ID, FIRST_NAME, LAST_NAME, EMAIL, PHONE_NUMBER, HIRE_DATE, JOB_ID, SAL
Insert into HR.EMPLOYEES (EMPLOYEE_ID, FIRST_NAME, LAST_NAME, EMAIL, PHONE_NUMBER, HIRE_DATE, JOB_ID, SAL
Insert into HR.EMPLOYEES (EMPLOYEE_ID, FIRST_NAME, LAST_NAME, EMAIL, PHONE_NUMBER, HIRE_DATE, JOB_ID, SAL
Insert into HR.EMPLOYEES (EMPLOYEE_ID, FIRST_NAME, LAST_NAME, EMAIL, PHONE_NUMBER, HIRE_DATE, JOB_ID, SAL
Insert into HR.EMPLOYEES (EMPLOYEE_ID, FIRST_NAME, LAST_NAME, EMAIL, PHONE_NUMBER, HIRE_DATE, JOB_ID, SAL

```

Responsive Table

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMIS
100	Steven	King	SKING	515.123.4567	17-JUN-03	AD_PRES	24000	
101	Neena	Kochhar	NKOCHHAR	515.123.4568	21-SEP-05	AD_VP	17000	
102	Lex	De Haan	LDEHAAN	515.123.4569	13-JAN-01	AD_VP	17000	
103	Alexander	Hunold	AHUNOLD	590.423.4567	03-JAN-06	IT_PROG	9000	
104	Bruce	Ernst	BERNST	590.423.4568	21-MAY-07	IT_PROG	6000	
105	David	Austin	DAUSTIN	590.423.4569	25-JUN-05	IT_PROG	4800	
106	Valli	Pataballa	VPATABAL	590.423.4560	05-FEB-06	IT_PROG	4800	


```
CREATE TABLE "HR"."EMPLOYEES"
( "EMPLOYEE_ID" NUMBER(6,0),
"FIRST_NAME" VARCHAR2(20 BYTE),
"LAST_NAME" VARCHAR2(25 BYTE) CONSTRAINT "EMP_LAST_NAME_NN" NOT NULL ENABLE,
"EMAIL" VARCHAR2(25 BYTE) CONSTRAINT "EMP_EMAIL_NN" NOT NULL ENABLE,
"PHONE_NUMBER" VARCHAR2(20 BYTE),
"HIRE_DATE" DATE CONSTRAINT "EMP_HIRE_DATE_NN" NOT NULL ENABLE,
"JOB_ID" VARCHAR2(10 BYTE) CONSTRAINT "EMP_JOB_NN" NOT NULL ENABLE,
"SALARY" NUMBER(8,2),
"COMMISSION_PCT" NUMBER(2,2),
"MANAGER_ID" NUMBER(6,0),
"DEPARTMENT_ID" NUMBER(4,0),
CONSTRAINT "EMP_SALARY_MIN" CHECK (salary > 0) ENABLE,
CONSTRAINT "EMP_EMAIL_UK" UNIQUE ("EMAIL")
USING INDEX PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS
STORAGE (INITIAL 65536 NEXT 1048576 MINEXTENTS 1 MAXEXTENTS 2147483645
PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1 BUFFER_POOL DEFAULT FLASH_CACHE DEFAULT CELL_FLASH_CACHE DEFAULT)
TABLESPACE "USERS" ENABLE,
CONSTRAINT "EMP_EMP_ID_PK" PRIMARY KEY ("EMPLOYEE_ID")
USING INDEX PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS
STORAGE (INITIAL 65536 NEXT 1048576 MINEXTENTS 1 MAXEXTENTS 2147483645
PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1 BUFFER_POOL DEFAULT FLASH_CACHE DEFAULT CELL_FLASH_CACHE DEFAULT)
TABLESPACE "USERS" ENABLE,
CONSTRAINT "EMP_DEPT_FK" FOREIGN KEY ("DEPARTMENT_ID")
```





Source/Destination

- Source/Destination**
- [Types to Export](#)
- Specify Objects
- Specify Data
- Export Summary

Connection: [Dropdown]

Export DDL

Pretty Print
 Show Schema
 Grants
 Add BYTE keyword
 Terminator
 Add Force to Views
 Drops
 Cascade Drops
 Storage
 Dependents

Export Data

Format: [insert] [Dropdown]

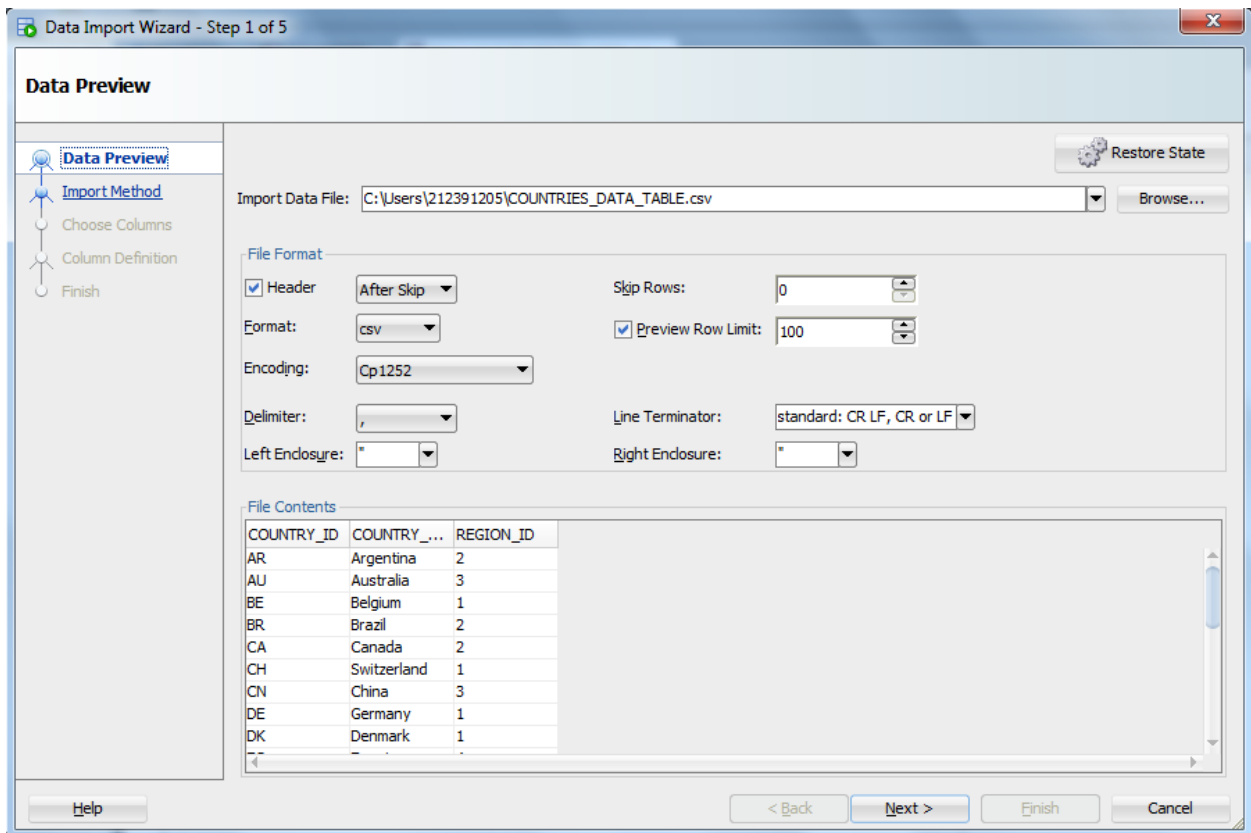
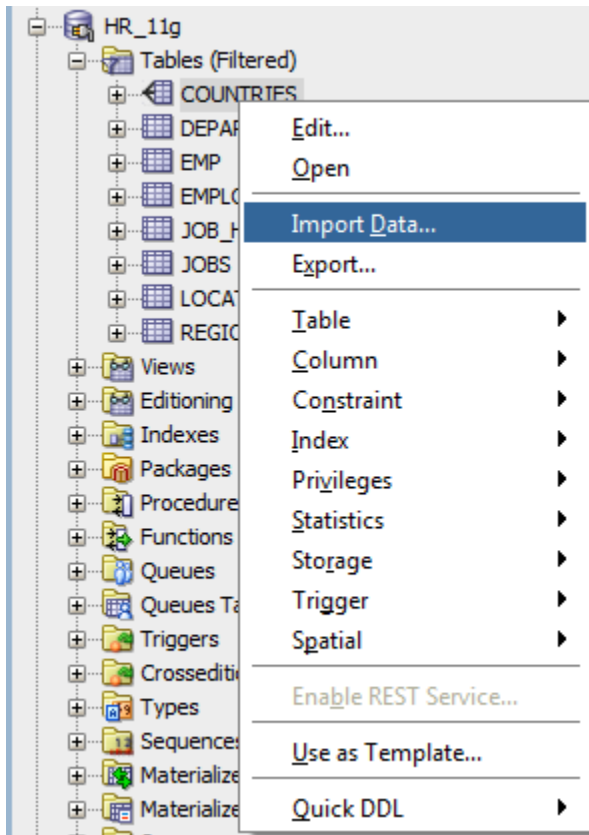
Line Terminator: [environment default] [Dropdown]

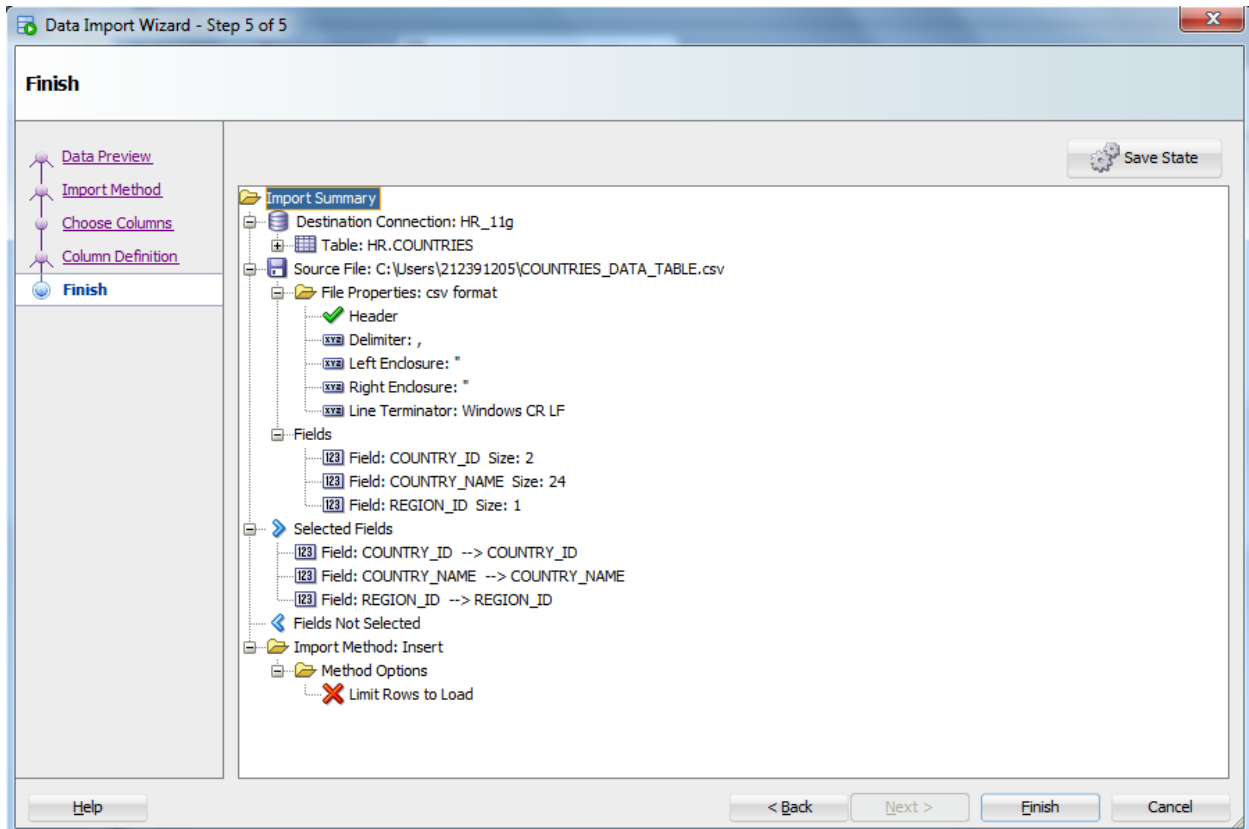
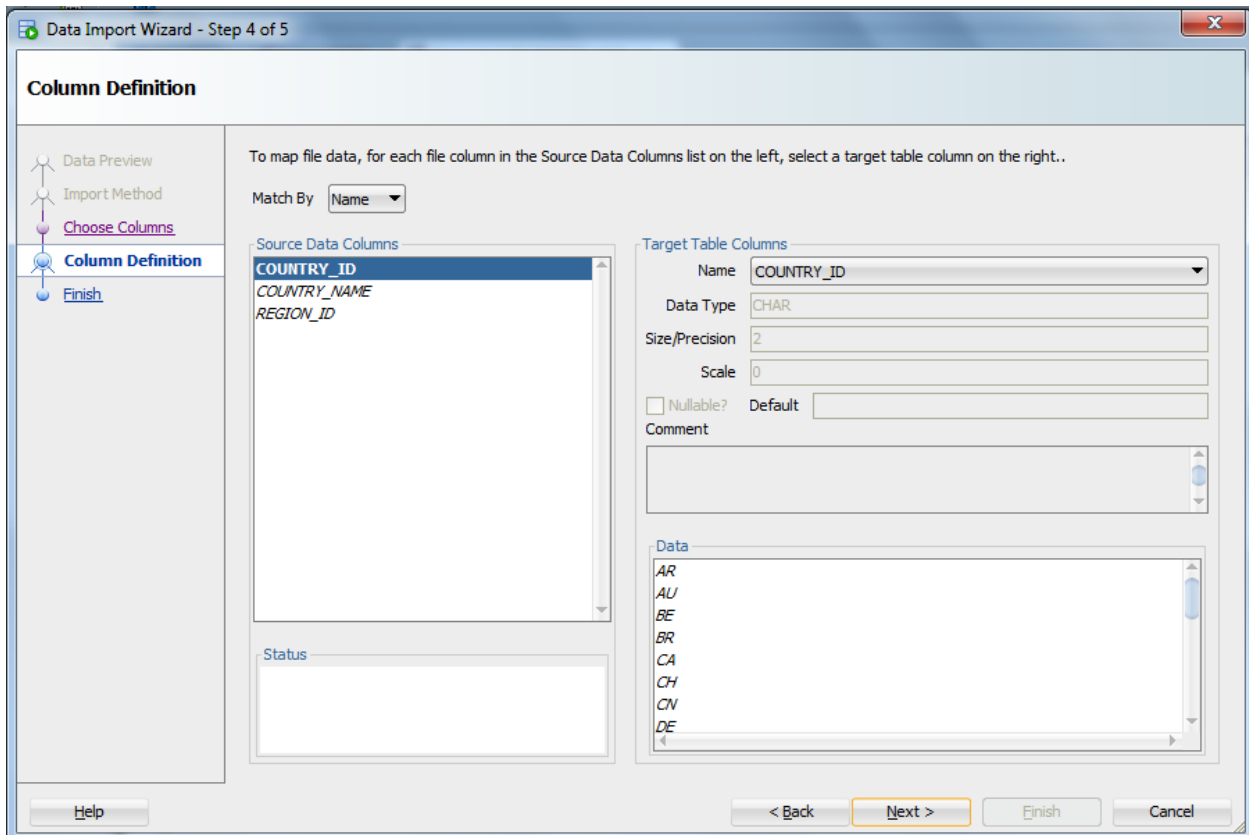
Include Commit Every [100] [Spinner] Rows

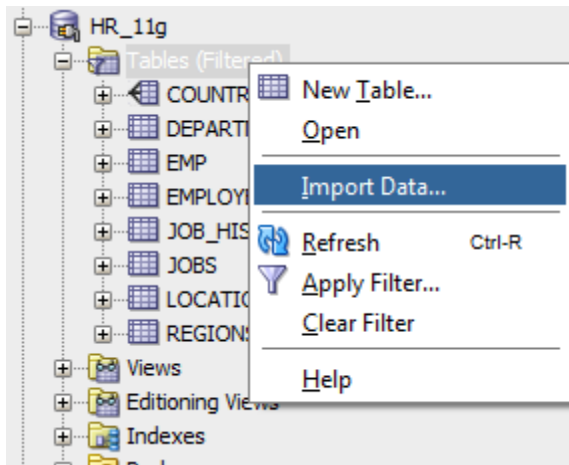
Save As: [Single File] [Dropdown] Compressed Encoding: [Cp1252] [Dropdown]

File: [C:\Users\212391205\export.sql] [Dropdown]

Proceed to summary.







◇ COLUMN_NAME	◇ DATA_TYPE	◇ NULLABLE	DATA_DEFAULT	◇ COLUMN_ID	◇ COMMENTS
EMPLOYEE_ID	NUMBER(6,0)	No	(null)	1	Primary key of
FIRST_NAME	VARCHAR2(20 BYTE)	Yes	(null)	2	First name of
LAST_NAME	VARCHAR2			3	Last name of t
EMAIL	VARCHAR2			4	Email id of th
PHONE_NUMBER	VARCHAR2			5	Phone number c
HIRE_DATE	DATE			6	Date when the
JOB_ID	VARCHAR2			7	Current job of
SALARY	NUMBER(8			8	Monthly salary
COMMISSION_PCT	NUMBER(2,2)	Yes	(null)	9	Commission per
MANAGER_ID	NUMBER(6,0)	Yes	(null)	10	Manager id of
DEPARTMENT_ID	NUMBER(4,0)	Yes	(null)	11	Department id

Export Wizard - Step 1 of 2

Source/Destination

Source/Destination
Export Summary

Connection: HR_11g

Export Data

Format: **csv** Header
Delimiter: delimited
Line Terminator: environment default
Left Enclosure: excel 2003+ (xlsx)
Right Enclosure: "
excel 95-2003 (xls)
excel.xml
Save As: Single fixed compressed Encoding: Cp1252
File: C:\Users\insert Browse...

Proceed to summary.

Help < Back Next > Finish Cancel

Export Wizard - Step 1 of 2

Source/Destination

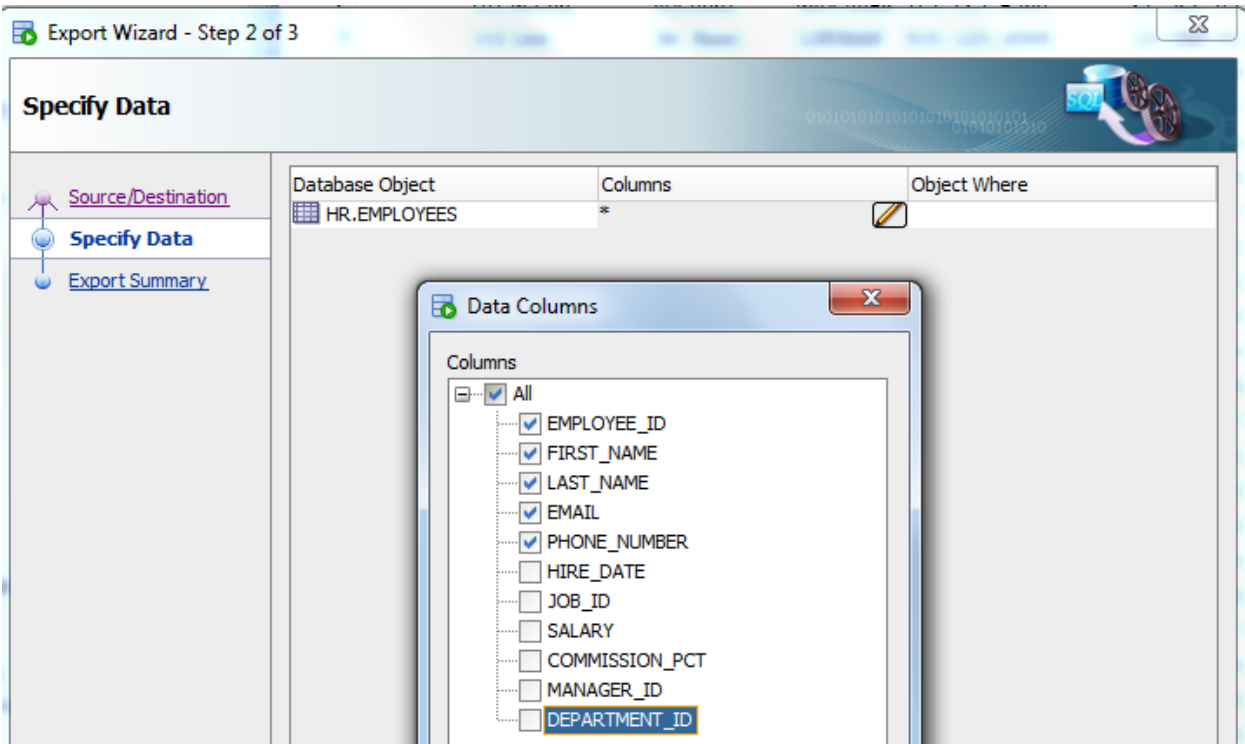
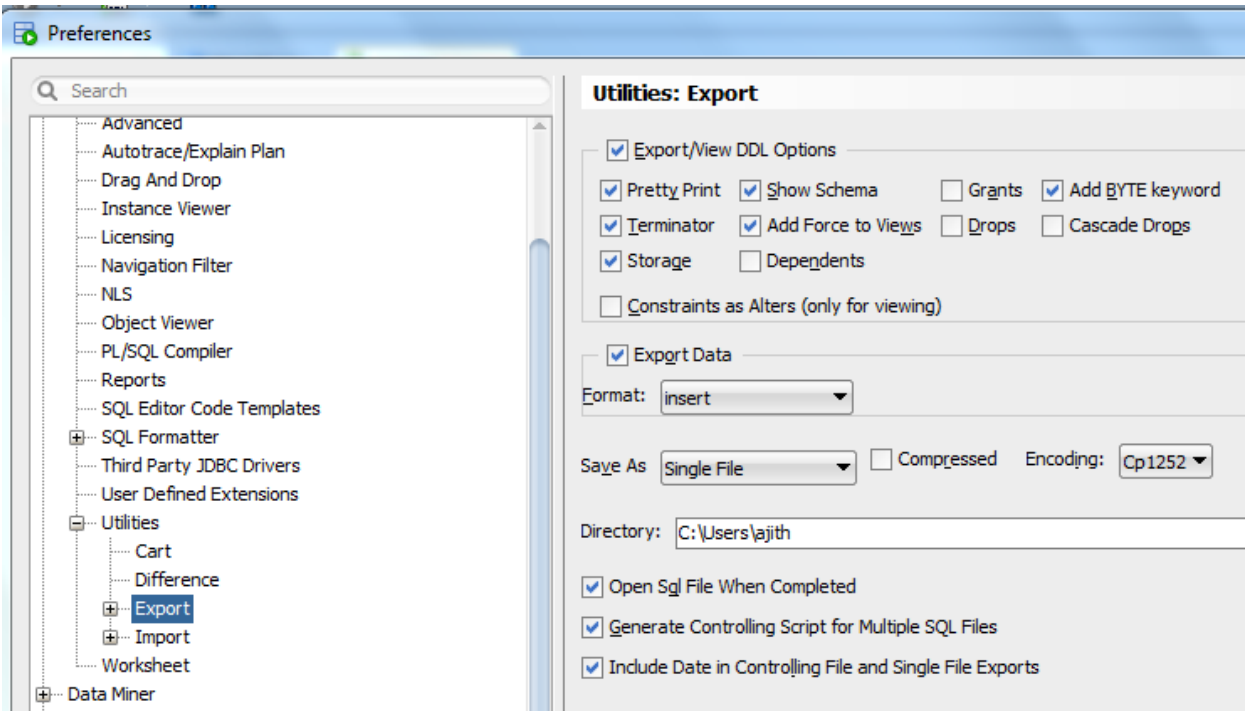
Source/Destination
Export Summary

Connection: SYSTEM_11g

Export Data

Format: insert
Line Terminator: environment default
Table Name: EXPORT_TABLE
 Include Commit Every 100 Rows
Save As: Single File Compressed Encoding: Cp1252
File: C:\Users\212391205\export.sql Browse...

Proceed to summary.



Data Where

Global Where:

Object Where: AND

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER
152	Peter	Hall	PHALL	011.44.1344.478968
201	Michael	Hartstein	MHARTSTE	515.123.5555
205	Shelley	Higgins	SHIGGINS	515.123.8080
118	Guy	Himuro	GHIMURO	515.127.4565
103	Alexander	Hunold	AHUNOLD	590.423.4567
175	Alyssa	Hutton	AHUTTON	011.44.1644.429266

Sample data:

Start Page | EMPLOYEES | HR_11g

Worksheet | Query Builder

```

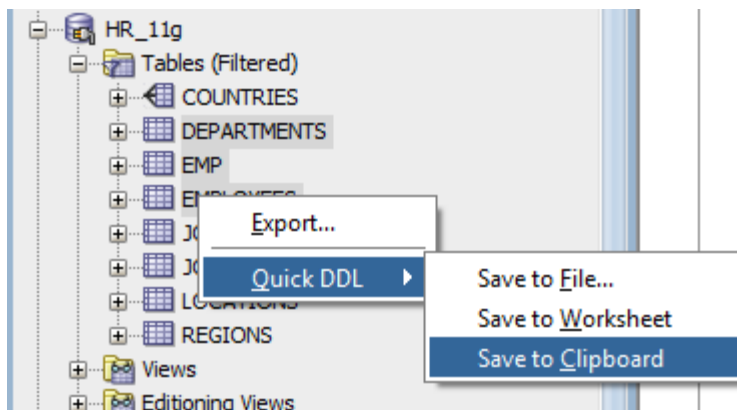
REM INSERTING into HR.EMPLOYEES
SET DEFINE OFF;
Insert into HR.EMPLOYEES (EMPLOYEE_ID, FIRST_NAME, LAST_NAME, EMAIL, PHONE_NUMBER, HIRE_DATE, JOB_ID, SAL
Insert into HR.EMPLOYEES (EMPLOYEE_ID, FIRST_NAME, LAST_NAME, EMAIL, PHONE_NUMBER, HIRE_DATE, JOB_ID, SAL
Insert into HR.EMPLOYEES (EMPLOYEE_ID, FIRST_NAME, LAST_NAME, EMAIL, PHONE_NUMBER, HIRE_DATE, JOB_ID, SAL
Insert into HR.EMPLOYEES (EMPLOYEE_ID, FIRST_NAME, LAST_NAME, EMAIL, PHONE_NUMBER, HIRE_DATE, JOB_ID, SAL
Insert into HR.EMPLOYEES (EMPLOYEE_ID, FIRST_NAME, LAST_NAME, EMAIL, PHONE_NUMBER, HIRE_DATE, JOB_ID, SAL
Insert into HR.EMPLOYEES (EMPLOYEE_ID, FIRST_NAME, LAST_NAME, EMAIL, PHONE_NUMBER, HIRE_DATE, JOB_ID, SAL
Insert into HR.EMPLOYEES (EMPLOYEE_ID, FIRST_NAME, LAST_NAME, EMAIL, PHONE_NUMBER, HIRE_DATE, JOB_ID, SAL
Insert into HR.EMPLOYEES (EMPLOYEE_ID, FIRST_NAME, LAST_NAME, EMAIL, PHONE_NUMBER, HIRE_DATE, JOB_ID, SAL
Insert into HR.EMPLOYEES (EMPLOYEE_ID, FIRST_NAME, LAST_NAME, EMAIL, PHONE_NUMBER, HIRE_DATE, JOB_ID, SAL
Insert into HR.EMPLOYEES (EMPLOYEE_ID, FIRST_NAME, LAST_NAME, EMAIL, PHONE_NUMBER, HIRE_DATE, JOB_ID, SAL

```

Responsive Table

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMIS
100	Steven	King	SKING	515.123.4567	17-JUN-03	AD_PRES	24000	
101	Neena	Kochhar	NKOCHHAR	515.123.4568	21-SEP-05	AD_VP	17000	
102	Lex	De Haan	LDEHAAN	515.123.4569	13-JAN-01	AD_VP	17000	
103	Alexander	Hunold	AHUNOLD	590.423.4567	03-JAN-06	IT_PROG	9000	
104	Bruce	Ernst	BERNST	590.423.4568	21-MAY-07	IT_PROG	6000	
105	David	Austin	DAUSTIN	590.423.4569	25-JUN-05	IT_PROG	4800	
106	Valli	Pataballa	VPATABAL	590.423.4560	05-FEB-06	IT_PROG	4800	

```
CREATE TABLE "HR"."EMPLOYEES"
( "EMPLOYEE_ID" NUMBER(6,0),
"FIRST_NAME" VARCHAR2(20 BYTE),
"LAST_NAME" VARCHAR2(25 BYTE) CONSTRAINT "EMP_LAST_NAME_NN" NOT NULL ENABLE,
"EMAIL" VARCHAR2(25 BYTE) CONSTRAINT "EMP_EMAIL_NN" NOT NULL ENABLE,
"PHONE_NUMBER" VARCHAR2(20 BYTE),
"HIRE_DATE" DATE CONSTRAINT "EMP_HIRE_DATE_NN" NOT NULL ENABLE,
"JOB_ID" VARCHAR2(10 BYTE) CONSTRAINT "EMP_JOB_NN" NOT NULL ENABLE,
"SALARY" NUMBER(8,2),
"COMMISSION_PCT" NUMBER(2,2),
"MANAGER_ID" NUMBER(6,0),
"DEPARTMENT_ID" NUMBER(4,0),
CONSTRAINT "EMP_SALARY_MIN" CHECK (salary > 0) ENABLE,
CONSTRAINT "EMP_EMAIL_UK" UNIQUE ("EMAIL")
USING INDEX PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS
STORAGE (INITIAL 65536 NEXT 1048576 MINEXTENTS 1 MAXEXTENTS 2147483645
PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1 BUFFER_POOL DEFAULT FLASH_CACHE DEFAULT CELL_FLASH_CACHE DEFAULT)
TABLESPACE "USERS" ENABLE,
CONSTRAINT "EMP_EMP_ID_PK" PRIMARY KEY ("EMPLOYEE_ID")
USING INDEX PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS
STORAGE (INITIAL 65536 NEXT 1048576 MINEXTENTS 1 MAXEXTENTS 2147483645
PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1 BUFFER_POOL DEFAULT FLASH_CACHE DEFAULT CELL_FLASH_CACHE DEFAULT)
TABLESPACE "USERS" ENABLE,
CONSTRAINT "EMP_DEPT_FK" FOREIGN KEY ("DEPARTMENT_ID")
```




Export Wizard - Step 1 of 5

Source/Destination

Source/Destination

- Types to Export
- Specify Objects
- Specify Data
- Export Summary

Connection:  [v]

Export DDL

Pretty Print Show Schema Grants Add BYTE keyword

Terminator Add Force to Views Drops Cascade Drops

Storage Dependents

Export Data

Format: [insert v]

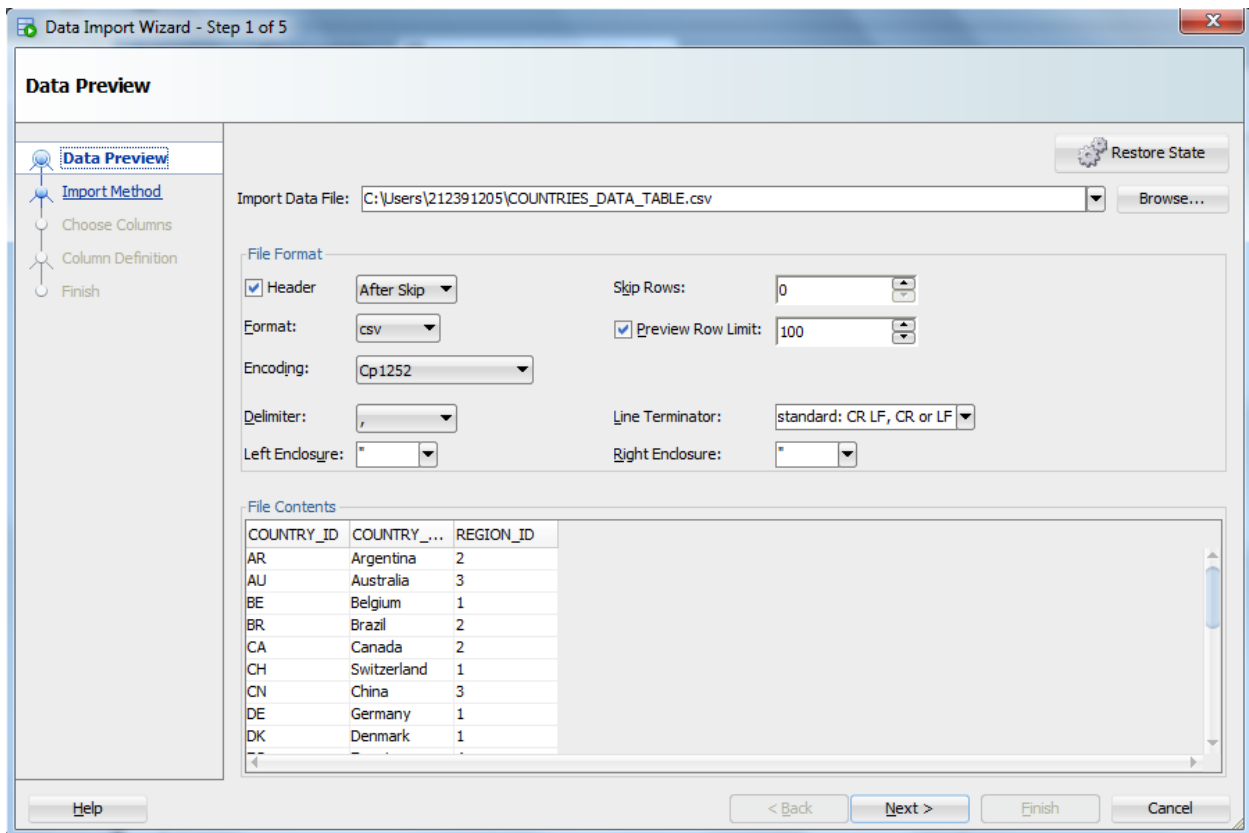
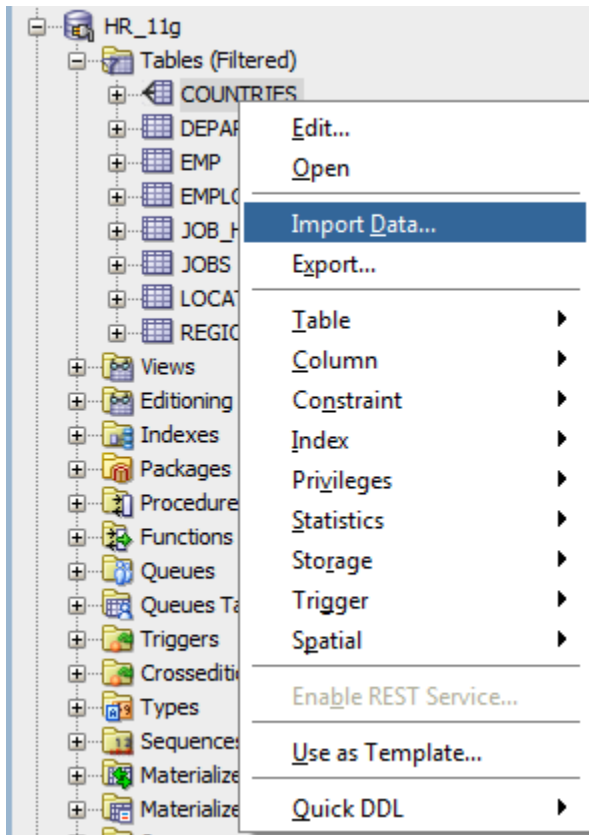
Line Terminator: [environment default v]

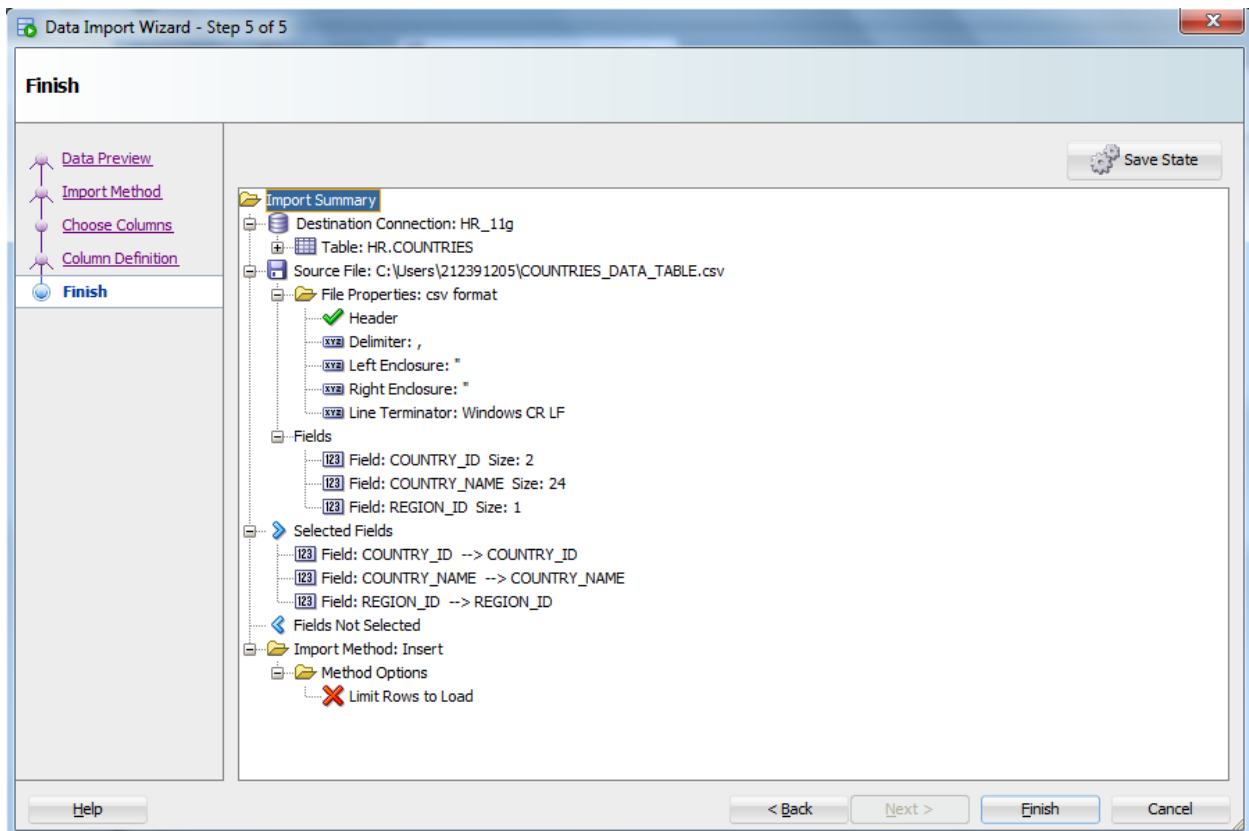
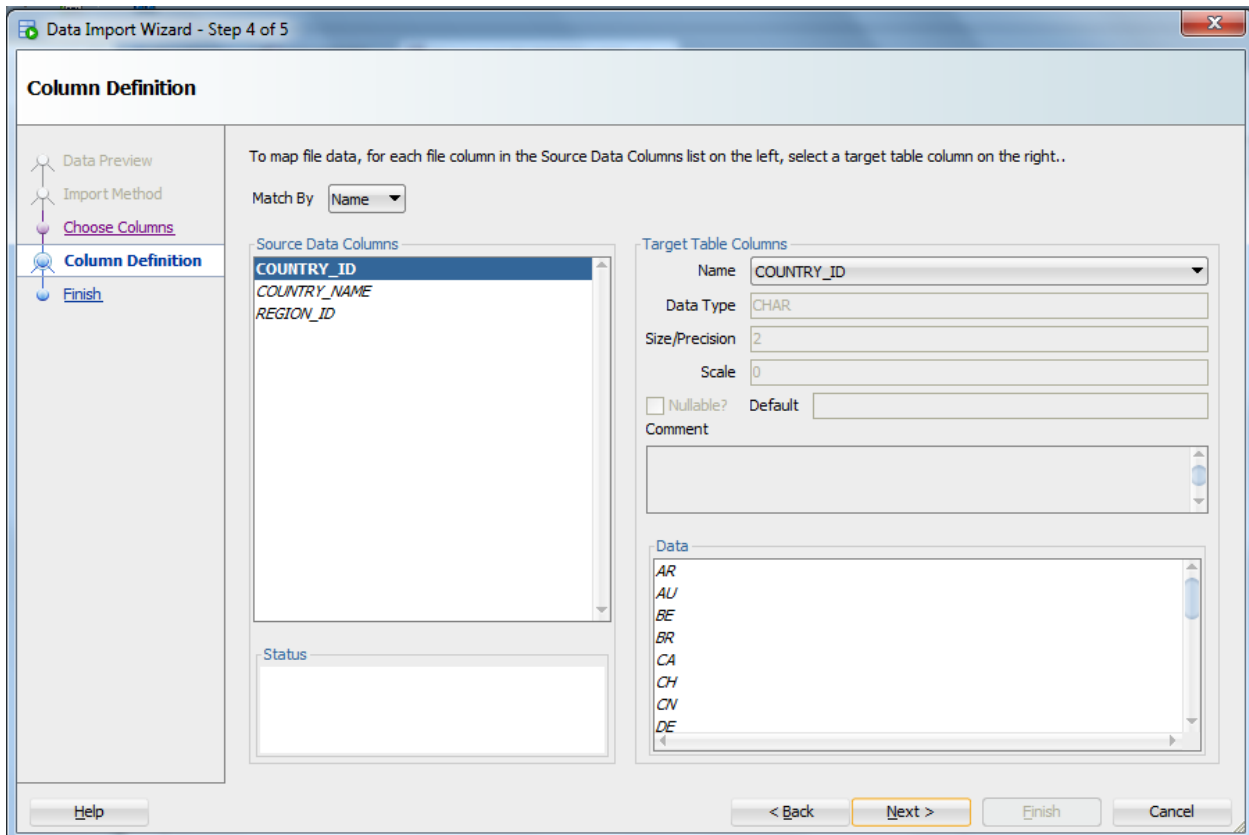
Include Commit Every [100] Rows

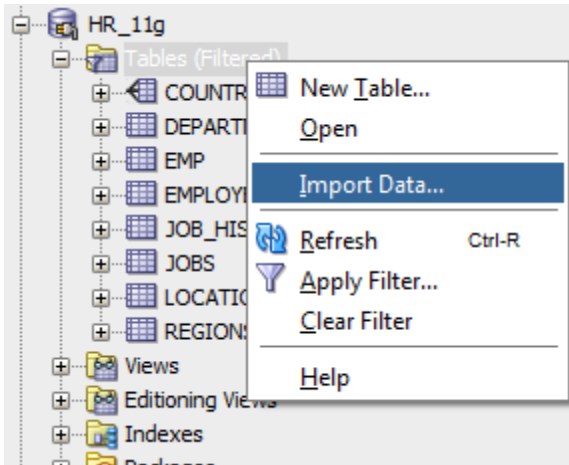
Save As: [Single File v] Compressed Encoding: [Cp1252 v]

File: [C:\Users\212391205\export.sql v]

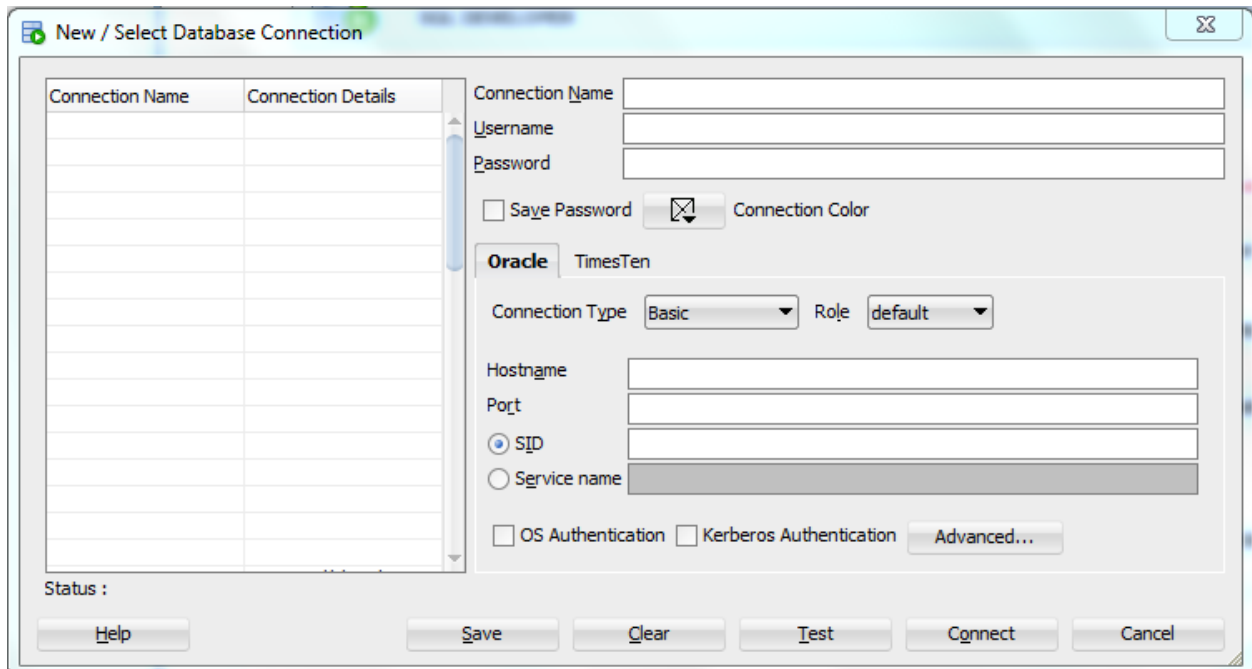
Proceed to summary.







Chapter 8



Connection Name

Username

Password

Save Password Connection Color

Oracle TimesTen

Connection Type **Basic** Role **default**

Hostname

Port

SID Service name

Local/Bequeath

SSH

OS Authentication Kerberos Authentication

Connection Name

Username

Password

Save Password Connection Color

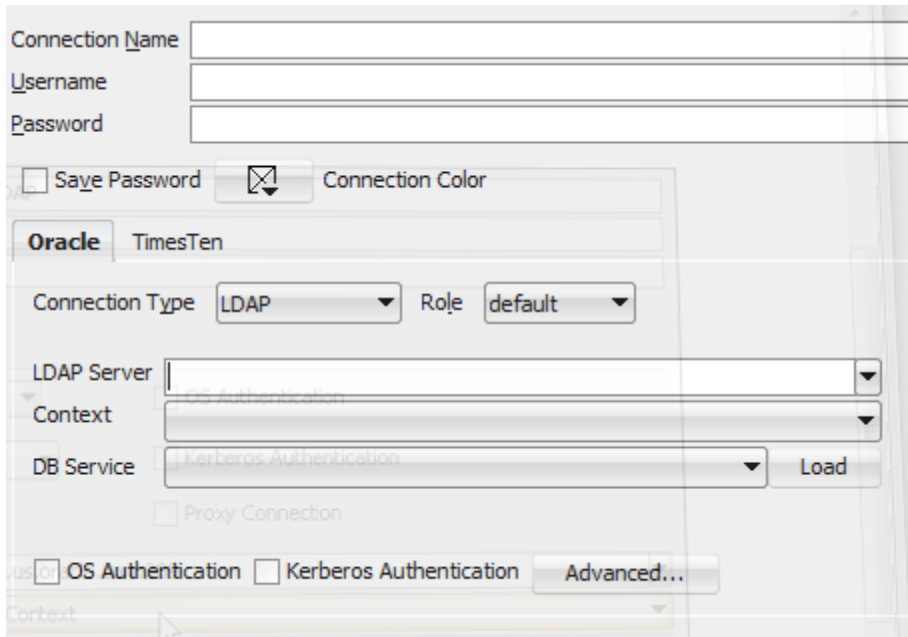
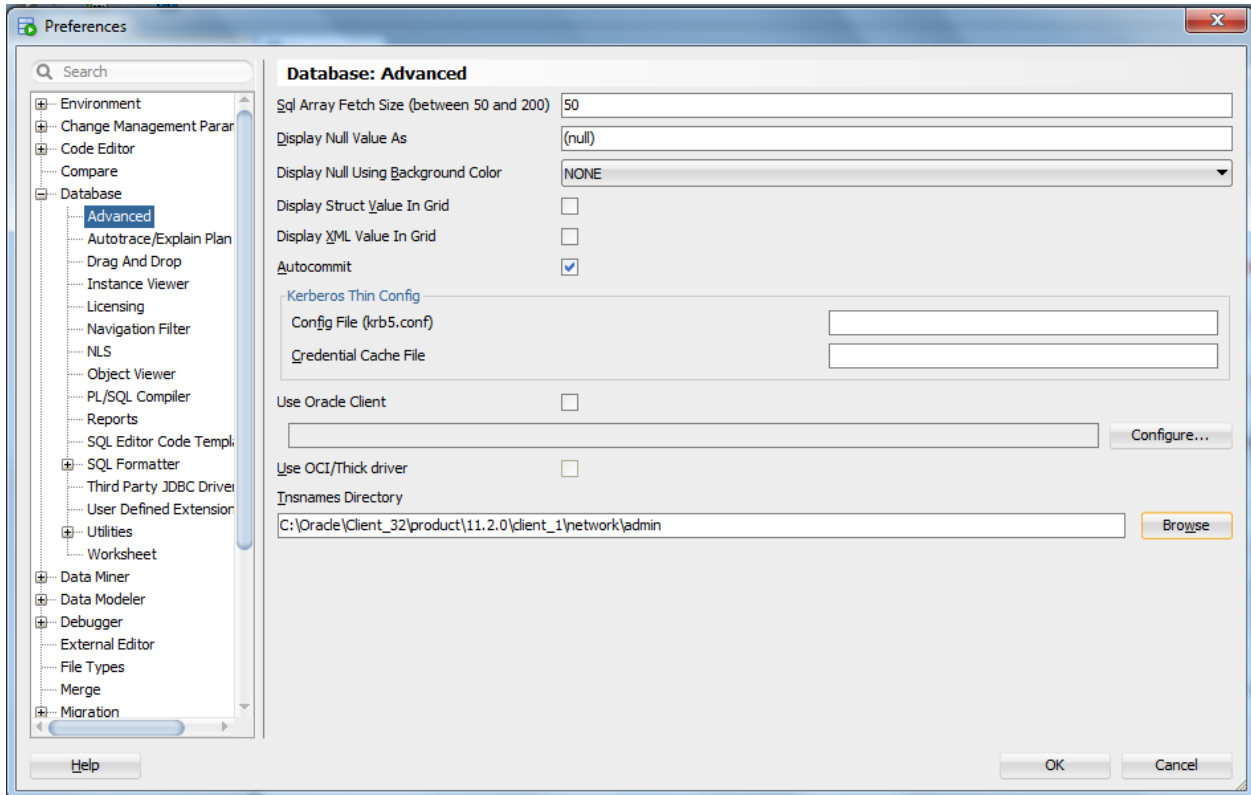
Oracle TimesTen

Connection Type **TNS** Role **default**

Network Alias Connect Identifier

ajith11grac
ajith12crac
ajithebs11i
ajithebsR12

OS Authentication Kerberos Authentication



Connection Name

Username

Password

Save Password Connection Color

Oracle TimesTen

Connection Type Role

Custom JDBC URL

OS Authentication Kerberos Authentication

Connection Name

Username

Password

Save Password Connection Color

Oracle **TimesTen**

Connection Type Autocommit

DSN

Connection Attributes

Enable Cache/Load tables from Oracle database

Oracle Database Password

Oracle Net Service Name

Connections

sampledb_1122

- Cache Groups
- Replication Schemes
- Tables
- Views
- Indexes
- Sequences
- Materialized Views
- Materialized View Logs
- Synonyms
- Public Synonyms
- Packages
- Procedures
- Functions
- Other Users
 - 212391205
 - GRID
 - SYS
 - SYSTEM
 - TTREP
- Cache Groups
- Replication Schemes
- Tables
 - CLIENTFAILOVER
 - REPELEMENTS
 - REPLICATIONS
 - REPNETWORK
 - REPPEERS
 - REPSTORES**
 - REPSUBSCRIPTIONS
 - REPTABLES
 - TTSTORES

sampledb_1122 x REPSTORES x

Columns | Data | Grants | Statistics | Sizes | Indexes | Aging attributes | SQL | Model

Actions...

COLUMN NAME	DATA TYPE	NULLABLE	DATA DEFAULT	COLUMN ID	PRIMARY KEY
1 REPLICATION_NAME	TT_CHAR (31 BYTE)	No	(null)	1	No
2 REPLICATION_OWNER	TT_CHAR (31 BYTE)	No	(null)	2	No
3 TT_STORE_ID	TT_BIGINT	No	(null)	3	No
4 PEER_TIMEOUT	TT_INTEGER	No	(null)	4	No
5 FAIL_THRESHOLD	TT_INTEGER	No	(null)	5	No
6 HEARTBEAT_FACTOR	BINARY_DOUBLE	Yes	(null)	6	No

Start Page x SYSTEM_11g x

3.66700006 seconds

Worksheet | Query Builder

```
SELECT UPPER(SYS_CONTEXT('USERENV', 'OS_USER')) FROM DUAL;

CREATE USER "OPS$AJNARAYA-LAP\AJNARAYA" IDENTIFIED EXTERNALLY;
GRANT CREATE SESSION TO "OPS$AJNARAYA-LAP\AJNARAYA";
```

Query Result x | Script Output x

Task completed in 3.667 seconds

```
User "OPS$AJNARAYA-LAP\AJNARAYA" created.

Grant succeeded.
```

Connection Name
Username
Password

Save Password Connection Color

Oracle TimesTen

Connection Type Role

Hostname
Port
 SID
 Service name

OS Authentication Kerberos Authentication

Start Page x SYSTEM_11g x

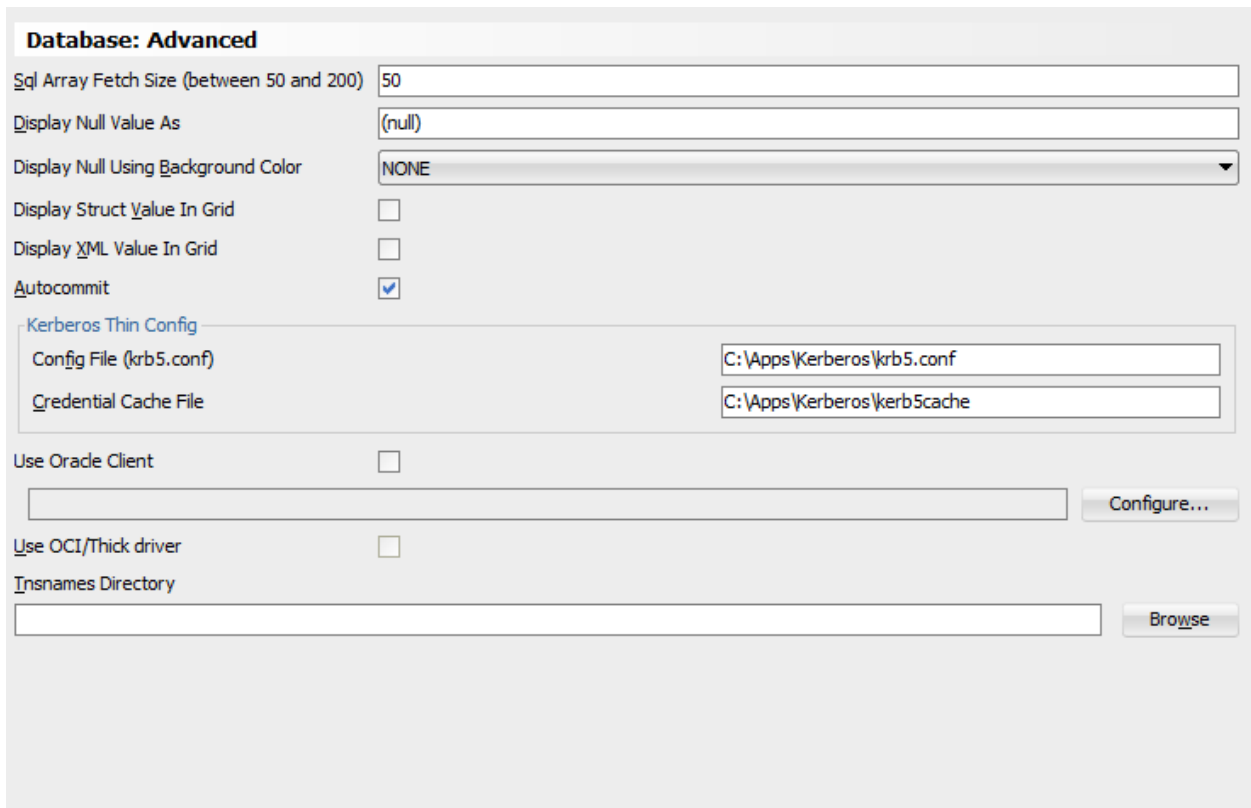
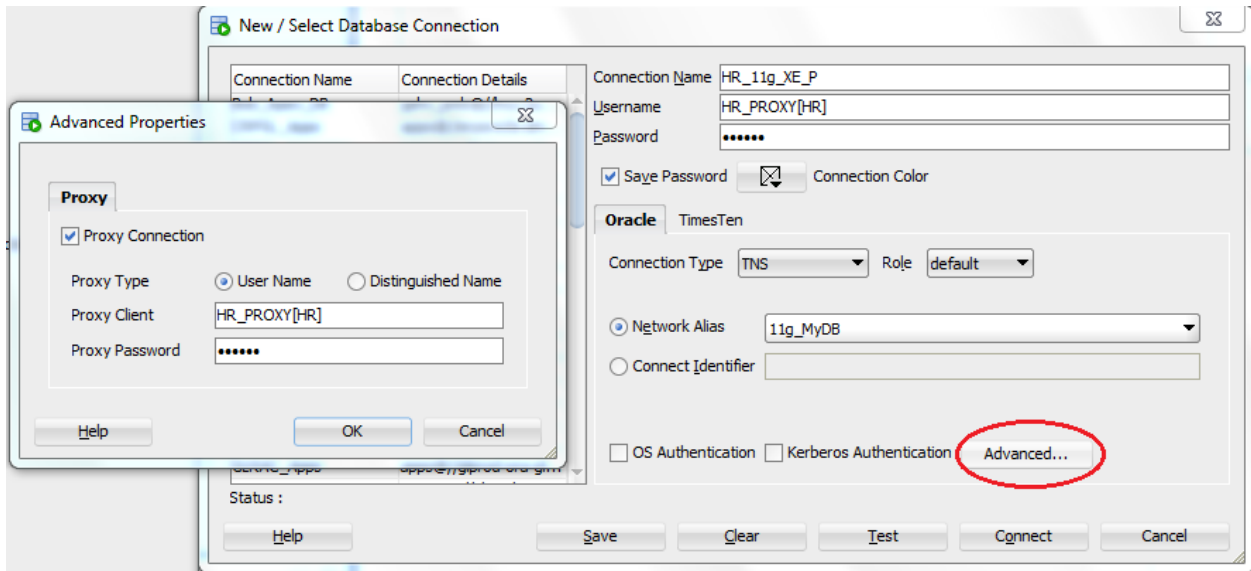
Worksheet Query Builder

```
GRANT CONNECT, RESOURCE TO HR_PROXY IDENTIFIED BY ORACLE;  
ALTER USER HR GRANT CONNECT THROUGH HR_PROXY;
```

Query Result x Script Output x Query Result 1 x

Task completed in 0.265 seconds

```
Grant succeeded.  
User HR altered.
```



Connection Name:
 Username:
 Password:
 Save Password Connection Color

Oracle TimesTen

Connection Type: Role:

Hostname:
 Port:
 SID:
 Service name:

OS Authentication Kerberos Authentication

Check for Updates - Step 1 of 4

Select update source

Search for updates published to Update Centers, or install an update from a bundle you have already downloaded.

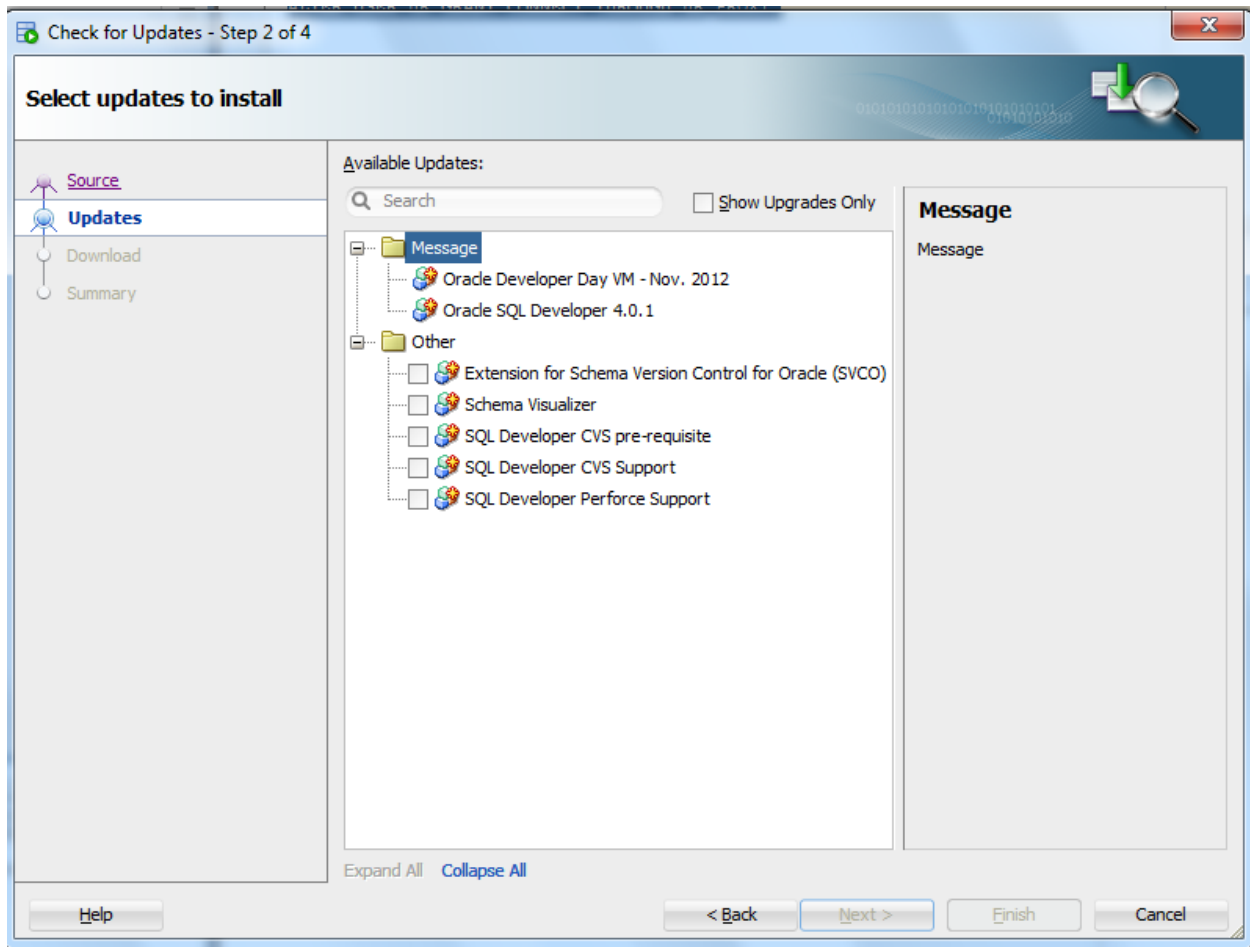
Automatically check for updates at startup

Search Update Centers: [Proxy Settings...](#)

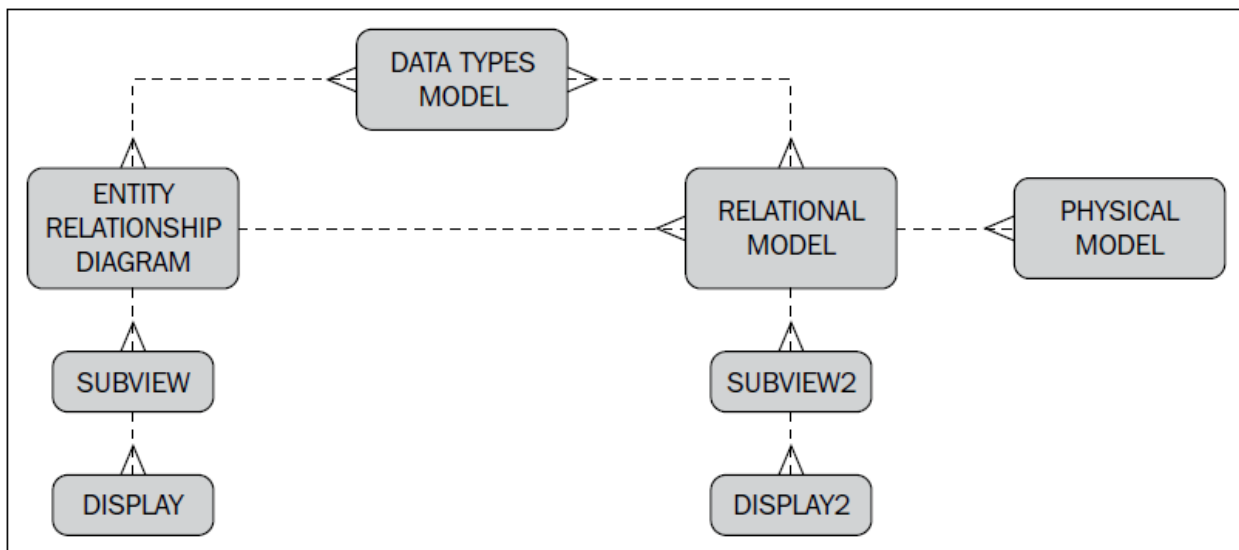
<input checked="" type="checkbox"/>	Oracle SQL Developer http://apex.oracle.com/pls/apex/dbtools/usage/cfu	<input type="button" value="Add..."/>
<input type="checkbox"/>	Oracle Extensions http://www.oracle.com/ocom/groups/public/@otn/documents/webcontent/162031.xml	<input type="button" value="Remove"/>
<input type="checkbox"/>	Third Party SQL Developer Extensions http://www.oracle.com/ocom/groups/public/@otn/documents/webcontent/162033.xml	<input type="button" value="Edit..."/>

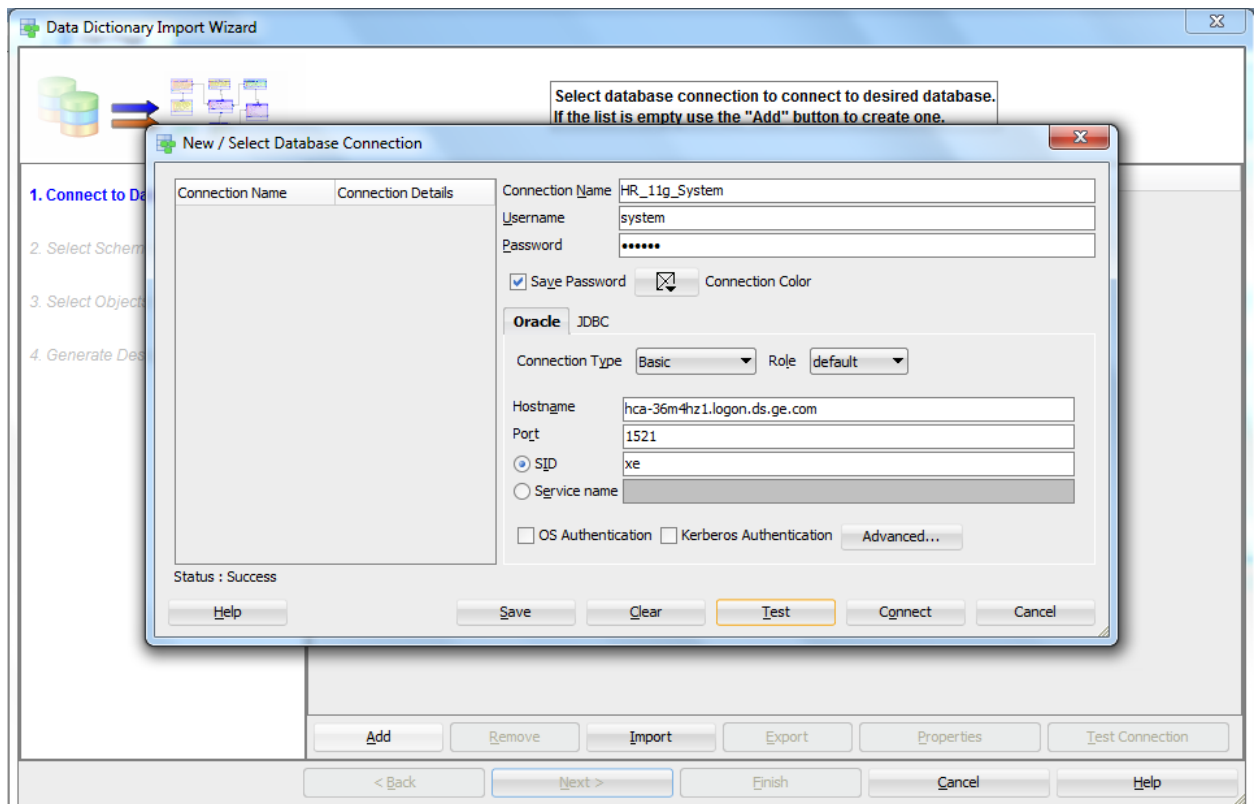
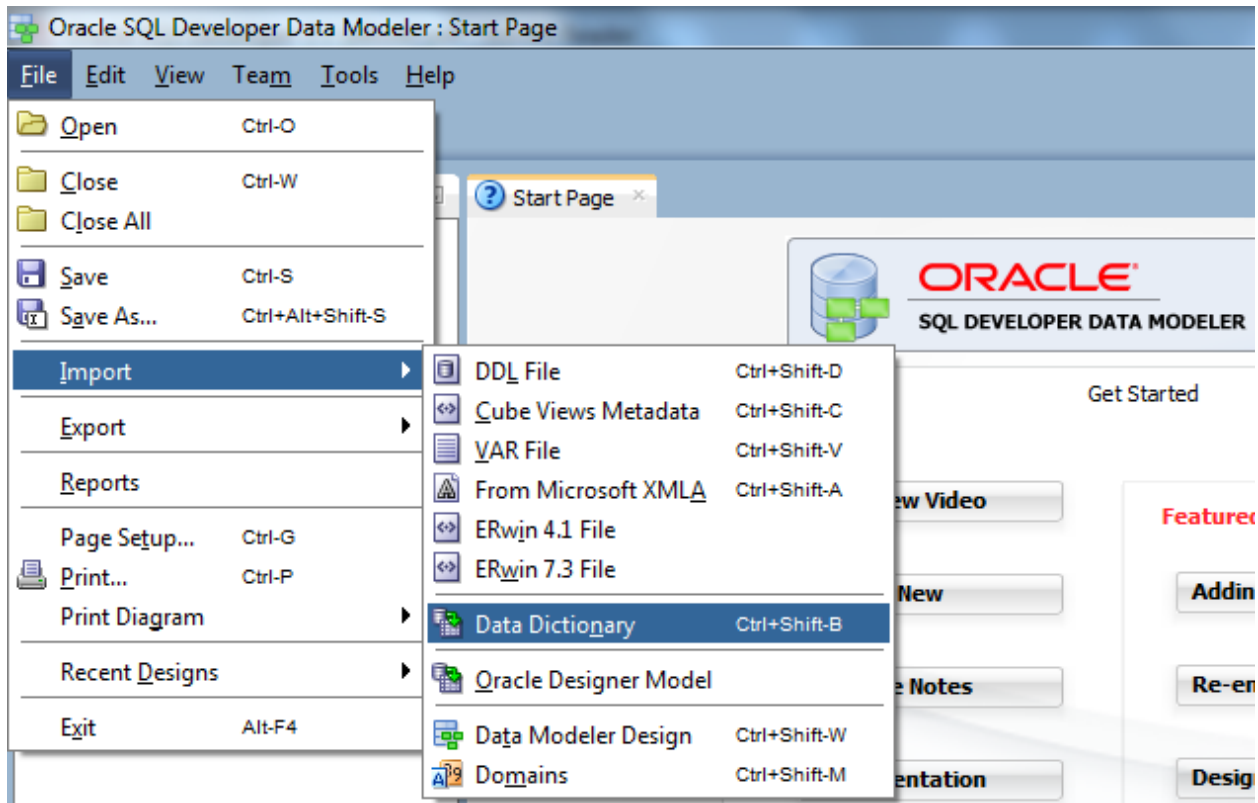
Install From Local File

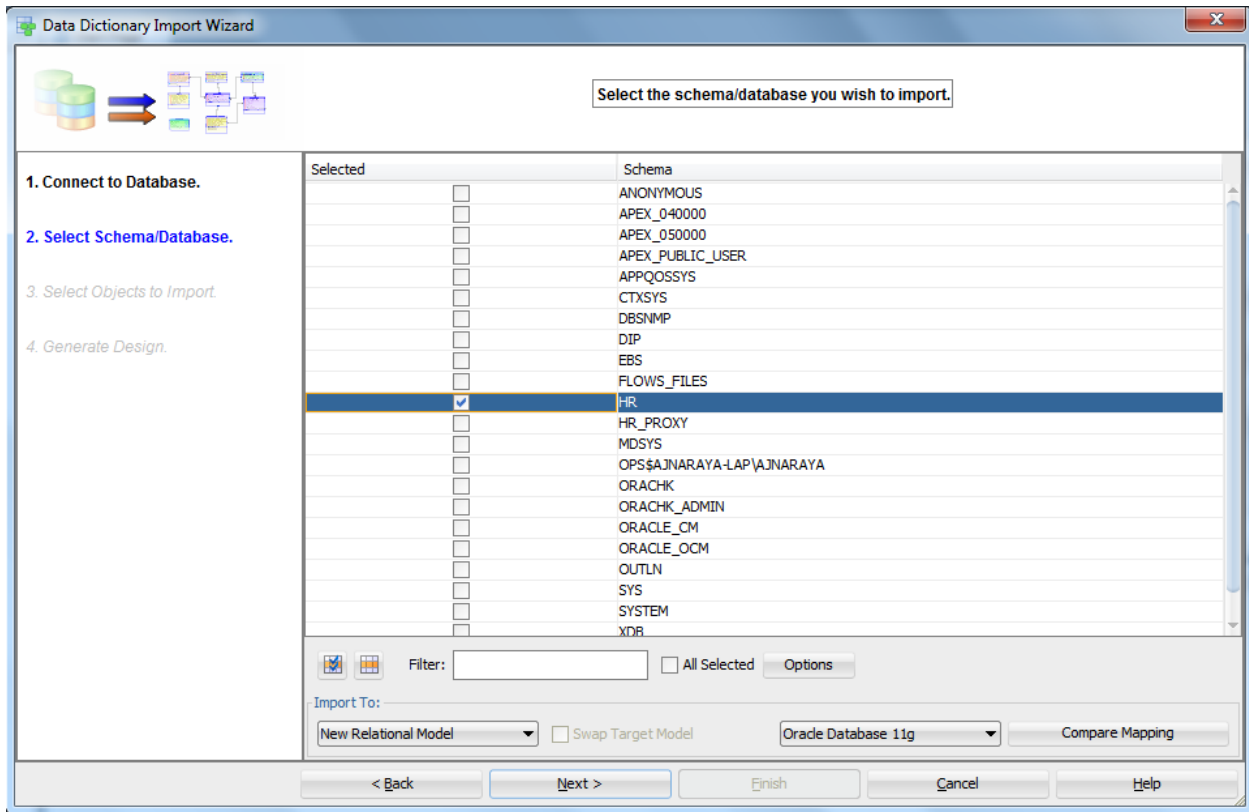
File Name:

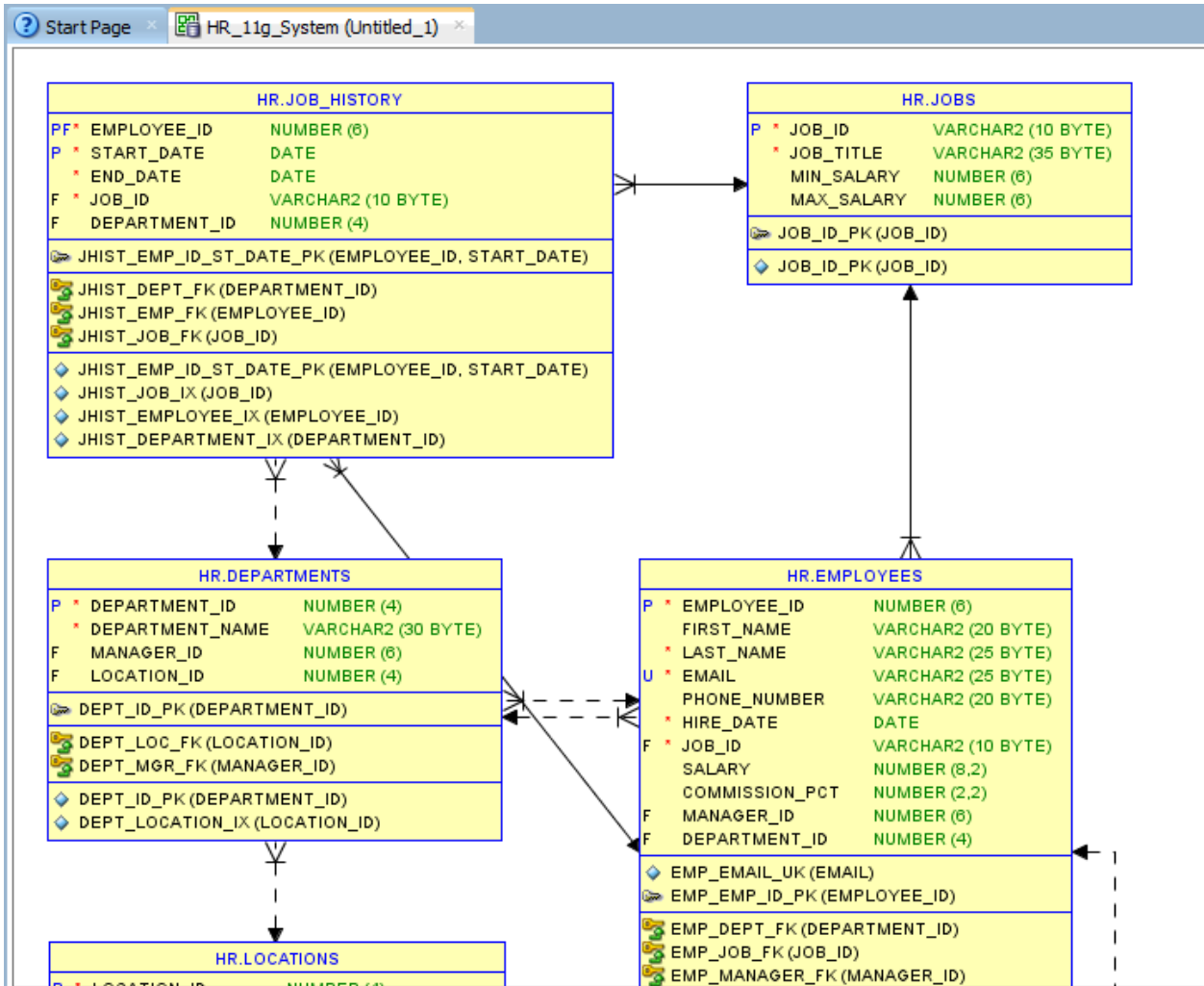


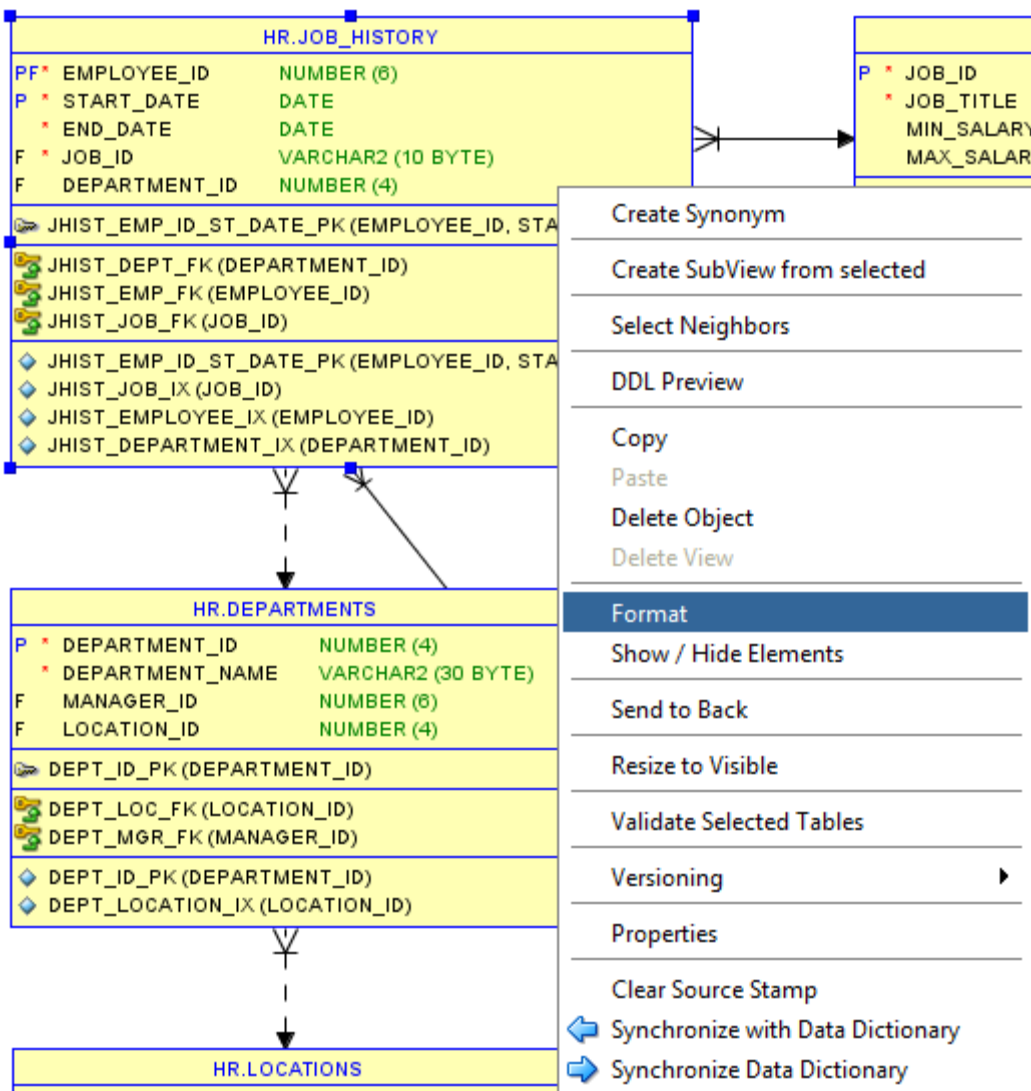
Chapter 9











Oracle SQL Developer Data Modeler : HR_11g_System (Untitled)

File Edit View Team Tools Help

Undo Straighten Lines of HR_11g_System Ctrl-Z
Redo Ctrl-Y

Cut Ctrl-X
Copy Ctrl-C
Paste Ctrl-V
Duplicate Selection
Delete Delete

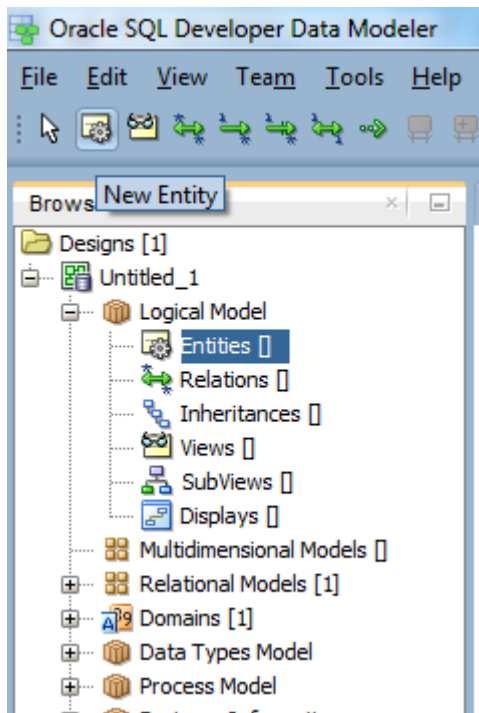
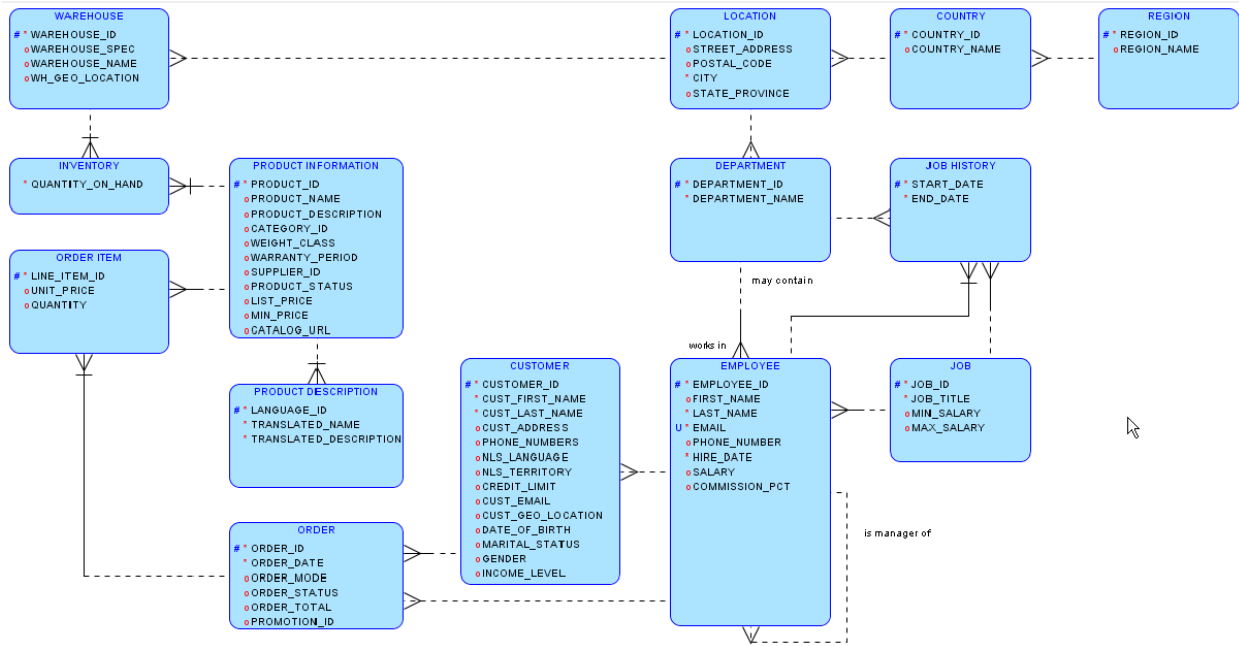
Align Left Ctrl-L
Align Top Ctrl-T
Equal Width
Equal Height

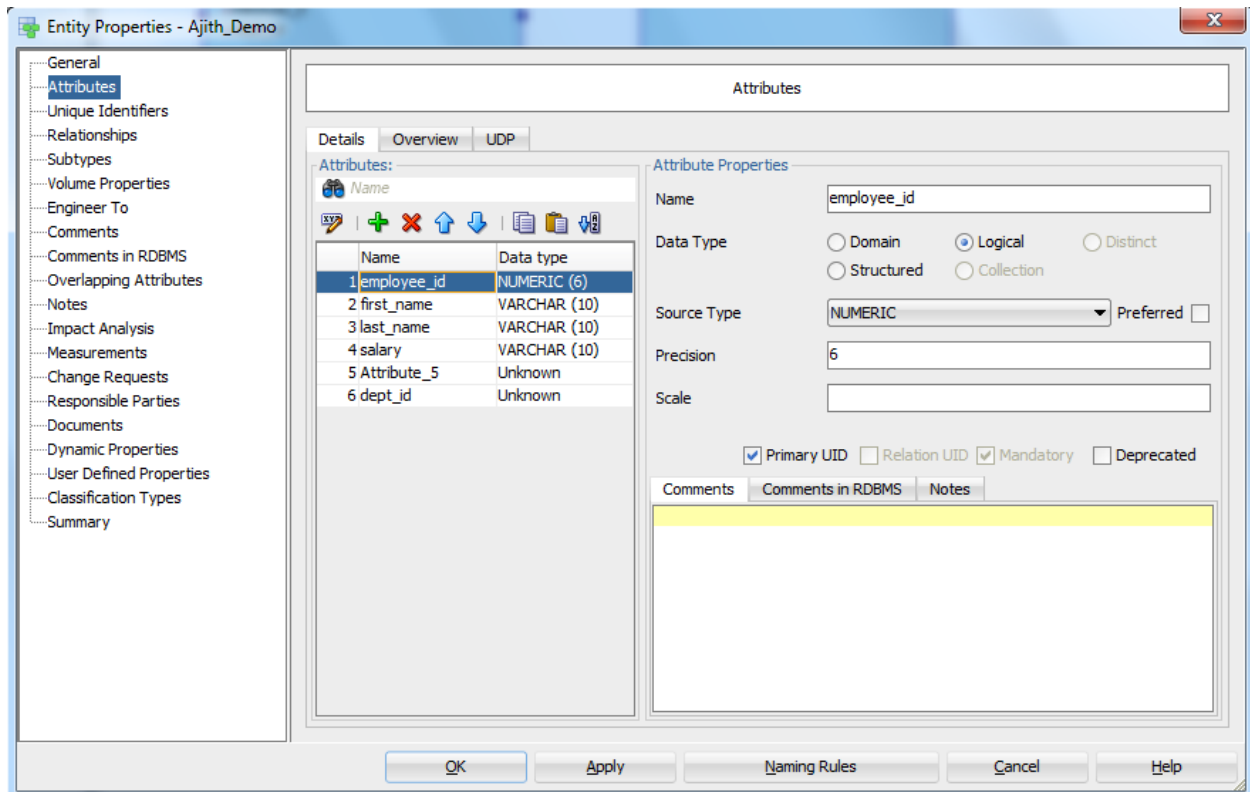
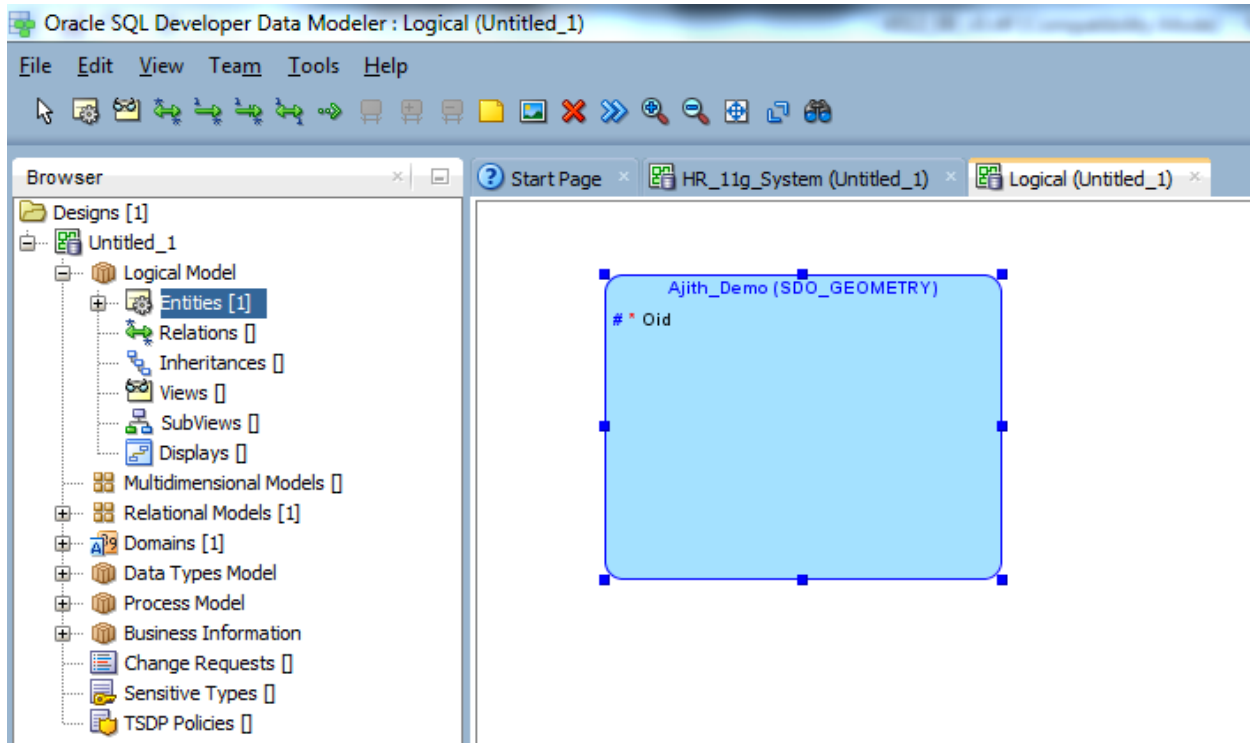
Multi-Cursor
Select All Ctrl-A
Block Selection

Find...
Find Next F3
Find Previous Shift-F3
Replace... Ctrl-R

Incremental Find Forward
Incremental Find Backward

Properties





Relation Properties - dept_id

General

Name: dept_id

Use surrogate keys:

Source Cardinality		Target Cardinality	
Source:	Ajith_dept	Target:	Ajith_Demo
Source key:		Target key:	Ajith_Demo.Ajith_De...
Name on Source:		Name on Target:	
Source Entity Synonym:	Ajith_dept	Target Entity Synonym:	Ajith_Demo
Source to Target Cardinality:	1	Target to Source Cardinality:	*
Source Optional:	<input checked="" type="checkbox"/>	Target Optional:	<input checked="" type="checkbox"/>
Transferable:	<input checked="" type="checkbox"/>	Transferable:	<input checked="" type="checkbox"/>

Dominant Role: None

Identifying: In Arc:

Delete Rule: NO ACTION

OK Apply Cancel Help

Domains Administration

Choose domain

Domains File: Select

Available Domains:

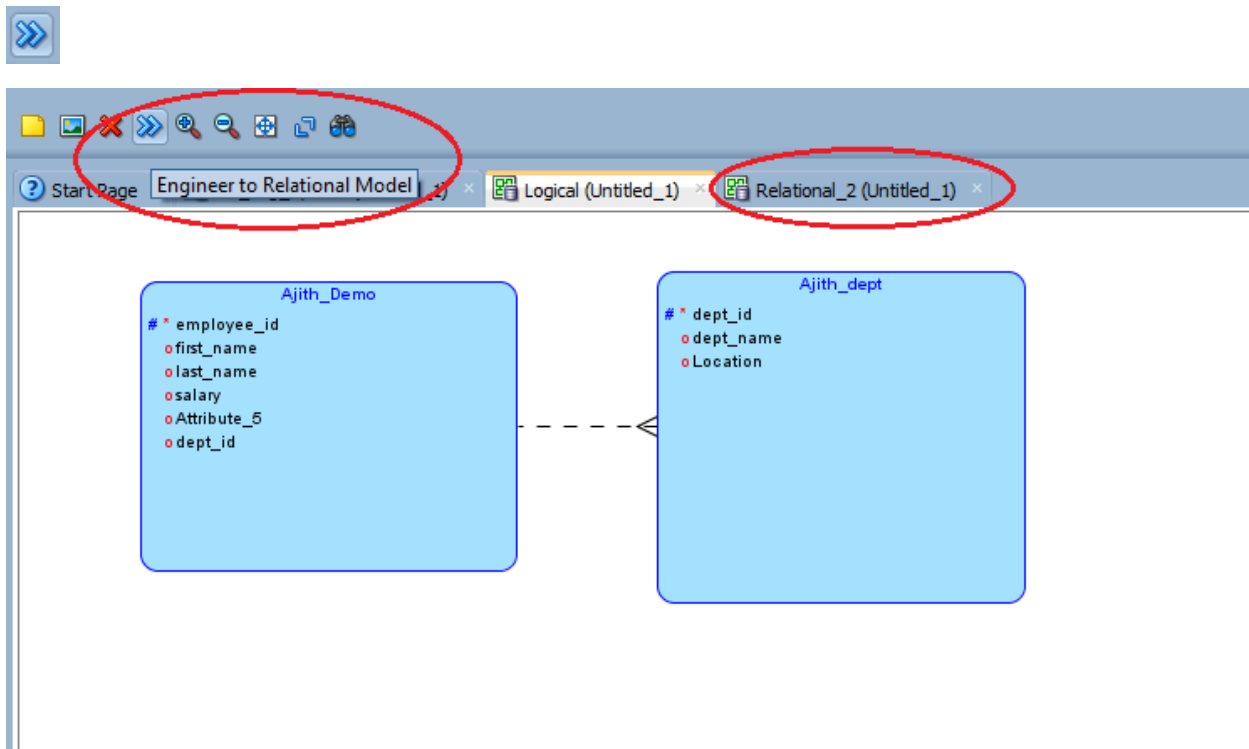
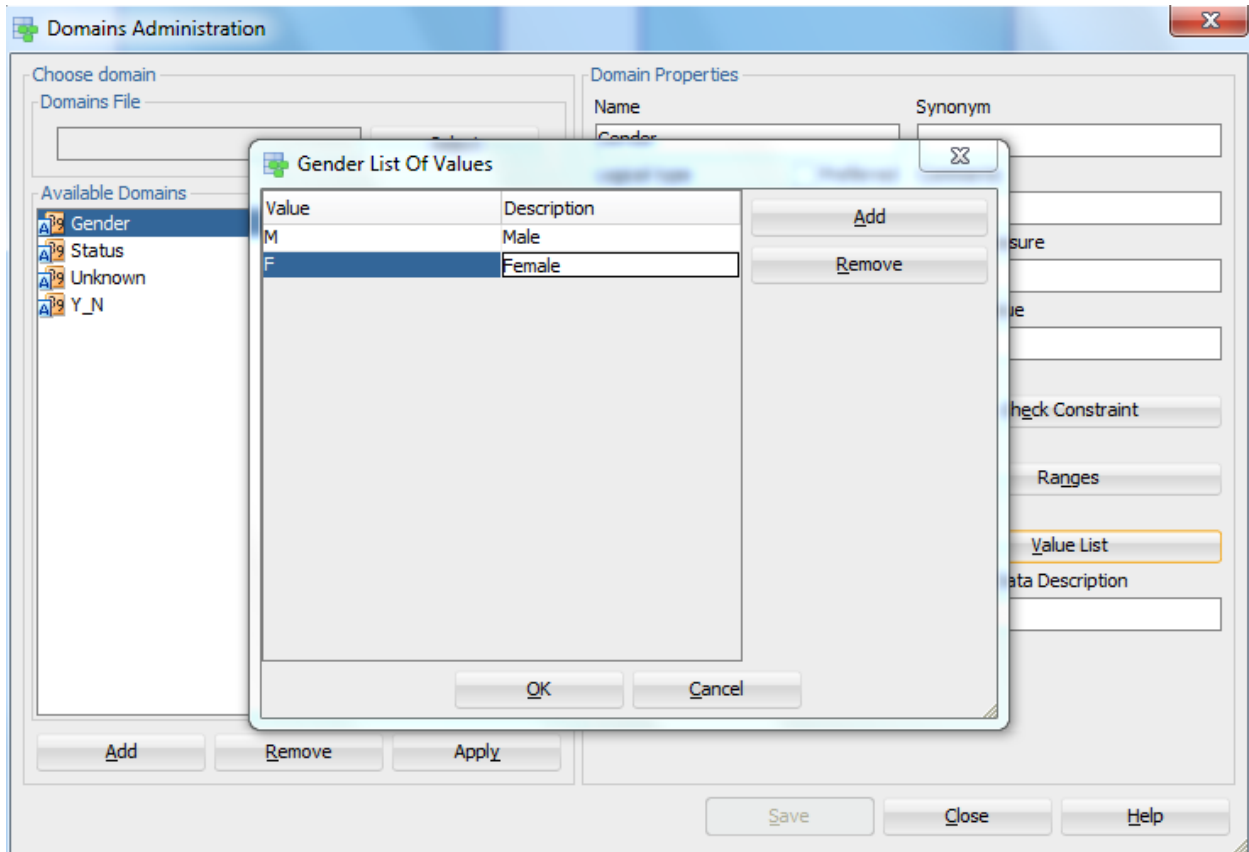
- Gender
- Status
- Unknown
- Y_N

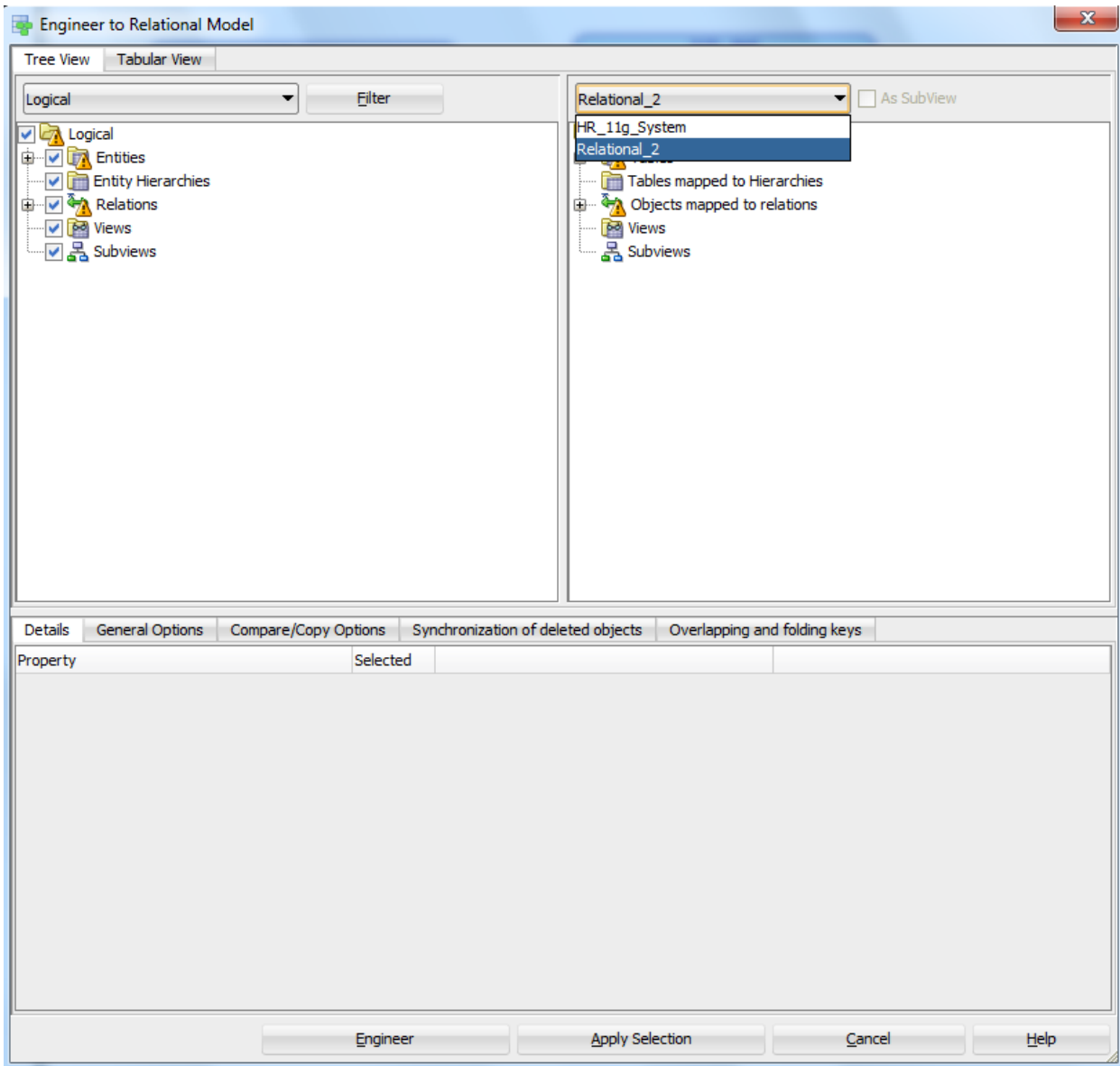
Add Remove Apply

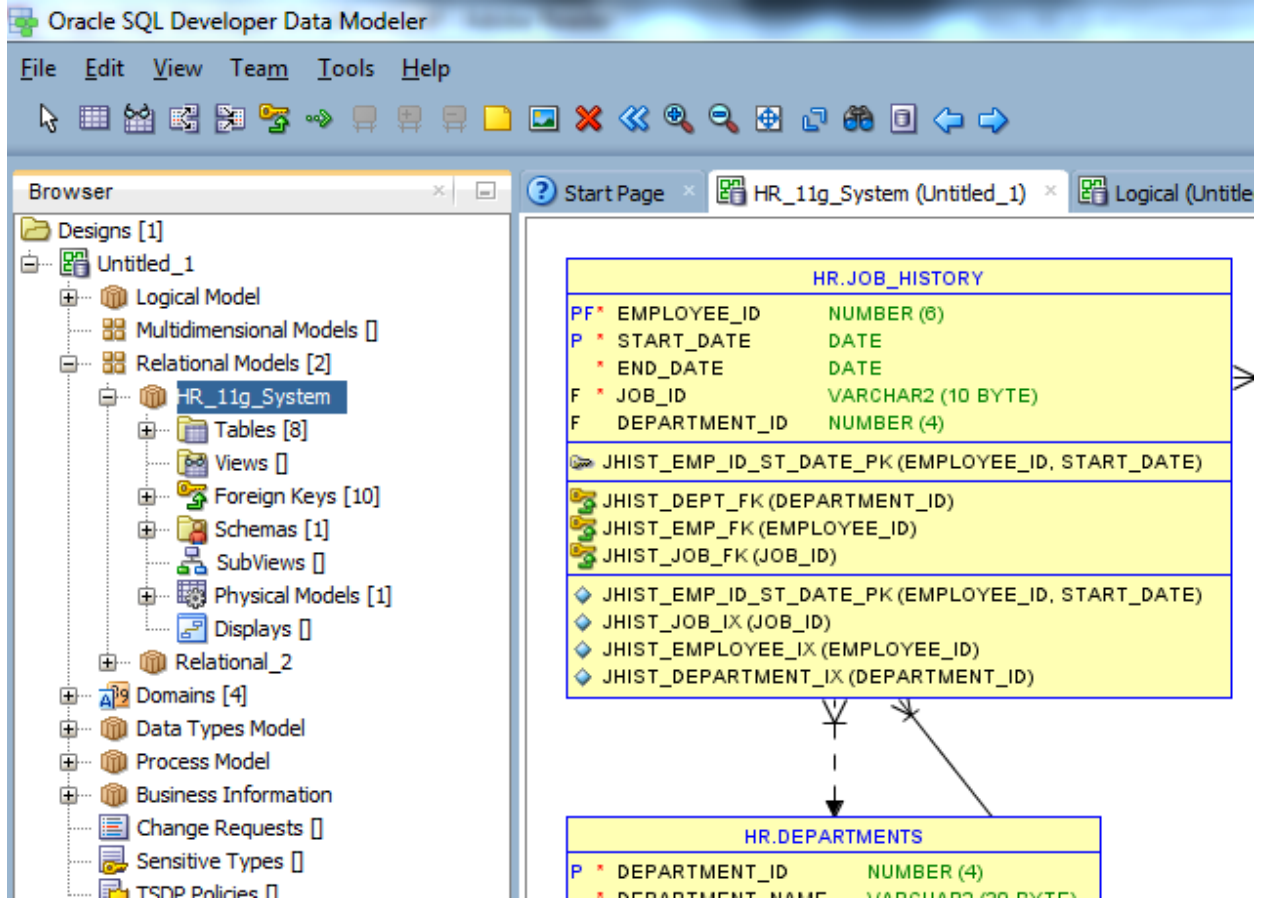
Domain Properties

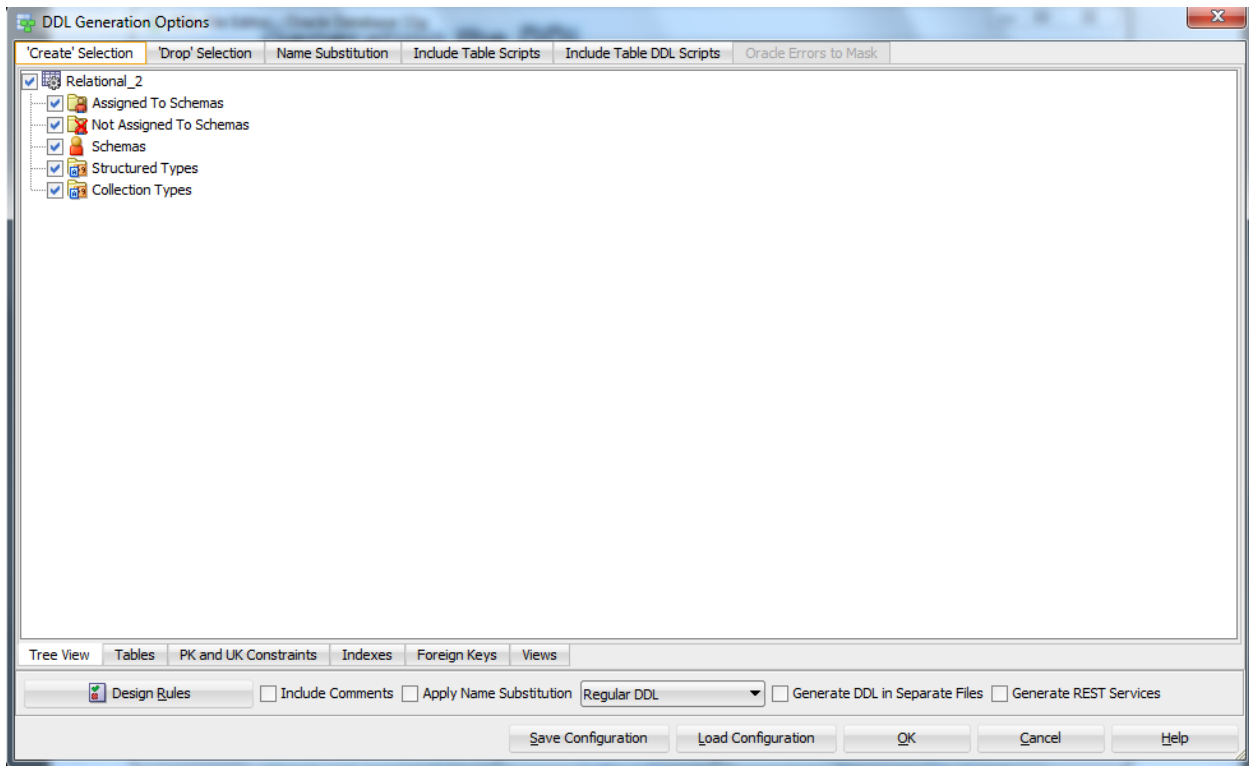
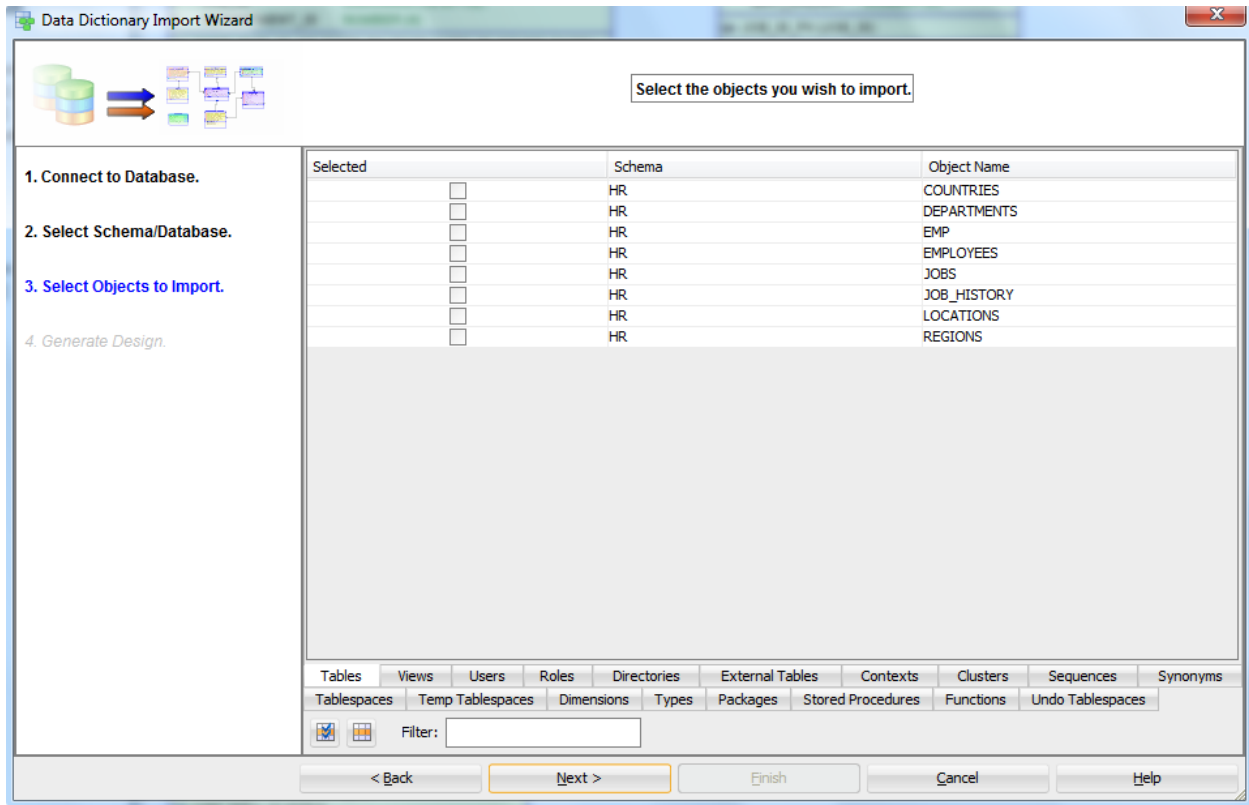
Name	Y_N	Synonym	
Logical type	<input type="checkbox"/> Preferred	Comments	
Logical type	VARCHAR	Unit of Measure	
Size	2	Default Value	
Units		Check Constraint	
Precision		Ranges	
Scale		Value List	
Domains File	defaultdomains	Sensitive Data Description	
Sensitive Type			

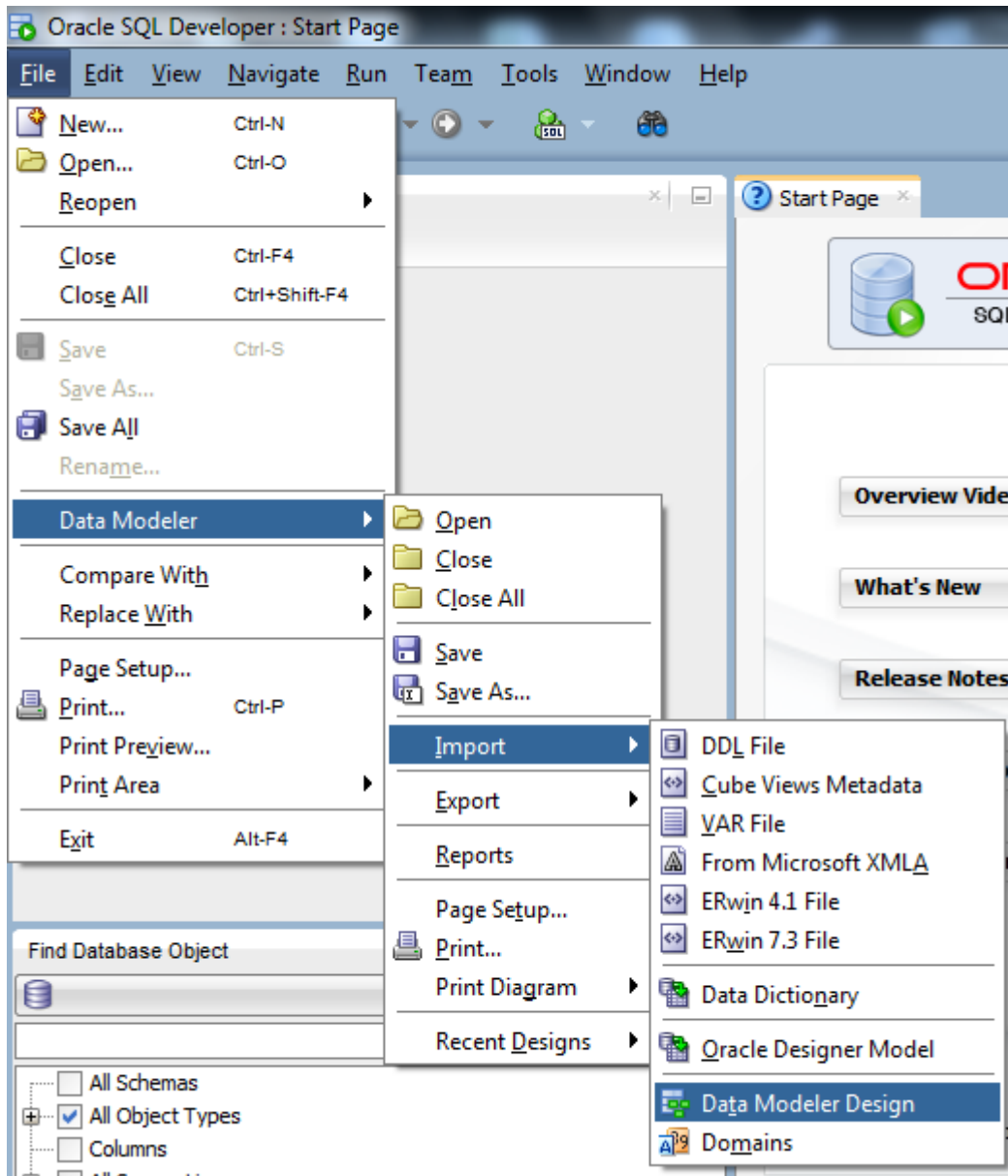
Save Close Help



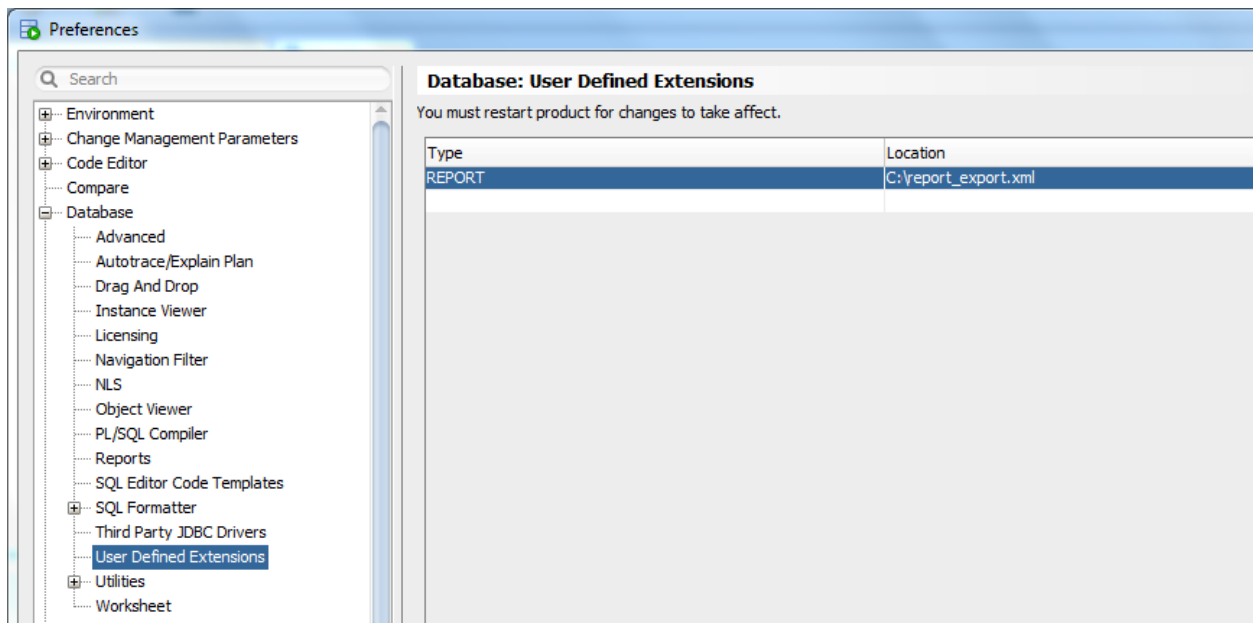
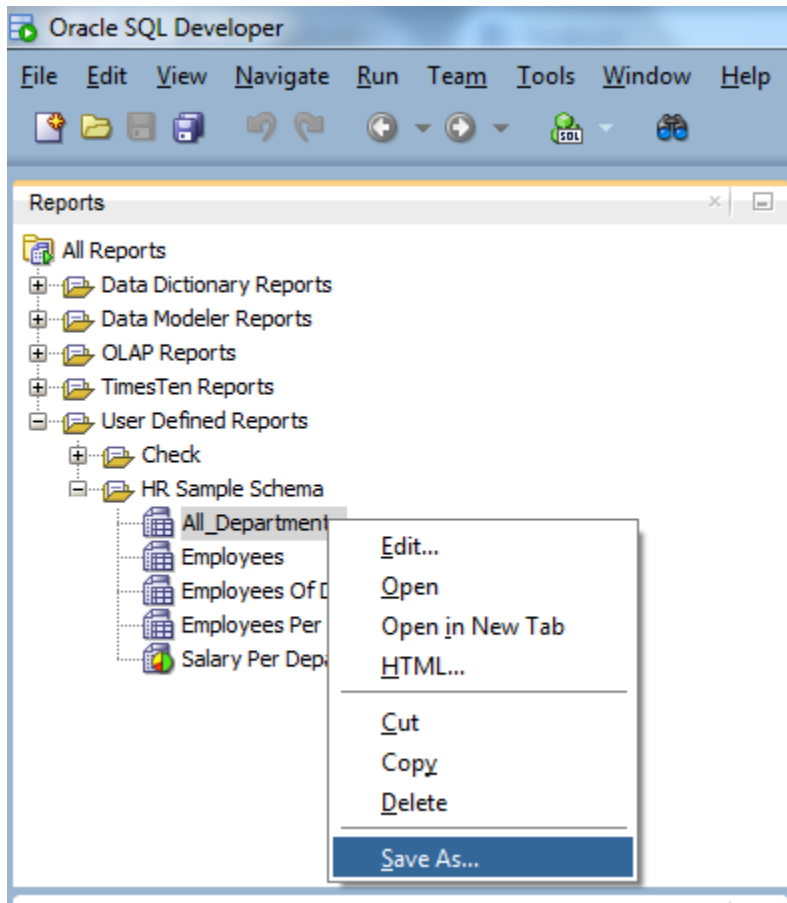








Chapter 10



Oracle SQL Developer

File Edit View Navigate Run Team Tools Window Help

Connections

- HR_11g
 - Tables (Filtered)
 - Views
 - EMP_DETAILS_VIEW
 - Editing Views
 - Indexes
 - Packages

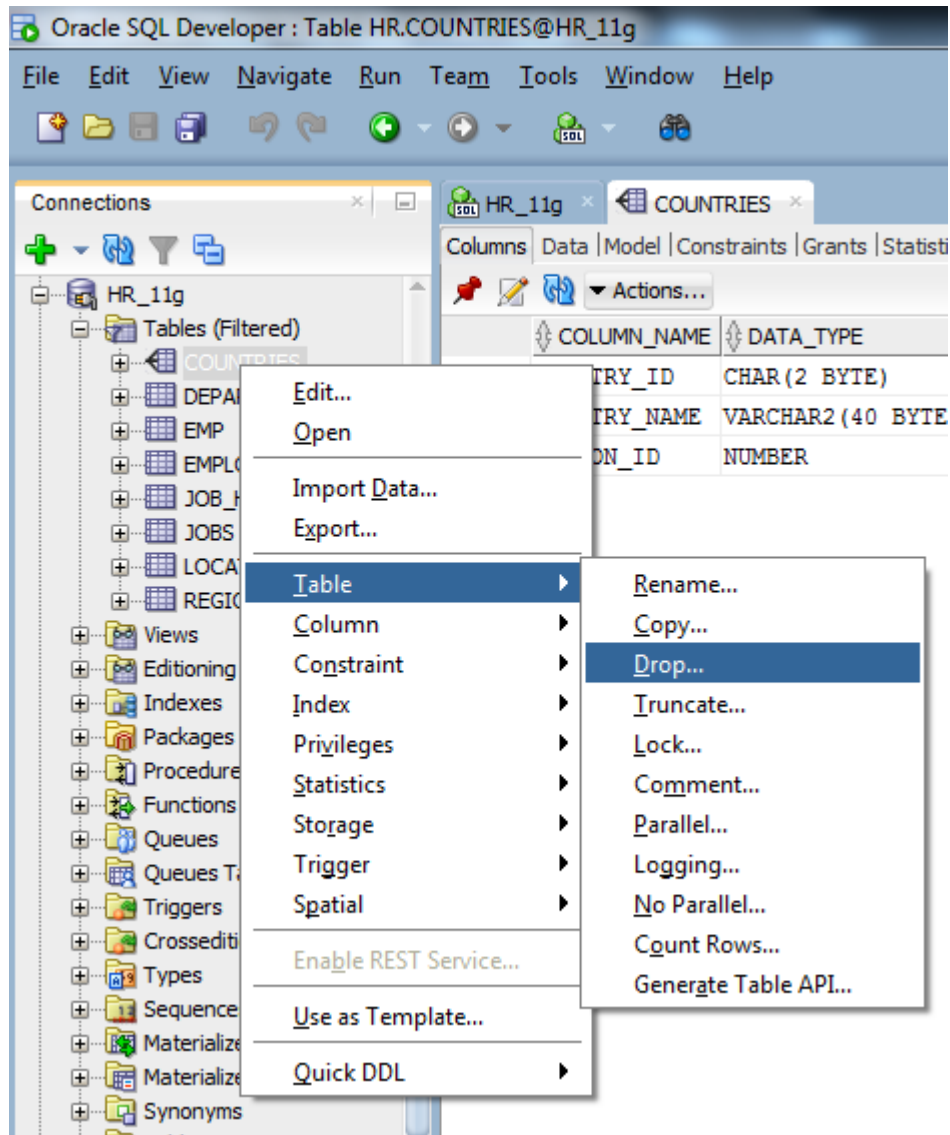
Columns | Data | Grants | Dependencies | Details | Triggers | SQL

	COLUMN_NAME	DATA_TYPE	NULLABLE	DATA_DEFAULT
1	EMPLOYEE_ID	NUMBER (6)	No	(null)
2	JOB_ID	VARCHAR2 (10)	No	(null)
3	MANAGER_ID	NUMBER (6)	Yes	(null)
4	DEPARTMENT_ID	NUMBER (4)	Yes	(null)

Database: User Defined Extensions

You must restart product for changes to take affect.

Type	Location
EDITOR	C:\Users\212391205\Documents
REPORT	



Drop

Prompts SQL

Owner

Name

Cascade Constraints

Purge

Are you sure you want to drop this table?

Help Apply Cancel

Normalize

Prompts SQL

Owner

Name

Table Name

Primary Key

Column to Normalize

Sequence Name

Trigger Name

Help Apply Cancel

Normalize

Prompts **SQL**

```

declare
l_sql varchar2(32767);
l_col_size number;
procedure run(p_sql varchar2) as
begin
    execute immediate p_sql;
end;
begin
select data_length into l_col_size from sys.all_tab_cols where owner = 'HR' and table_name =

run('create table ( number not null primary key, varchar2('||l_col_size||') not null)');

run('create sequence ');

run('create or replace trigger "T_"'||
    ' before insert or update on '||
    ' for each row '||
    ' begin '||
    ' if inserting and :new. is null then '||
    ' for c1 in (select .nextval nv from dual) loop '||
    '     :new. := c1.nv; '||
    ' end loop; '||
    'end if; '||
    'end;');

run('insert into ( ) select distinct from "HR"."COUNTRIES" where is not null');

run('alter table "COUNTRIES" add _ID number');

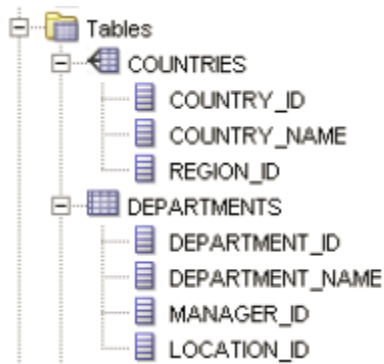
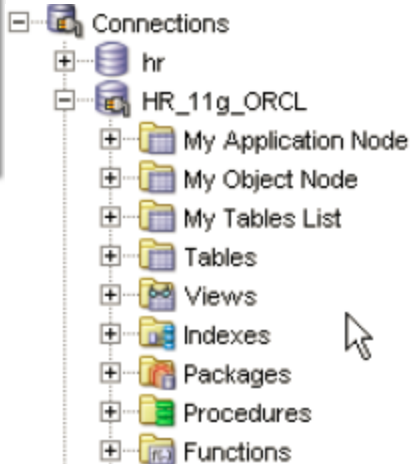
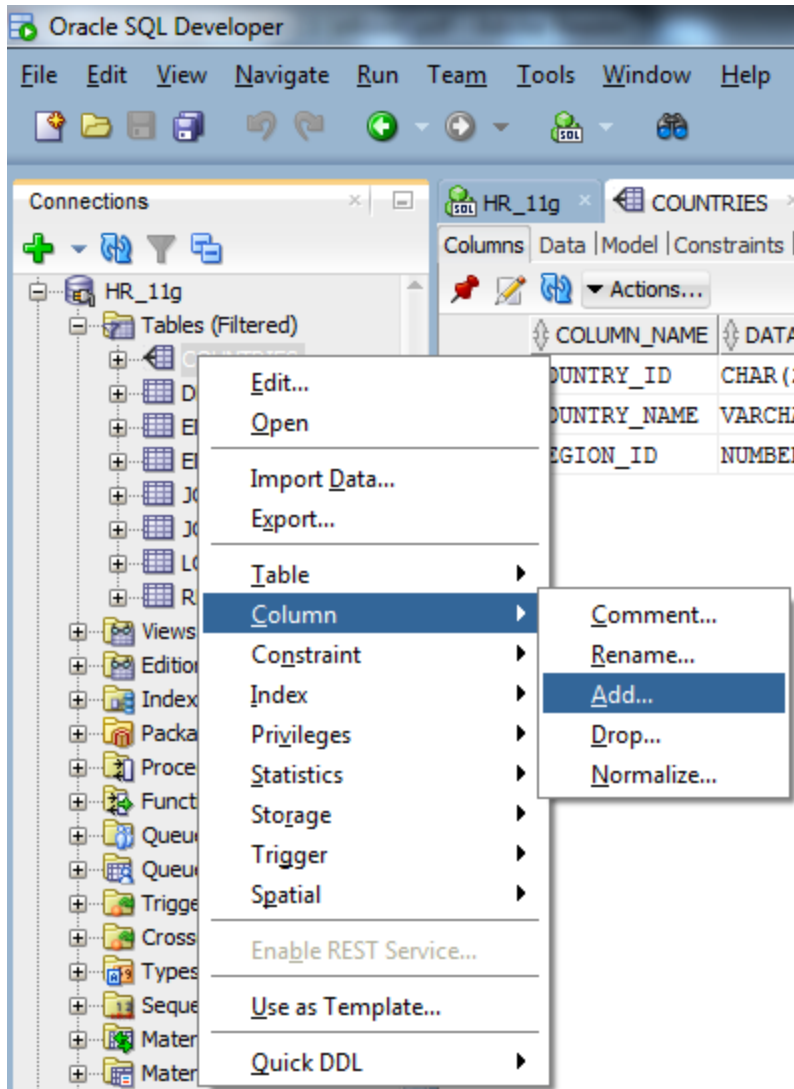
```

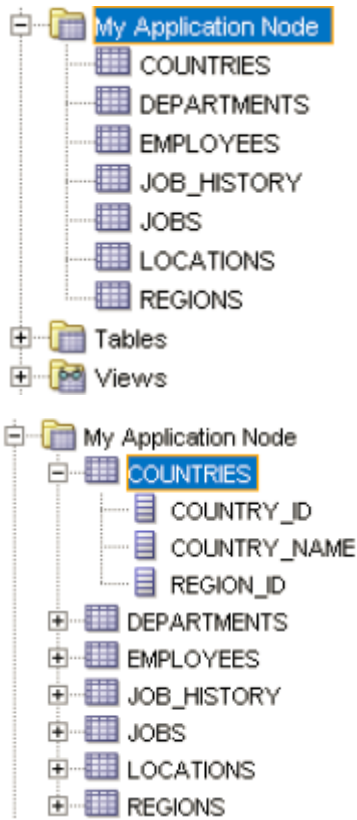
Help Apply Cancel

Database: User Defined Extensions

You must restart product for changes to take affect.

Type	Location
REPORT	D:\UserDefinedExtensions\demoreports.xml
EDITOR	D:\UserDefinedExtensions\subpartitions.xml
ACTION	D:\UserDefinedExtensions\CompileAll.xml





Chapter 11

Manage Workspaces

127.0.0.1:8080/apex/f?p=4050:10:2624607292819254::NO::

ORACLE Application Express

Home Manage Requests Manage Instance **Manage Workspaces** Monitor Activity

Home > Manage Workspaces

Workspace Actions

- Create Workspace
- Remove Workspace
- Lock Workspace
- Manage Workspace to Schema Assignments
- Manage Developers and Users
- Manage Component Availability

Workspace Reports

- Existing Workspaces
- Workspace Details
- Workspace Database Privileges
- Workspaces with Only Sample Application
- Manage File Utilization

- Identify Workspace
- Identify Schema
- Identify Administrator
- Confirm Request**
- Success Confirmation

Confirm Request Cancel < Previous Create Workspace

You have requested to provision a new Workspace.

Workspace Information:

Name	SampleWorkspace
Security Group ID	System Assigned
Description	...

Administrator Information:

User Name	ADMIN
E-mail	ajithpathiyil@gmail.com

Schema Information:

Reuse Existing Schema	No
Schema Name	SAMPLE
Tablespace will be created	APEX_XXX
Datafile for tablespace	C:/ORACLEXE/APP/ORACLE/ORADATA /XE/APEX_XXX.DBF

Welcome ADMIN (Logout)

Manage Workspaces Monitor Activity Help

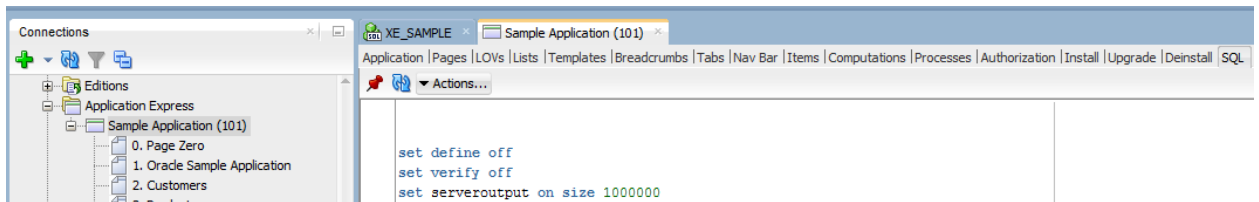
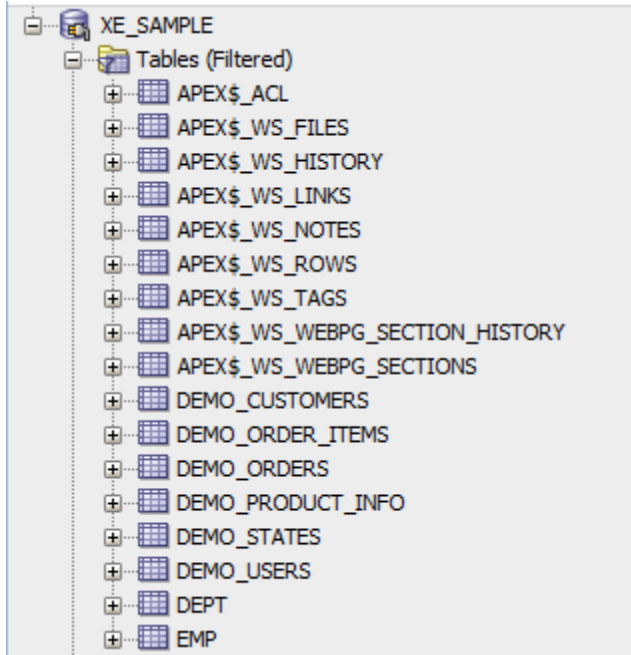
Create Workspace
Remove Workspace
Lock Workspace
Manage Schema Assignments
Manage Developers and Users
Component Availability
Import
Export 12 years ago 14 minutes
Find Workspaces ago 22 seconds
More... 19 minutes ago 18 minutes

Reset Create User >

Developers and Users

Application Express internal applications (such as Application Builder, SQL Workshop, and so on) authenticate user credentials against entries in the Application Express account repository. User developed applications may use that account repository as well for authentication.

This report shows user name entries in that repository by workspace. Click the name of a user in the report to edit that user, or click **Create** to create a new user. Select the **Reset** link to change the password for that user.



Sample Application (101) ×

Application | Pages | LOVs | Lists | Templates | Breadcrumbs | Tabs | Nav Bar | Iter

Actions...

Name	Value
1 APPLICATION_ID	101
2 APPLICATION_NAME	Sample Application
3 ALIAS	DEMO_APP
4 OWNER	SAMPLE
5 HOME_LINK	f?p=APP_ID.:1:SESSION.
6 IMAGE_PREFIX	/i/
7 LOGO	TEXT:Sample Application
8 AUTHENTICATION_SCHEME	CUSTOM SCHEME
9 VERSION	1.0
10 AVAILABILITY_STATUS	Available with Edit Links
11 BUILD_STATUS	Run and Develop
12 DEBUGGING	Not Allowed
13 GLOBAL_NOTIFICATION	(null)
14 LAST_UPDATED_BY	ADMIN
15 LAST_UPDATED_ON	10-NOV-15
16 PAGES	23
17 WORKSPACE	SAMPLEWORKSPACE
18 WORKSPACE_ID	4886315587313604
19 PROXY_SERVER	(null)

Sample Application (101) ×

Application | Pages | LOVs | Lists | Templates | Breadcrumbs | Tabs | Nav Bar | Items | Computations | Proc

Actions...

LIST_OF_VALUES_NAME	LOV_TYPE	LOV_ENTRIES	LOV_ID
1 CATEGORIES	Static	3	791857043561856742
2 PRODUCTS	Dynamic	0	793141336679351343
3 PRODUCTS WITH PRICE	Dynamic	0	816005565349428985
4 STATES	Dynamic	0	792408837581314697
5 Y OR N	Static	2	791510161524083080

Query **Static Values**

Refresh: 0

DISPLAY_SEQUENCE	DISPLAY_VALUE	RETURN_VALUE
1	3 Accessories	Accessories
2	2 Womens	Womens
3	1 Mens	Mens

Connections

- Editions
 - Application Express
 - Sample Application (101)
 - 0. Page Zero
 - 1. Oracle Sample Application
 - 2. Customers
 - 3. Products
 - 4. Orders
 - 5. Sales by Category / Month
 - 6. Product Details
 - 7. Customer Details
 - 8. Manage Users
 - 9. Reset Password
 - 10. Order Calendar
 - 11. Enter New Order
 - 12. Enter New Order
 - 13. Customer Map

7. Customer Details

Page | Items | Regions | Buttons | Computations | Processes | Validations | Branches | SQL

SEQ	REGION	BUTTON_NAME	BUTTON_TEMPLATE	DISPLAY_POSITION
1	10 Customer Details	CANCEL	Button	REGION_TEMPLATE_CLOSE
2	20 Customer Details	DELETE	Button	REGION_TEMPLATE_DELETE
3	50 Customer Details	SAVE	Button, Alternative 1 - Hot Button	REGION_TEMPLATE_CHANGE
4	100 Customer Details	CREATE	Button, Alternative 1 - Hot Button	REGION_TEMPLATE_CREATE

ORACLE Application Express

Home Application Builder SQL Workshop Team Development Administration

Home > Application Builder > Application 101 > Page 7

Page 7

Page Rendering

Page Processing

Page

Page Name: [Customer Details](#) Template: [Application default](#)
 Title: [Customer Details](#) Header Text:
 HTML Header: Footer Text:
 HTML Body: Build Option:
 Help Text: Authorization: [No](#)
 Page Group: Cached: [No](#)

Regions

Display Point: Page Template Body (2)

10 [Customer Details](#) HTML
 20 [Orders for this Customer Report](#) Conditional

Display Point: Region Position 03

40 [New Customer](#) HTML Conditional

Buttons

Region: [Customer Details](#)

10 [Cancel](#) Redirect to page 2
 20 [Delete](#) Run: javascript:confirmDelete(htmldb_delete_m Conditional
 50 [Apply Changes](#) Submit as "SAVE" Conditional
 100 [Create Customer](#) Submit as "CREATE" Conditional

Computations

Validations

23 [P7_PHONE_NUMBER1](#)
 33 [P7_PHONE_NUMBER2](#)
 63 [Credit Limit <= 5000](#)
 73 [Can't Delete Customer with Orders](#) Conditional

Processes

After Submit

10 [Process Row of DEMO_CUSTOMERS](#) Automatic Row Processing (DML) Unconditional
 20 [reset page](#) Clear Cache for all Items on Pages (PageID,PageID,PageID) Never

Branches

After Processing

20 [Branch To Page Identified By Item](#) Unconditional

1. Oracle Sample Application

Page | Items | Regions | Buttons | Computations | Processes | Validations | Branches | SQL

SEQ	REGION_NAME	TEMPLATE	SOURCE_TYPE	REGION_SOURCE
1	10 Sales Quota	Reports Region	Flash Chart	<object classid="clsid:D27CDB6E-AE61
2	11 Sales Quota	Reports Region	HTML/Text	
3	20 Top Customers	Reports Region	Report	SELECT b.cust_last_name ', ' b
4	30 Top Products	Reports Region	Report	Select p.product_name ' - ' SUM(o
5	40 Top Orders by Date	Reports Region	Report	select o.order_timestamp order_day,
6	50 Sample Application	Sidebar Region	HTML/Text	Welcome to the Sample Application.
7	60 Tasks	Sidebar Region, Alternative 1	List	299404824033600345

XE_SAMPLE x

0.82700002 seconds

Worksheet Query Builder

```
select o.order_timestamp order_day,
       SUM(o.order_total) sales
from demo_orders o
group by o.order_timestamp
order by 2 desc
```

Explain Plan x

SQL | 0.827 seconds

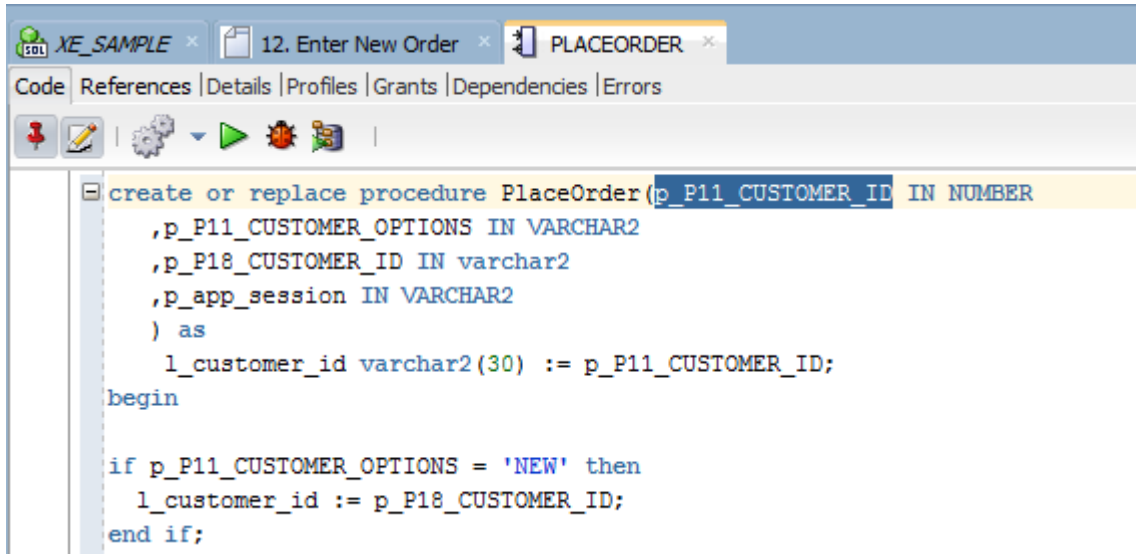
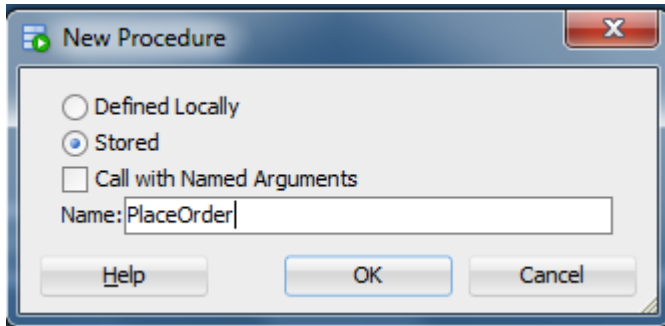
OPERATION	OBJECT_NAME	CARDINALITY	COST
SELECT STATEMENT		10	5
SORT (ORDER BY)		10	5
HASH (GROUP BY)		10	5
TABLE ACCESS (FULL)	DEMO_ORDERS	10	3
Other XML			
{info}			
info type="db_version"			
11.2.0.2			
info type="parse_schema"			
"SAMPLE"			
info type="dynamic_sampling"			
2			
info type="plan_hash"			
3981287570			
info type="plan_hash_2"			
2953537631			
{hint}			
USE_HASH_AGGREGATION(@"SEL\$1")			
FULL(@"SEL\$1" "O"@"SEL\$1")			
OUTLINE_LEAF(@"SEL\$1")			
ALL_ROWS			
DB_VFSION("11.2.0.2")			

XE_SAMPLE x 12. Enter New Order x

0.82700002 seconds

Worksheet Query Builder

```
declare
  l_customer_id varchar2(30) := :P11_CUSTOMER_ID;
begin
  --
  -- display customer information
  --
  if :P11_CUSTOMER_OPTIONS = 'NEW' then
    l_customer_id := :P18_CUSTOMER_ID;
  end if;
  for x in (select * from demo_customers where customer_id = l_customer_id)
  loop
    htp.p('<div class="demoCustomerInfo">');
    htp.p('<strong>Customer:</strong>');
    htp.p('<p>');
    htp.p(htf.escape_sc(x.cust_first_name) || ' ' || htf.escape_sc(x.cust_last_name) || '<br />');
    htp.p(sys.htf.escape_sc(x.cust_street_address1) || '<br />');
    if x.cust_street_address2 is not null then
      sys.htp.p(sys.htf.escape_sc(x.cust_street_address2) || '<br />');
    end if;
  end loop;
end;
```



Region: 1 of 2 Name: Select Items

Show All Identification User Interface Source Attributes Header and Footer Conditions Security Configuration Caching

Identification

Page: 12 Enter New Order

* Title Select Items exclude title from translation

Type PL/SQL (anonymous block)

User Interface

Template Wizard Region

* Sequence 5

Parent Region - Select a Parent -

Display Point Page Template Body (3. items above region content) Column 1

[Body] [Pos.1] [Pos.2] [Pos.3] [Pos.4]

Source

Region Source

placeorder (:P11_CUSTOMER_ID)

Enter New Order

127.0.0.1:8080/apex/f?p=101:12:65259042783175:ADD:::P12_PRODUCT_ID:10

Most Visited Getting Started Services For You Google SupportCentral - BA C... myRESOURCES CM Team- GE Libraries SBI Card Hot Deal

Sample Application

Home Customers Products **Orders** Reports Administration

Home > Orders > Enter New Order

Identify Customer

Select Items

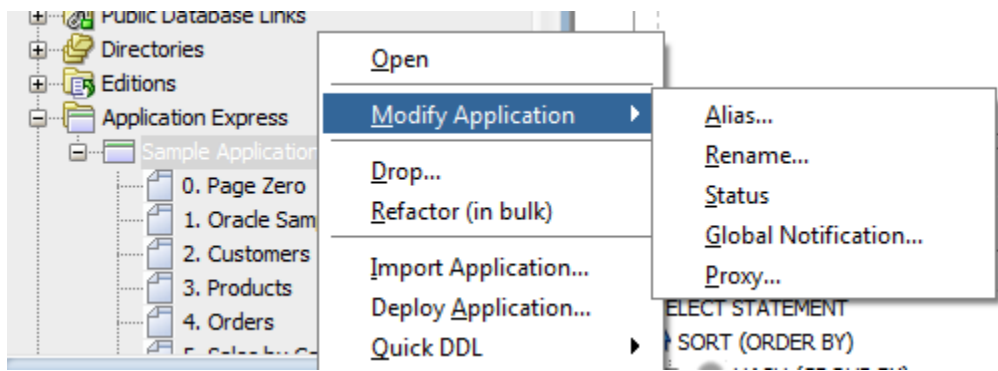
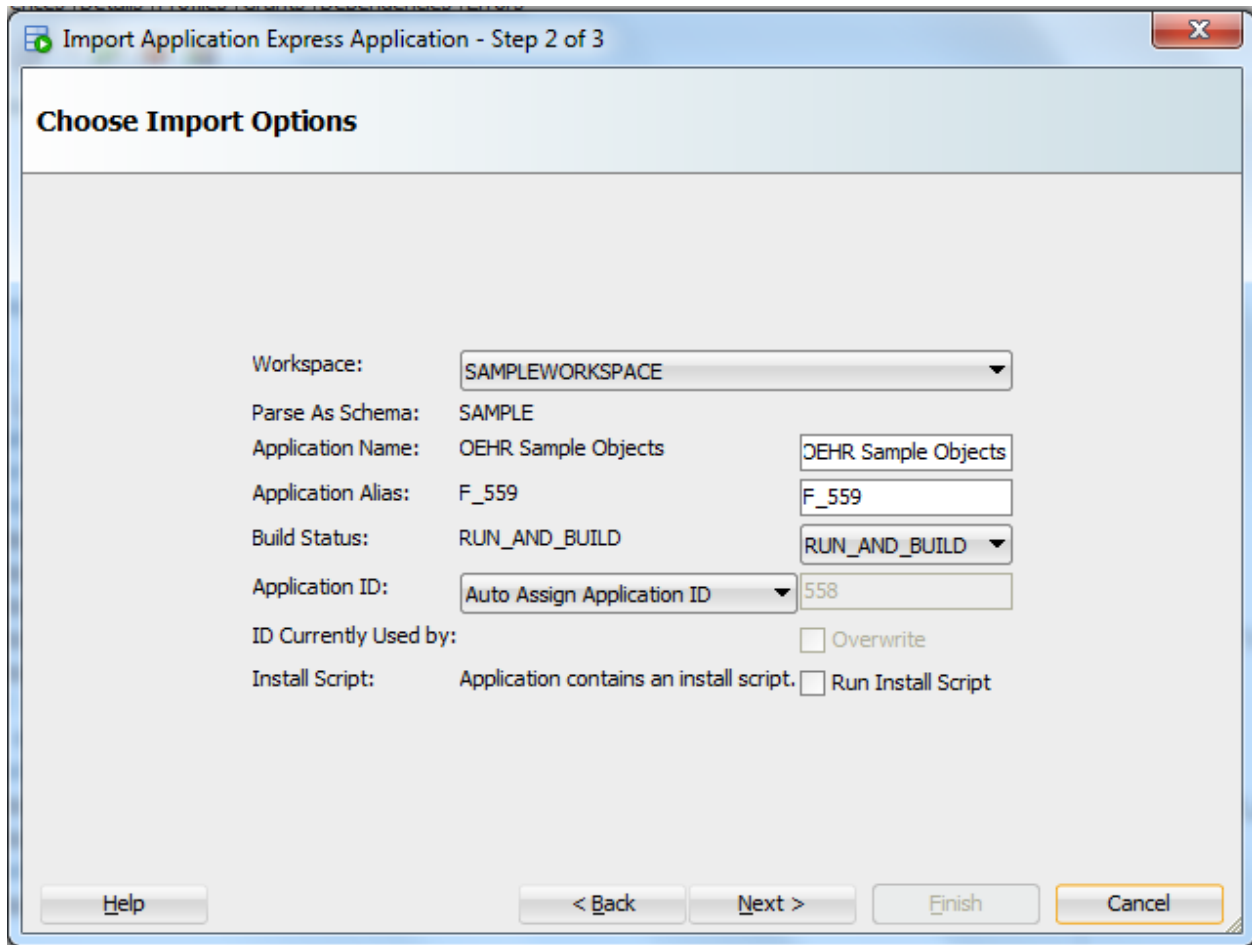
Order Summary

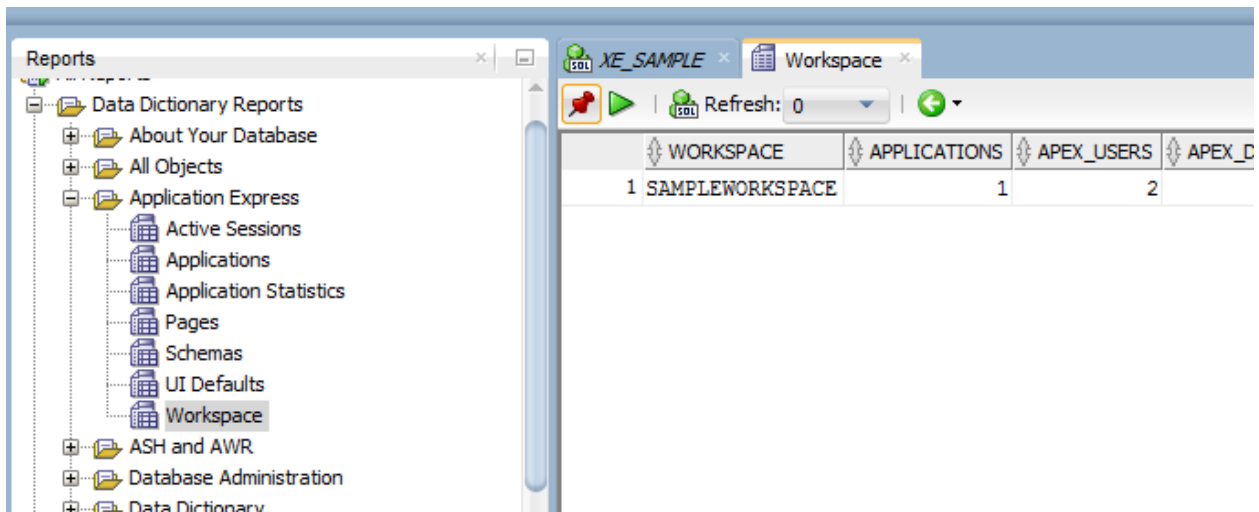
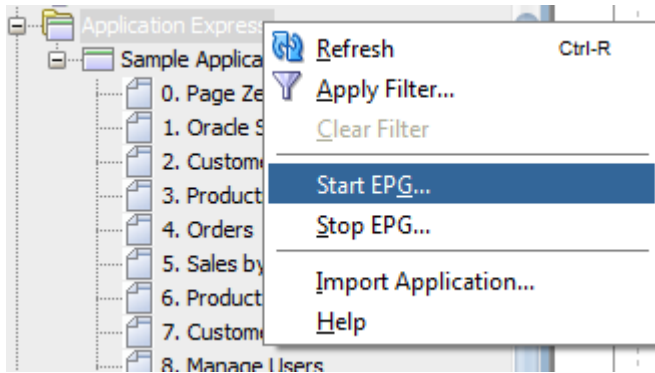
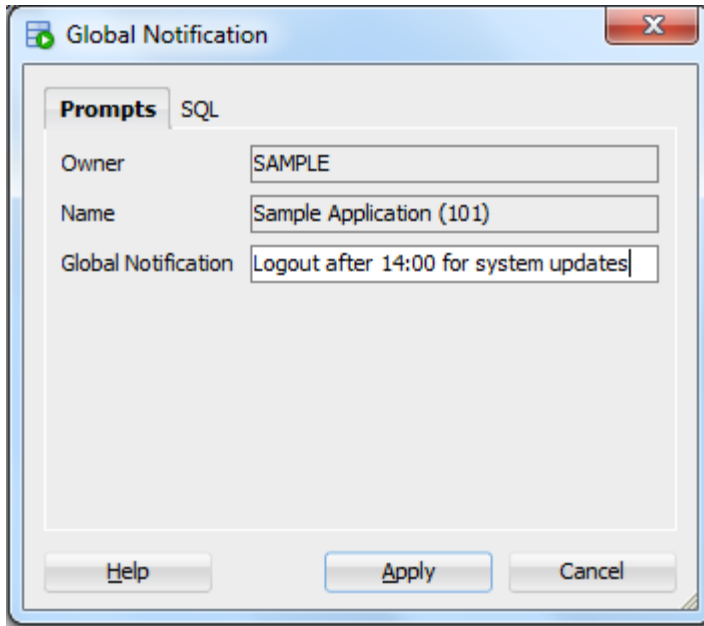
Cancel < Previous **Place Order**

Customer: Edward Logan
1 Harborside Drive
East Boston, MA 02128

Product	Price	
Business Shirt	50.00	Add >
Wallet	50.00	Add >
Trousers	80.00	Add >
Jacket	150.00	Add >
Blouse	60.00	Add >
Skirt	80.00	Add >
Ladies Shoes	120.00	Add >
Belt	30.00	Add >
Bag	125.00	Add >
Mens Shoes	110.00	Add >

Current Order	
X Business Shirt	\$50.00
	Quantity: 1
	Subtotal: \$50.00
X Wallet	\$50.00
	Quantity: 1
	Subtotal: \$50.00
Items: 2	
Total:	\$100.00





Chapter 12

Connection Name

Username

Password

Save Password Connection Color

Oracle | TimesTen | MySQL | **SQLServer** | Sybase

Use Default Password

Use Windows Authentication

Hostname

Port

Retrieve database

Save Clear Test Connect Cancel

Connections

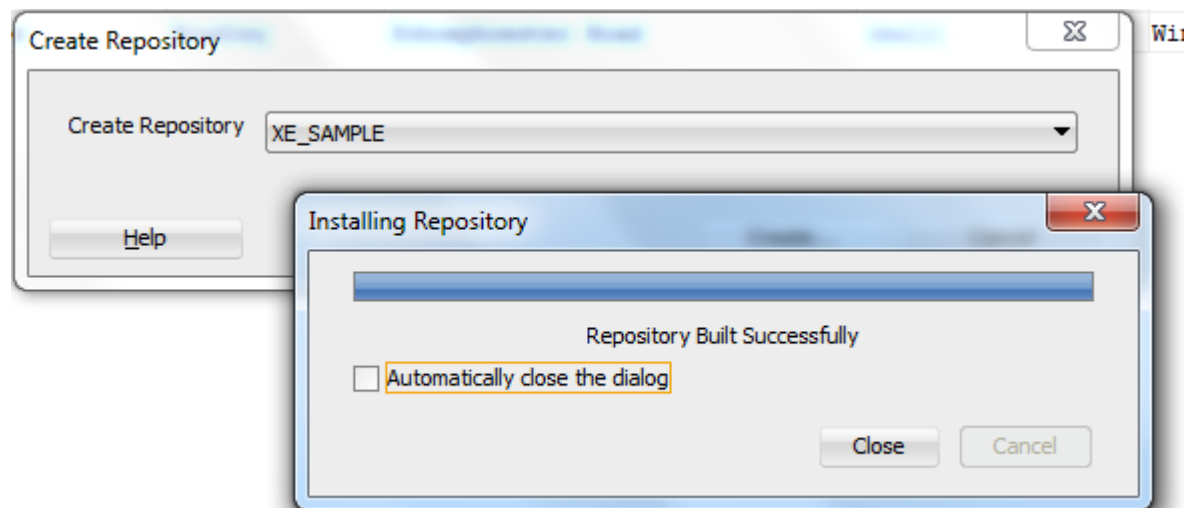
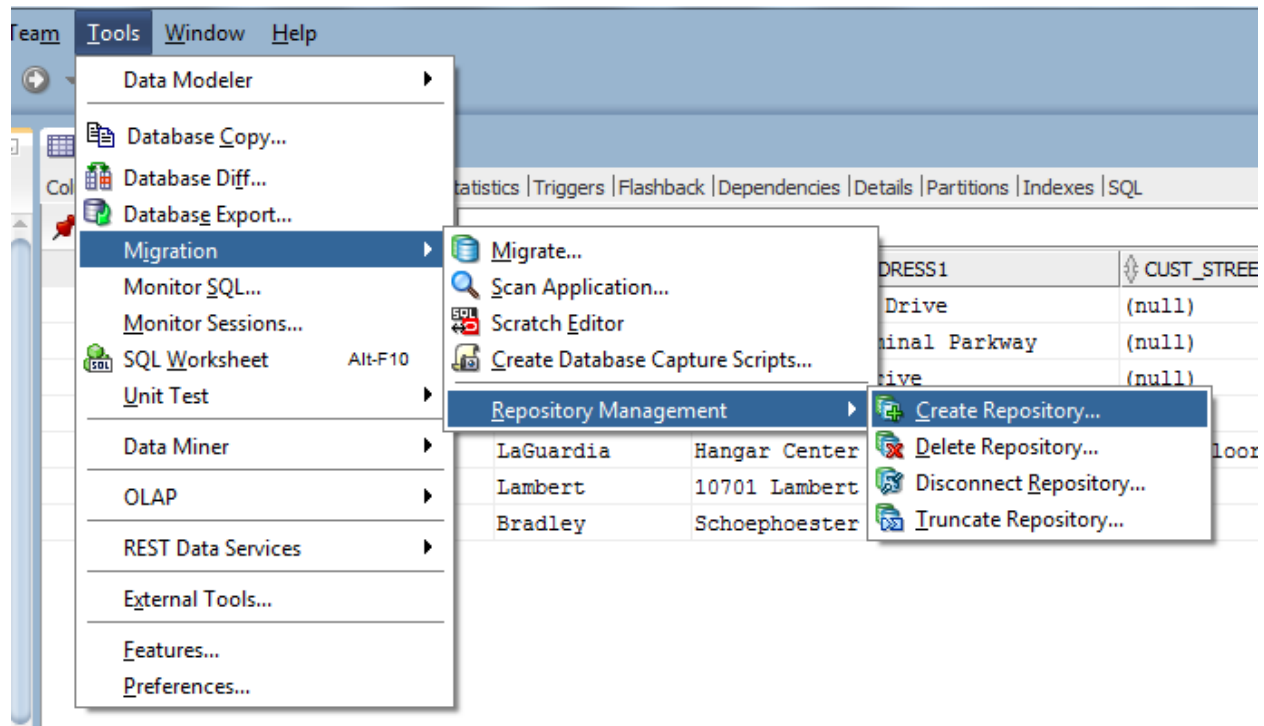
- SQL_server2000_sa
 - Northwind
 - dbo
 - Functions
 - Procedures
 - Tables
 - Categories
 - CustomerCust
 - CustomerDem
 - Customers**
 - dtproperties
 - Employees

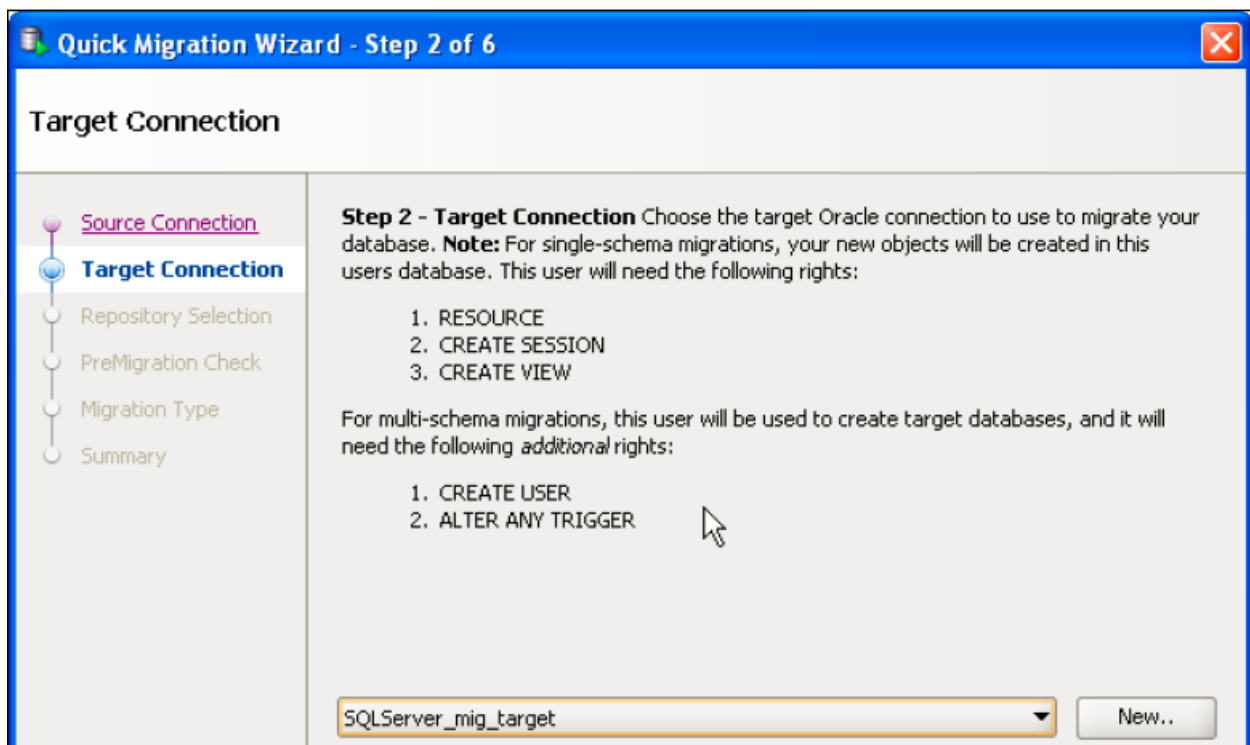
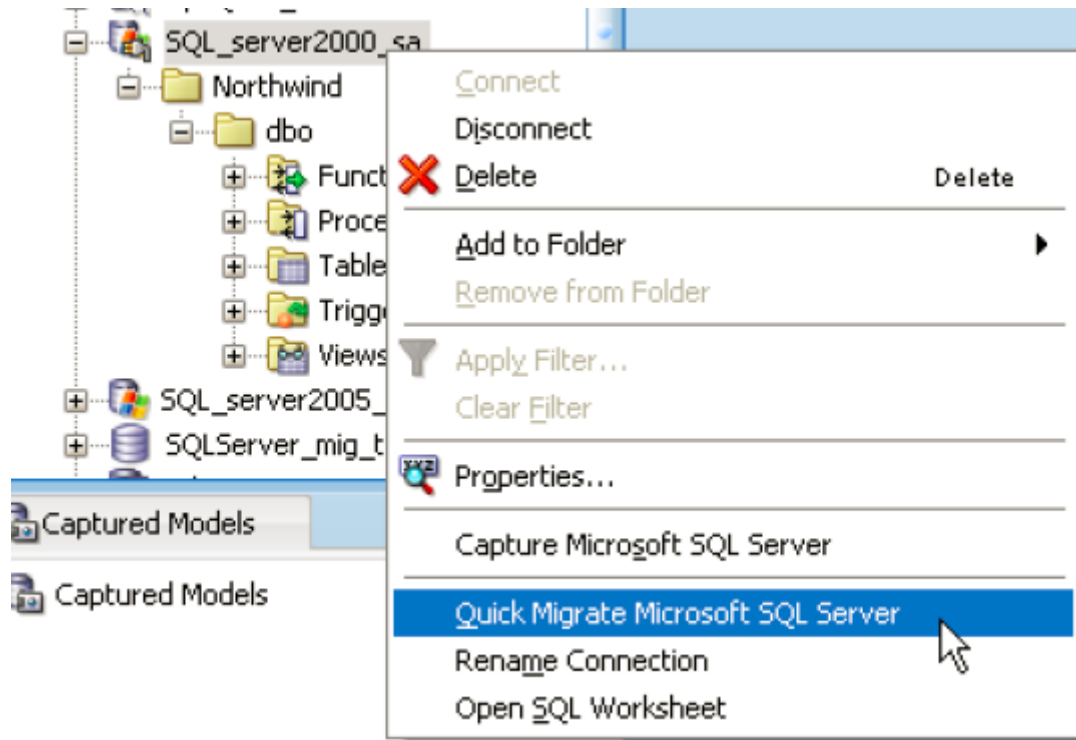
CUSTOMERS

Columns Data Model Constraints Grants Statistics Tri

Sort.. Filter:

	CUSTOMER_ID	CUST_FIRST_NAME	CUS
1	1	John	Dulle
2	2	William	Harts
3	3	Edward	Logar
4	4	Edward "Butch"	OHare
5	5	Fiorello	LaGua
6	6	Albert	Lambe
7	7	Eugene	Bradl





Privilege Warning

i Some privileges required for multi-schema migrate are not granted, or missing admin option. This will not affect a single schema migration, but if you intend on quick migrating multiple schema, you should review the verify results to see if extra privileges are required.
Privilege 'CREATE ROLE' is not present

Help OK

Quick Migration Wizard - Step 4 of 6

PreMigration Check

Step 4 - Pre-migration check Click Verify to check that prerequisites have been met and to view the results.

Verify

Test	Status	Information
Checking source connection SQL_serve...	SUCCESS	
Locating source plugin	SUCCESS	
Checking target connection SQLServer...	SUCCESS	
Checking repository	SUCCESS	
Checking target rights	SUCCESS	
Checking multi-schema privileges	FAILED	Privilege 'CREATE ROLE' is not present

Quick Migration Wizard - Step 6 of 6


Summary

- Source Connection
- Target Connection
- Repository Selection
- PreMigration Check
- Migration Type
- **Summary**

Summary

- Source Connection : SQL_server2000_sa
- Target Connection : SQLServer_mig_target
- Repository Connection : MIG_REPOS
- Keep Repository : True
- Migration Type : Migrate Everything

Quick Migration ✖



Capture Convert Generate Build Data Move

Capture

Object Type	No of Objects Captured
Catalog	1
Schema	1
User	1
Table	16
Column	101
Index	26
Index Details	26
Constraint	38
Constraint Details	55
View	16
Stored Procedure	7

Automatically close the dialog

Quick Migration



Capture Convert Generate Build **Data Move**

Capture | Convert | Generate | Build | **Data Move**

Current Activity

Thread	Table	State	Rows	Total Rows	Errors	Total Errors
DataMove-0	[Northwind]...	MOVING	94%	830	0	0
DataMove-1	[Northwind]...	MOVING	87%	8	0	0
DataMove-2	[Northwind]...	MOVING	30%	13	0	0
DataMove-3	[Northwind]...	DONE	100%	29	0	0

Completed Tables

Table	Rows	Total Rows	Errors	Total Errors
[Northwind].[dbo]...	91	91	0	0
[Northwind].[dbo]...	3	3	0	0
[Northwind].[dbo]...	29	29	0	0

Migration Log - Log

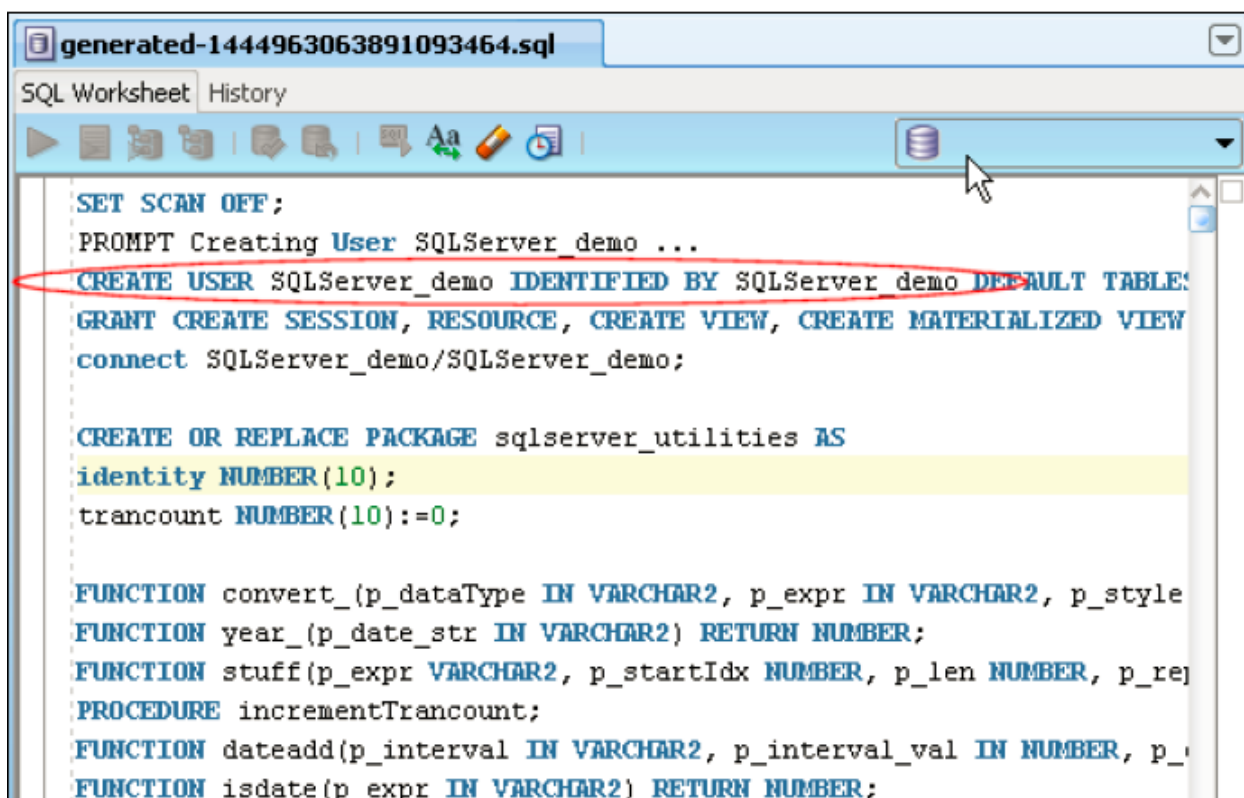
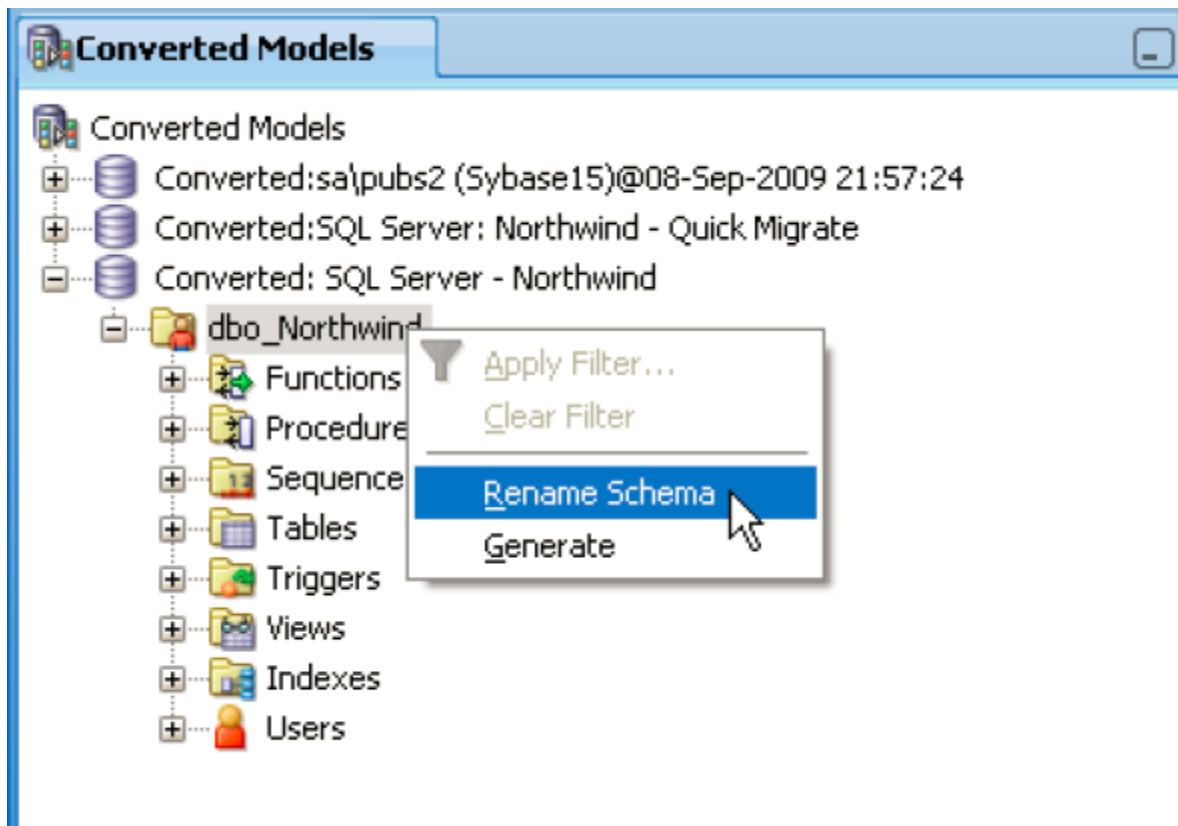
Converted: \\edtc

Message

Default Values Transformed: The following column default values have been transformed during conver

Following objects have had name changes applied

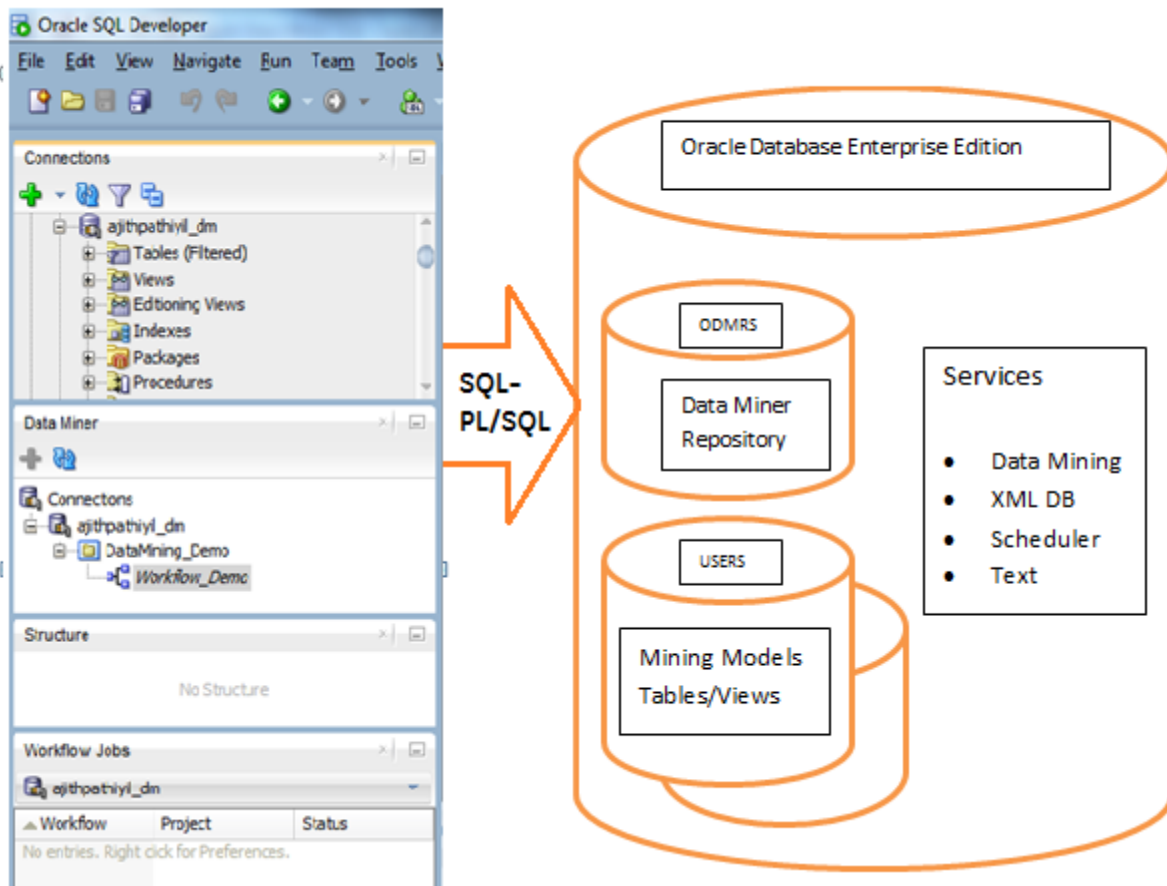
- View 'Order Details Extended' Changed to 'Order_Details_Extended' (Invalid characters, reserved v
- View 'Quarterly Orders' Changed to 'Quarterly_Orders' (Invalid characters, reserved word or clash)
- View 'Products by Category' Changed to 'Products_by_Category' (Invalid characters, reserved wor
- View 'Products Above Average Price' Changed to 'Products_Above_Average_Price' (Invalid charact
- View 'Orders Qry' Changed to 'Orders_Qry' (Invalid characters, reserved word or clash)
- Constraint 'FK_EmployeeTerritories_Territories' Changed to 'FK_EmployeeTerritories_Territo' (Invali
- Constraint 'FK_EmployeeTerritories_Employees' Changed to 'FK_EmployeeTerritories_Employe' (Inv
- Constraint 'FK_CustomerCustomerDemo_Customers' Changed to 'FK_CustomerCustomerDemo_Cus
- Stored Procedure 'Sales by Year' Changed to 'Sales_by_Year' (Invalid characters, reserved word or
- Stored Procedure 'Employee Sales by Country' Changed to 'Employee_Sales_by_Country' (Invalid c
- Stored Procedure 'Ten Most Expensive Products' Changed to 'Ten_Most_Expensive_Products' (Inva
- View 'Current Product List' Changed to 'Current_Product_List' (Invalid characters, reserved word or



CAPTURE_CONN_ID	CAPTURE_CONN_NAME	Captured On	CONVERT_CONN_ID	CONVERT
255131953846604	SQL Server: Northwind - Quick Migrate	08-SEP-09	21775120343342252	Converted:SQ
7620122265928744	SQLServer - Northwind	08-SEP-09	14900116622403192	Converted:\{e
18885116249160881	sa\pubs2 (Sybase15)@08-Sep-2009...	08-SEP-09	19845119771087202	Converted:sa\

	SCHEMAS	TABLES	INDEXES	CONSTRAINTS	VIEWS	TRIGGERS	STOREDP
Source Exists	1	12	12	0	1	2	
Capture Passed	1	12	12	0	1	2	
Capture Failed	0	0	0	0	0	0	
Convert Passed	1	12	12	0	1	2	
Convert Limitation	0	0	0	0	0	0	
Convert Failed	0	0	0	0	0	0	
Generate Passed	1	12	12	0	1	2	
Generate Failed	0	0	0	0	0	0	

Chapter 13



The screenshot displays the Oracle SQL Developer interface. The 'Tools' menu is open, listing various utility options. The 'Data Miner' option is selected, and its sub-menu is visible, containing 'Make Visible' and 'Drop Repository'. Below the menu, a 'Query Result' window shows the output of an SQL query. The query returned three rows of data, including instance names and host names.

Tools Menu:

- Data Modeler
- Database Copy...
- Database Diff...
- Database Export...
- Migration
- Monitor SQL...
- Monitor Sessions...
- SQL Worksheet (Alt-F10)
- Unit Test
- Data Miner**
 - Make Visible
 - Drop Repository
- OLAP
- REST Data Services
- External Tools...
- Features...
- Preferences...

Query Result:


SQL | All Rows Fetched: 3 in 0.015 seconds

	INSTANCE_NAME	HOST_NAME
1	ajith1	ajithpathiyil1.lab.com
2	ajith3	ajithpathiyil3.lab.com
3	ajith2	ajithpathiyil2.lab.com

Start Page x SQL *ajithpathiyil_system* x

Worksheet Query Builder

Repository not Installed



This database does not have the Data Miner repository installed.

Would you like to install the repository?

You will be prompted to authenticate as a database administrator to perform this task.

Query Result x

SQL |

	INSTANCE_NAME	HOST_NAME
1	ajith1	ajithpathiyil1.lab.com
2	ajith3	ajithpathiyil3.lab.com
3	ajith2	ajithpathiyil2.lab.com

Data Miner

Connections

- ajithpathiyil_dm
 - Disconnect
 - + Add Connection...
 - + **New Project...**
 - ✗ Remove Connection
 - Properties...

Workflow Jobs

ajithpathiyil_dm

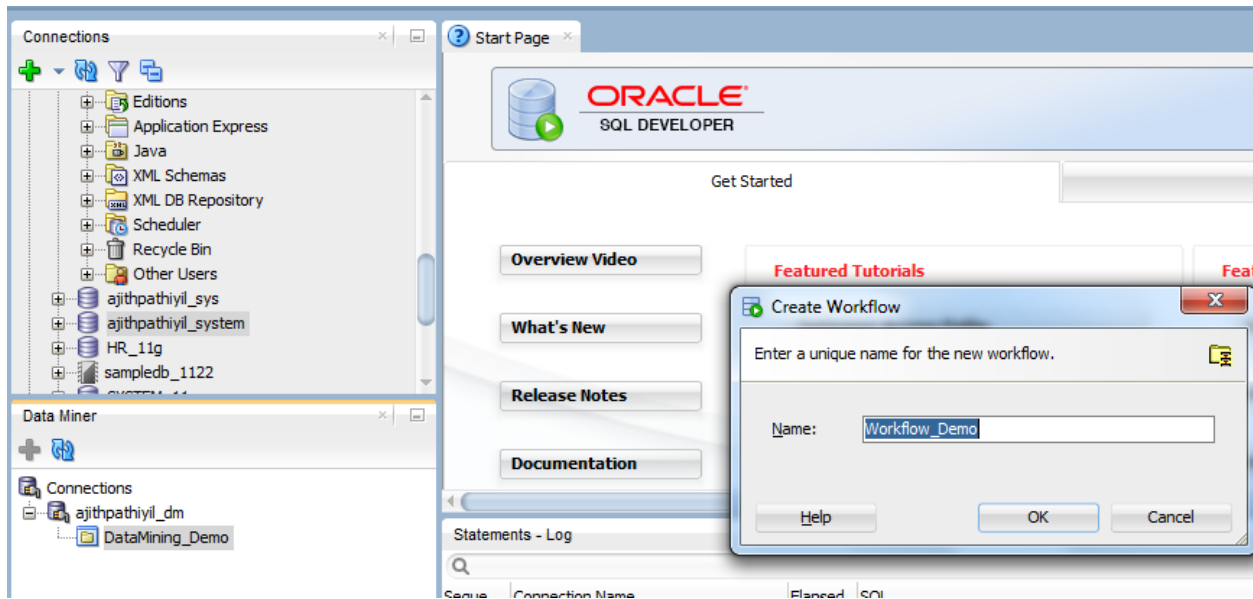
Workflow	Project	Status
No entries. Right click for Preferences.		

Documentation

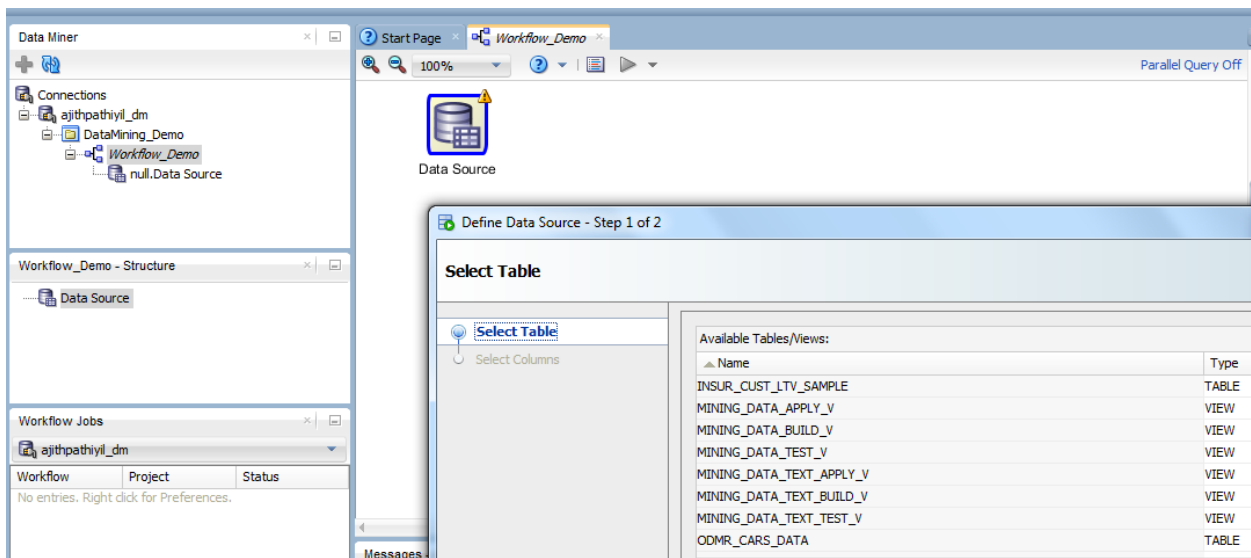
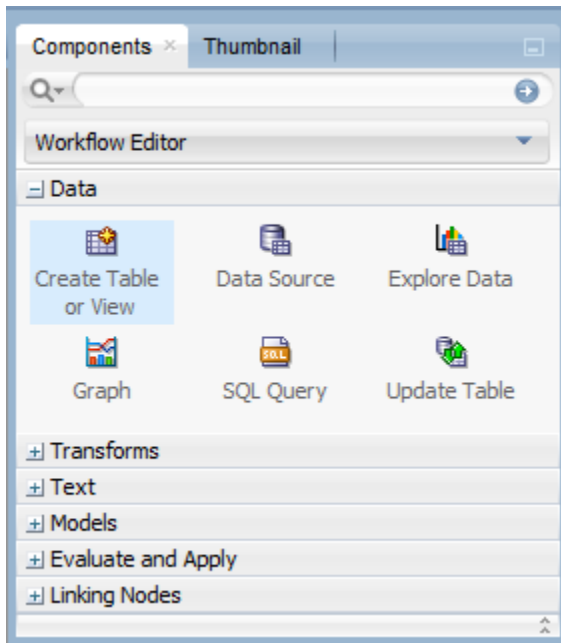
Statements - Log

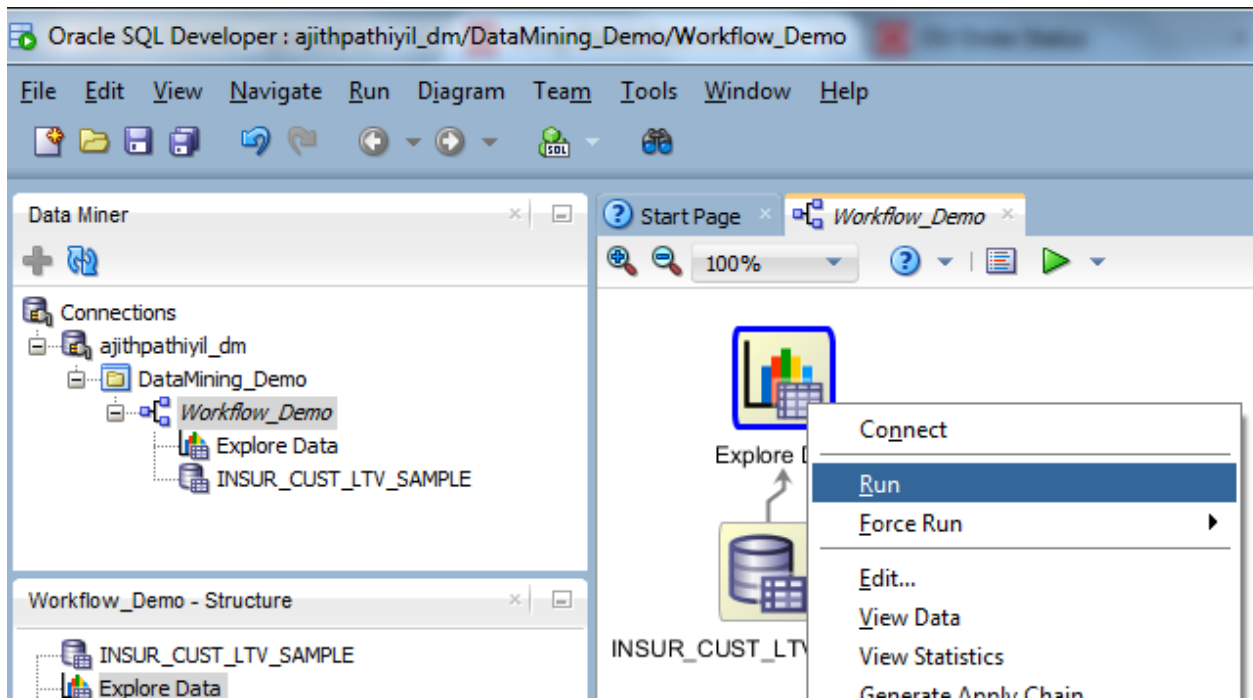
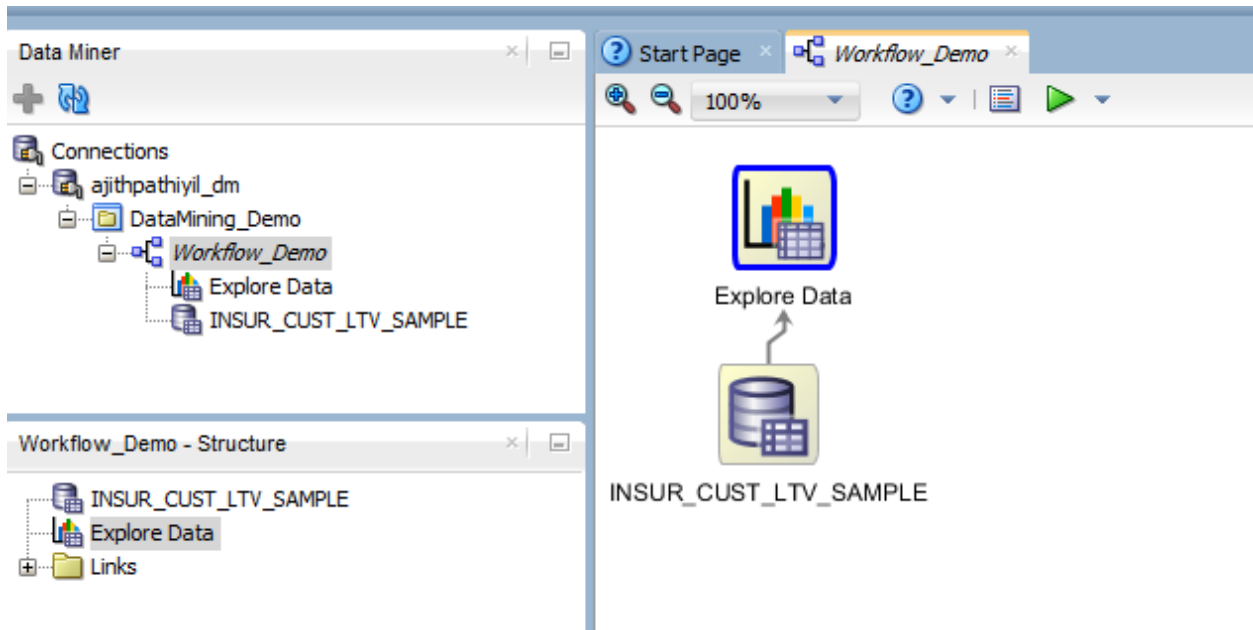
Seque...	Connection Name
3985	ajithpathiyil_dm
3984	ajithpathiyil_dm
3983	ajithpathiyil_dm
3982	ajithpathiyil_dm
3981	ajithpathiyil_dm
3980	ajithpathiyil_dm
3979	ajithpathiyil_dm
3978	ajithpathiyil_dm
3977	ajithpathiyil_dm
3976	ajithpathiyil_dm
3975	ajithpathiyil_dm
3974	ajithpathiyil dm

Messages Statements x



Type	Description
Model Nodes	They specify models to build or models to add to a workflow.
Evaluate and Apply Nodes	They evaluate and apply models.
Data Nodes	They specify data for mining operation, data transformation or to save data to a table.
Transforms Nodes	They perform one or more transformation on the table or tables identified in a Data node.
Predictive Query Nodes	They create predictive results without the need to build models. The predictive queries automatically generate refined predictions based on data partitions.
Text Nodes	They prepare data sources that contain one or more text columns so that the data can be used to Build and Apply models.
Link Nodes	They provide a way to link or connect nodes.





Data Miner

ajithpathiyil_dm

- DataMining_Demo
 - Workflow_Demo
 - Explore Data
 - INSUR_CUST_LTV_SAMPLE

Workflow_Demo - Structure

- INSUR_CUST_LTV_SAMPLE
- Explore Data
- Links

Workflow Jobs

ajithpathiyil_dm

Workflow	Project	Status
Workflow_Demo	DataMining_Demo	✓

Start Page | Workflow_Demo

100%

- Connect
- Run
- Force Run
- Edit...
- View Data**
- View Statistics
- Generate Apply Chain
- Show Event Log
- Validate Parents
- Deploy
- Save SQL
- Cut (Ctrl-X)
- Copy (Ctrl-C)
- Paste (Ctrl-V)

Data Miner

ajithpathiyil_dm

- DataMining_Demo
 - Workflow_Demo
 - Explore Data
 - INSUR_CUST_LTV_SAMPLE

Explore Data - Structure

No Structure

Workflow Jobs

ajithpathiyil_dm

Workflow	Project	Status
Workflow_Demo	DataMining_Demo	✓

Start Page | Workflow_Demo | Explore Data

Statistics | Data | Columns | SQL

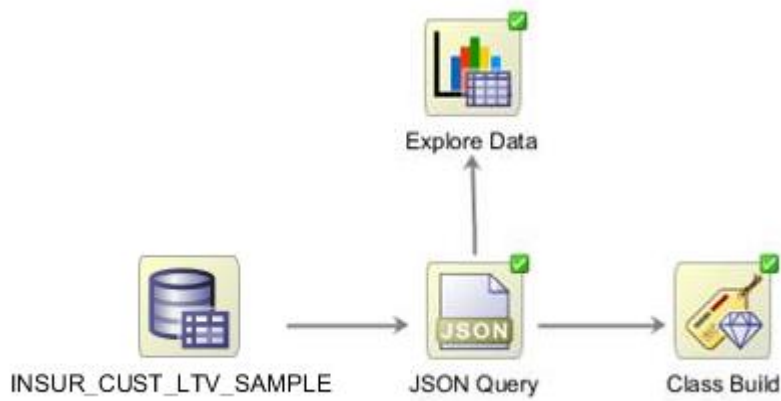
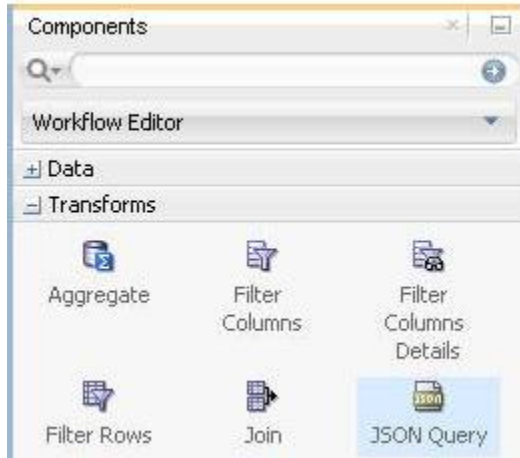
Statistics: 10 Columns from 1,015 Rows(Sampled)

Group by: BUY_INSURANCE

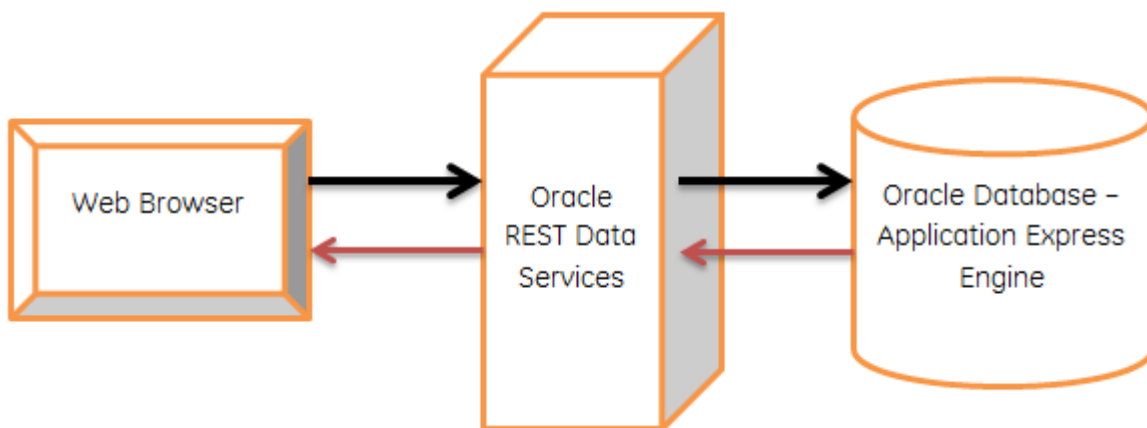
Name	Histogram	Data Type	Percent ...	Distinct ...	Distinct ...	Mode	Average	Median	Min Value	Max V...	Standard ...	Variance
AGE		NUMBER	0	66	6.5025		38.1901	36	0	84	14.9184	222.5585
BANK_FUNDS		NUMBER	0	280	27.5862		2,639.8394	500	0	36,000	4,996.1007	24,961,02...
BUY_INSURANCE		VARCHAR2	0	2	0.197	No						
CAR_OWNERSHIP		NUMBER	0	2	0.197		0.9468	1	0	1	0.2245	0.0504
CHECKING_AMOUNT		NUMBER	0	327	32.2167		1,055.8483	25	25	23,476	3,124.406	9,761,912...
CREDIT_BALANCE		NUMBER	0	93	9.1626		2,234.1015	0	0	170,498	11,727.8738	137,543,0...
CREDIT_CARD_LIMITS		NUMBER	0	23	2.266		1,285.6158	1,000	500	5,000	858.2067	736,518.728
CUSTOMER_ID		VARCHAR2	0	1,015	100	<Other>						
FIRST		VARCHAR2	0	847	83.4483	<Other>						
HAS_CHILDREN		NUMBER	0	2	0.197		0.5113	1	0	1	0.5001	0.2501
HOUSE_OWNERSHIP		NUMBER	0	3	0.2956		0.8049	1	0	2	0.5077	0.2578

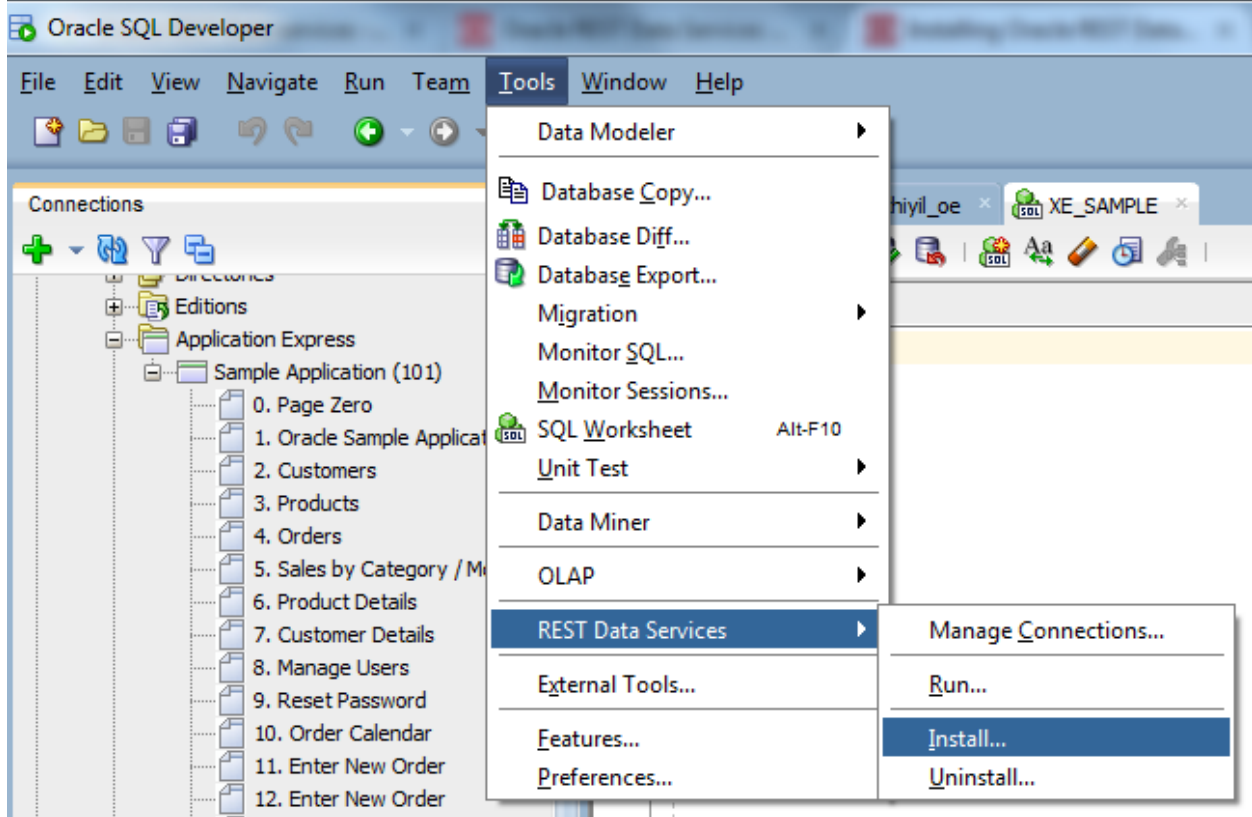
BUY_INSURANCE

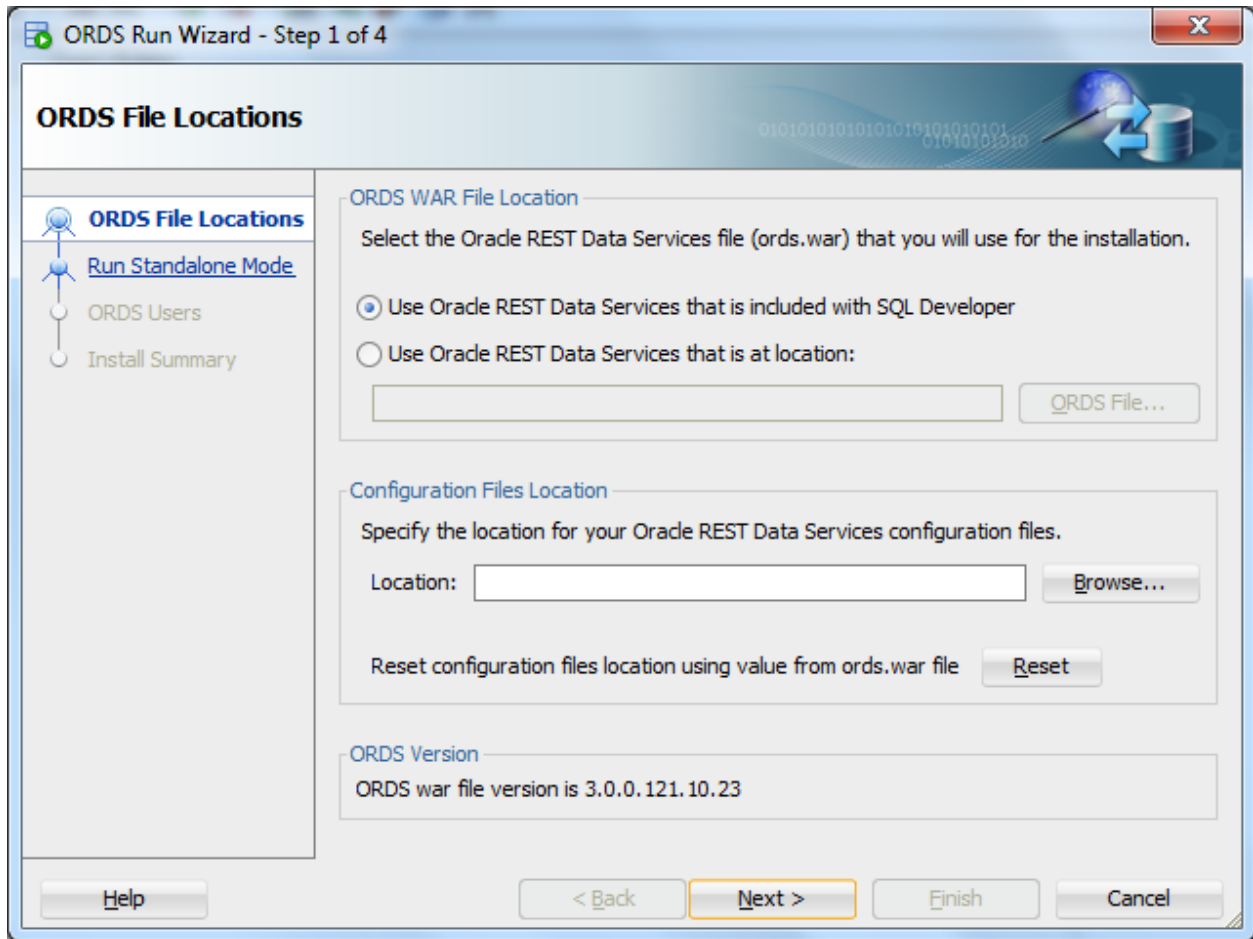
Category	Percent
No	~75%
Yes	~25%

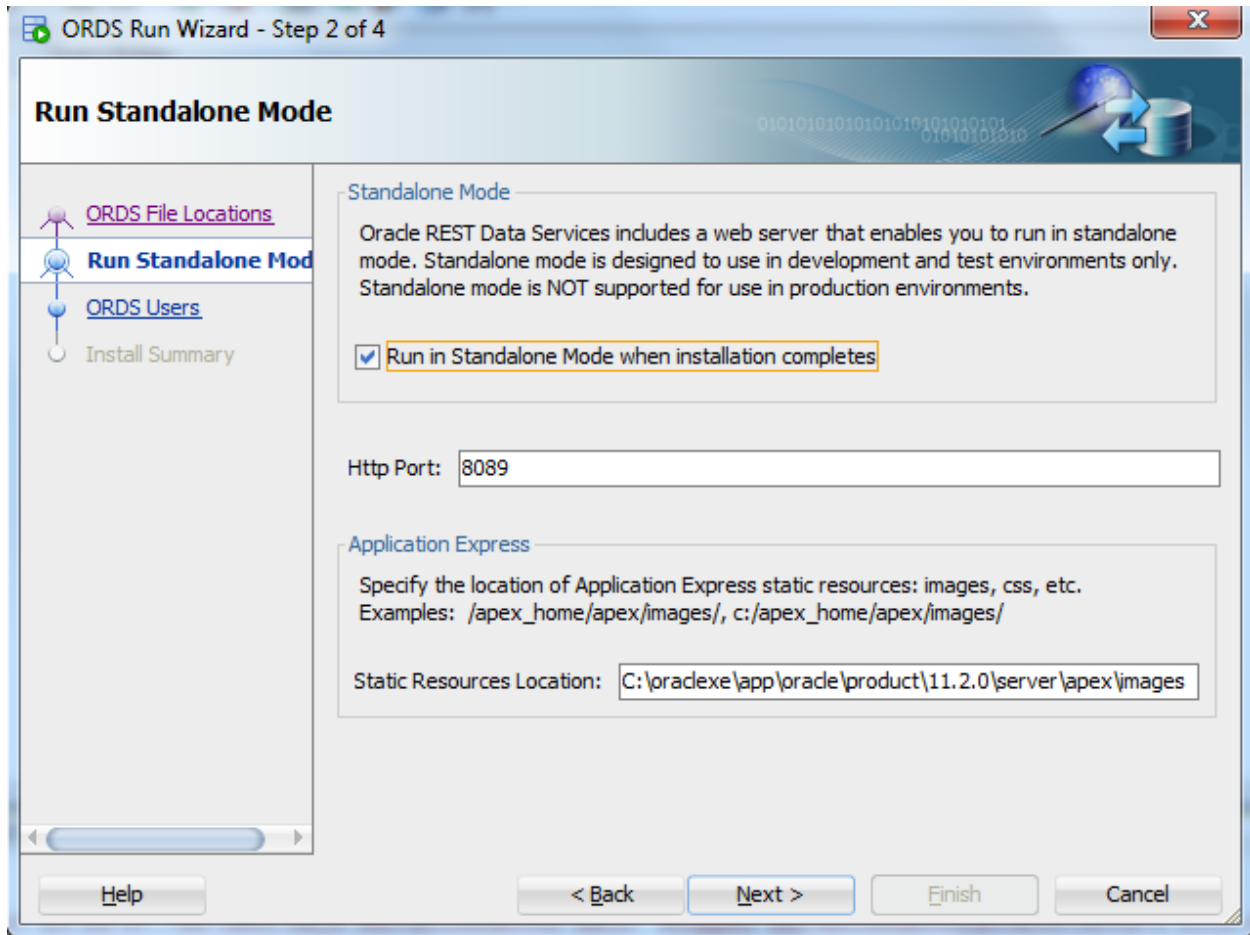


Chapter 14









ORDS Run Wizard - Step 3 of 4

ORDS Users

ORDS File Locations
Run Standalone Mode
ORDS Users
Install Summary

ORDS Administrator
Create an administrator responsible for administering the ORDS configurations using SQL Developer.

Username:

Password:

Confirm Password:

ORDS RESTful Services User
Create a provisioned user that allows SQL Developer to create/edit ORDS RESTful Services.

Username:

Password:

Confirm Password:

Requires Secure Socket Layer (example: https)

Help < Back Next > Finish Cancel

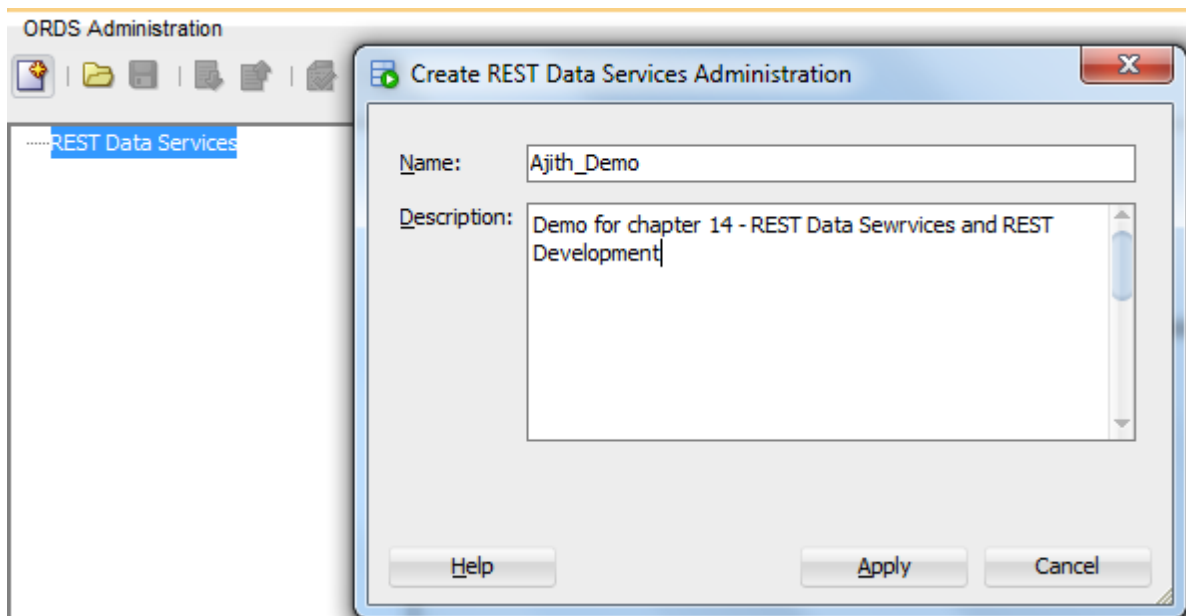
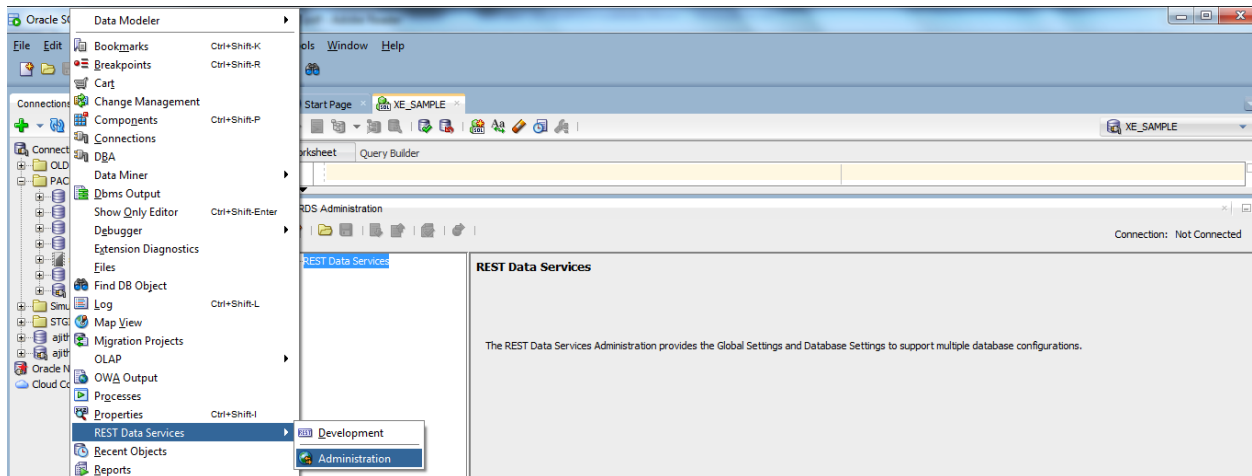
ORDS Run Wizard - Step 4 of 4

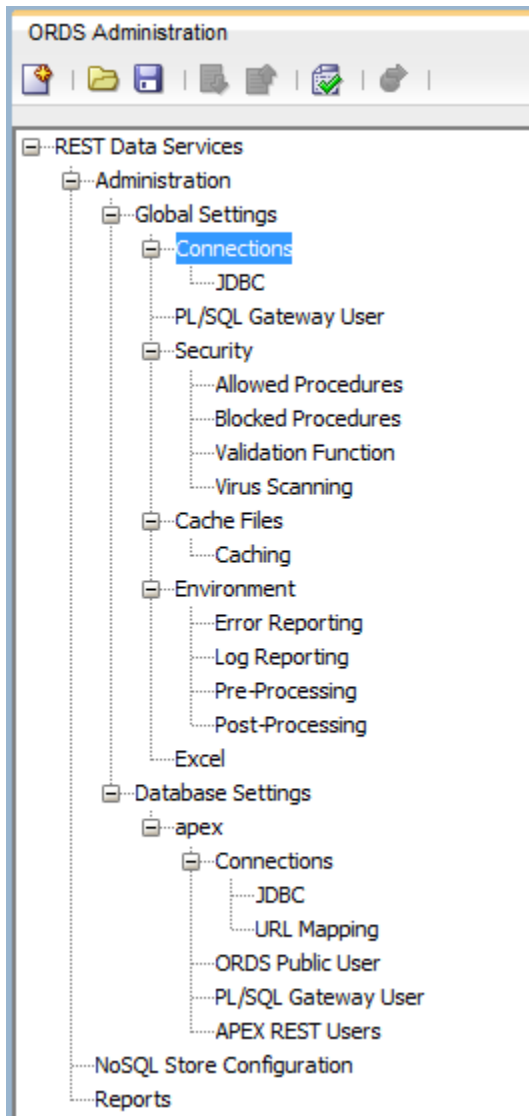
Install Summary

ORDS File Locations
Run Standalone Mode
ORDS Users
Install Summary

- ORDS Installation Summary
 - ORDS War File
 - File Name: C:\sqldeveloper-4.1.0.19.07-no-jre\sqldeveloper\ords\ords.war
 - Version: 3.0.0.121.10.23
 - Configuration Location: C:\Users\212391205\Documents\OTN\Book_Proposal\PACKT\Oracle_REST_Data_Services_Configu
 - Run in Standalone Mode when installation completes
 - Http Port: 8085
 - APEX Static Resources Location: C:\oradexe\app\orade\product\11.2.0\server\apex\images
 - ORDS Administrator: ORDS
 - ORDS User: RESTFUL

Help < Back Next > Finish Cancel







- REST Data Services
 - Administration
 - Global Settings
 - Connections
 - JDBC
 - PL/SQL Gateway User
 - Security
 - Cache Files
 - Environment
 - Excel
 - Database Settings
 - apex
 - Connections
 - JDBC
 - URL Mapping
 - ORDS Public
 - PL/SQL Gateway
 - APEX REST
 - NoSQL Store Configuration
 - Reports

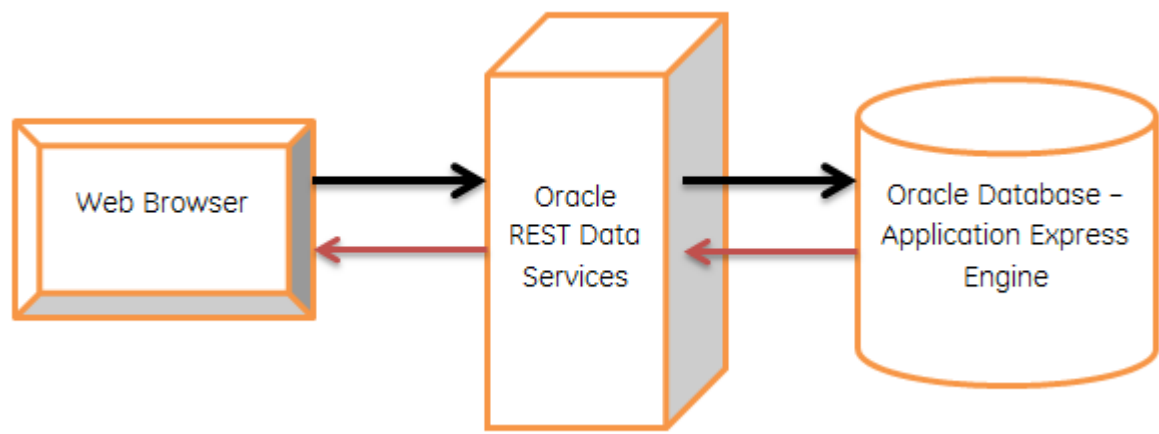
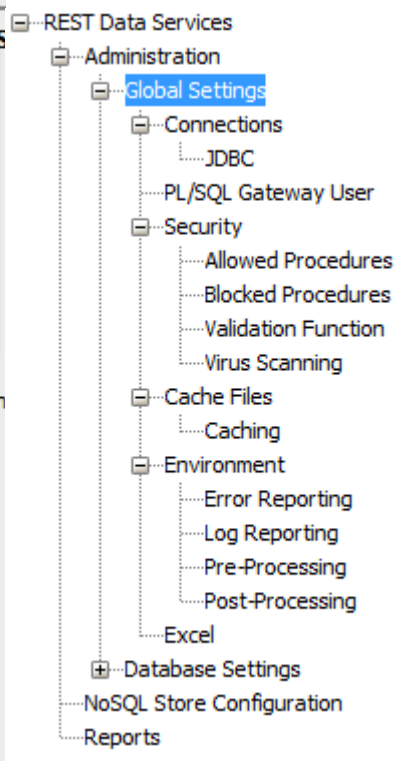
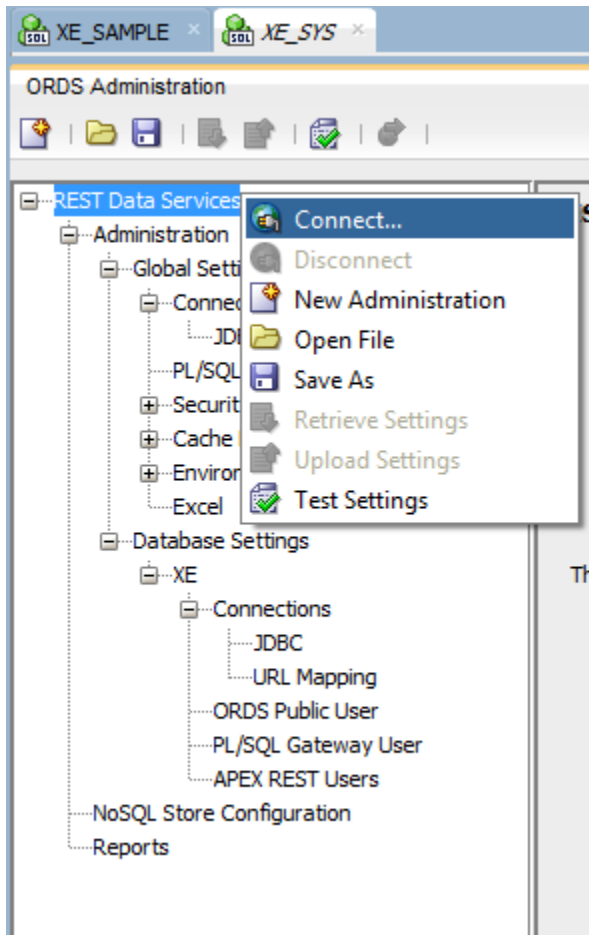
Database Settings - apex

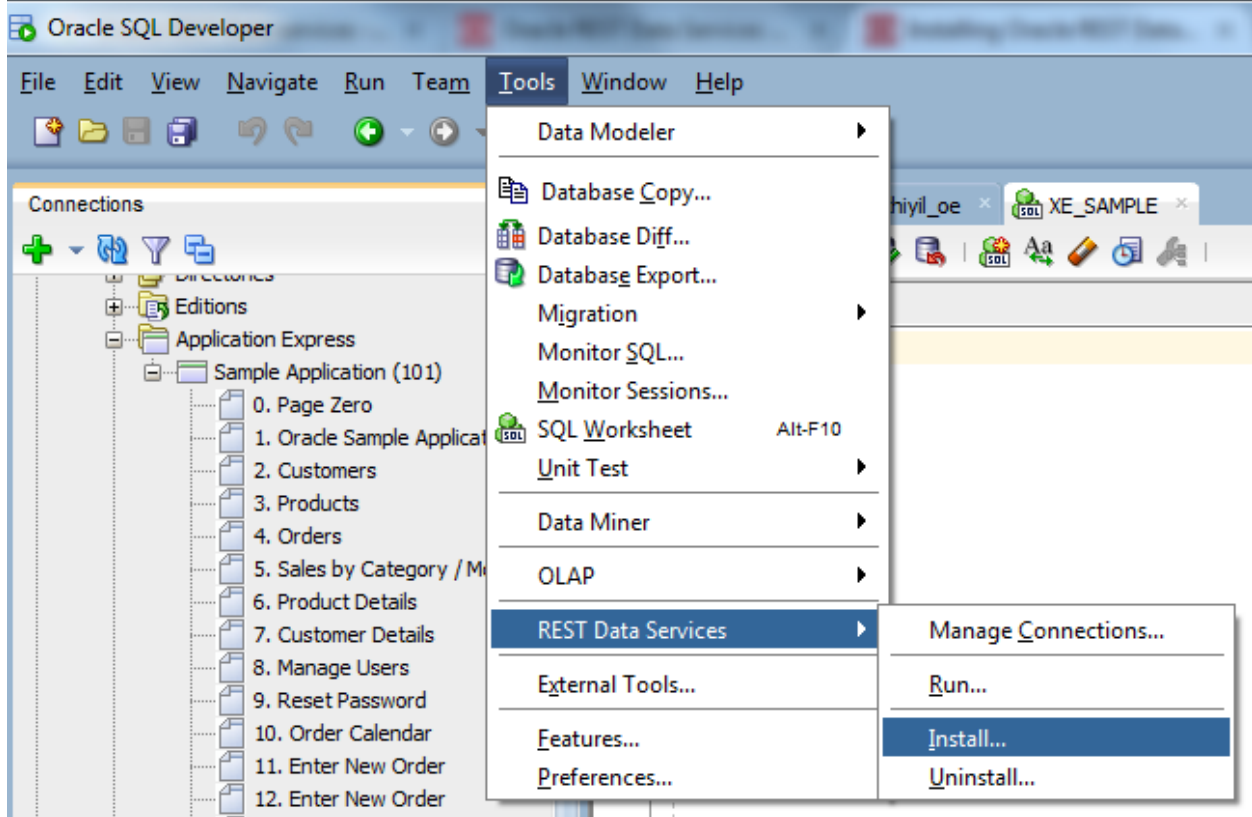
Test Settings [Close]

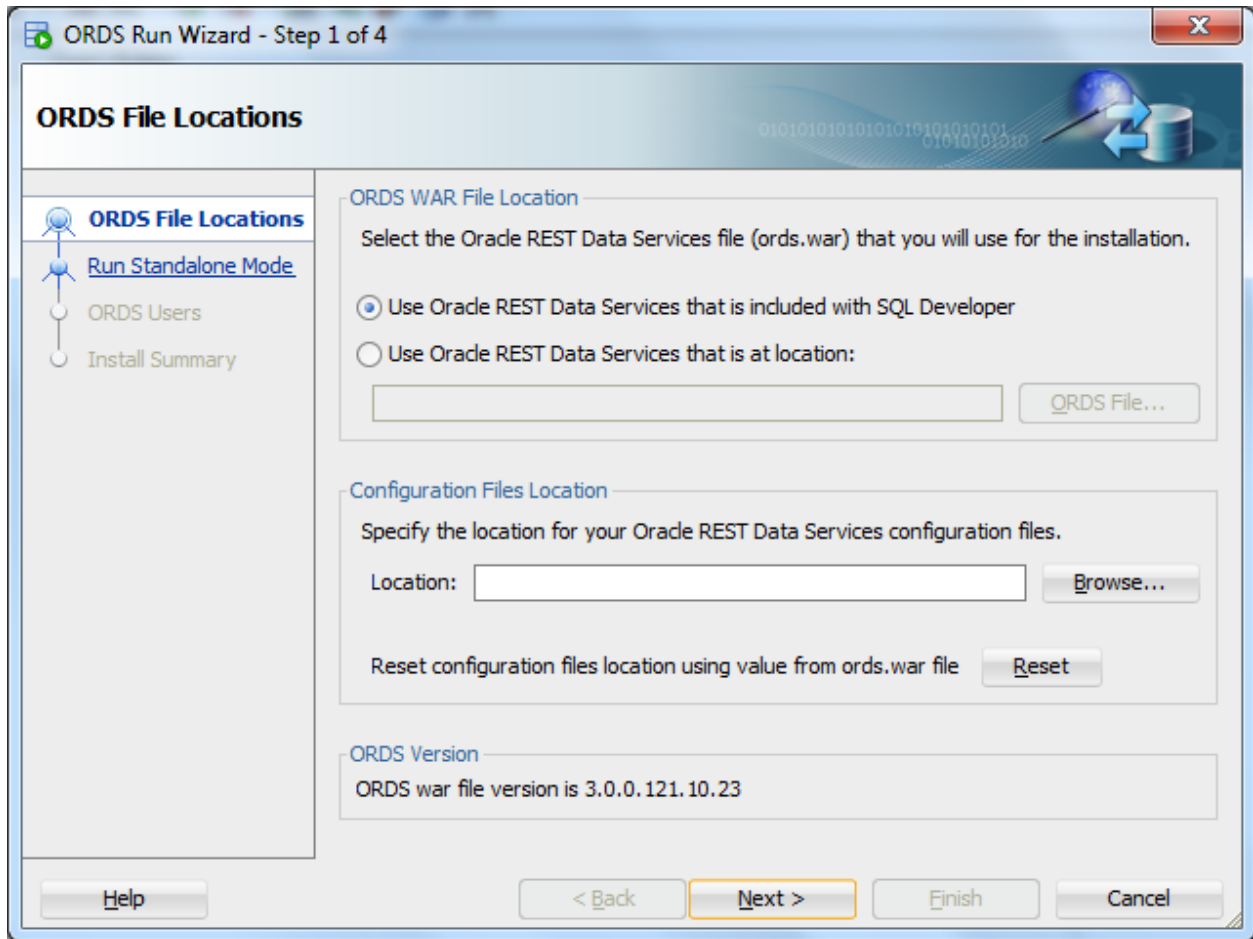
Validation Information:

Validating settings completed successfully.

[Close]







Run Standalone Mode



- ORDS File Locations
- Run Standalone Mode**
- ORDS Users
- Install Summary

Standalone Mode

Oracle REST Data Services includes a web server that enables you to run in standalone mode. Standalone mode is designed to use in development and test environments only. Standalone mode is NOT supported for use in production environments.

Run in Standalone Mode when installation completes

Http Port:

Application Express

Specify the location of Application Express static resources: images, css, etc.
Examples: /apex_home/apex/images/, c:/apex_home/apex/images/

Static Resources Location:

Help

< Back

Next >

Finish

Cancel

ORDS Run Wizard - Step 3 of 4

ORDS Users

ORDS File Locations
Run Standalone Mode
ORDS Users
Install Summary

ORDS Administrator
Create an administrator responsible for administering the ORDS configurations using SQL Developer.

Username:

Password:

Confirm Password:

ORDS RESTful Services User
Create a provisioned user that allows SQL Developer to create/edit ORDS RESTful Services.

Username:

Password:

Confirm Password:

Requires Secure Socket Layer (example: https)

Help < Back Next > Finish Cancel

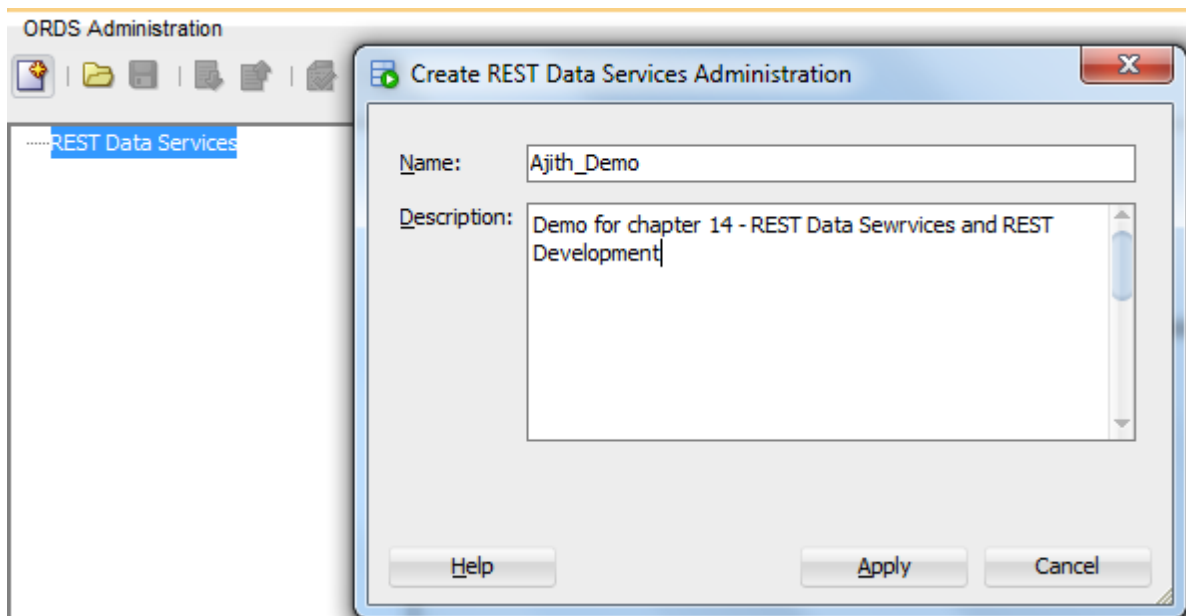
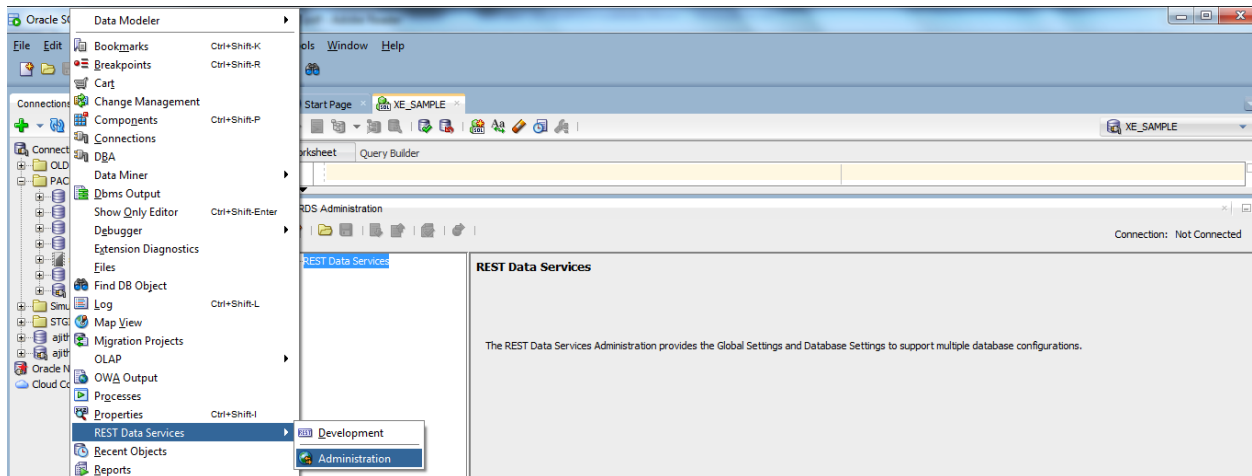
ORDS Run Wizard - Step 4 of 4

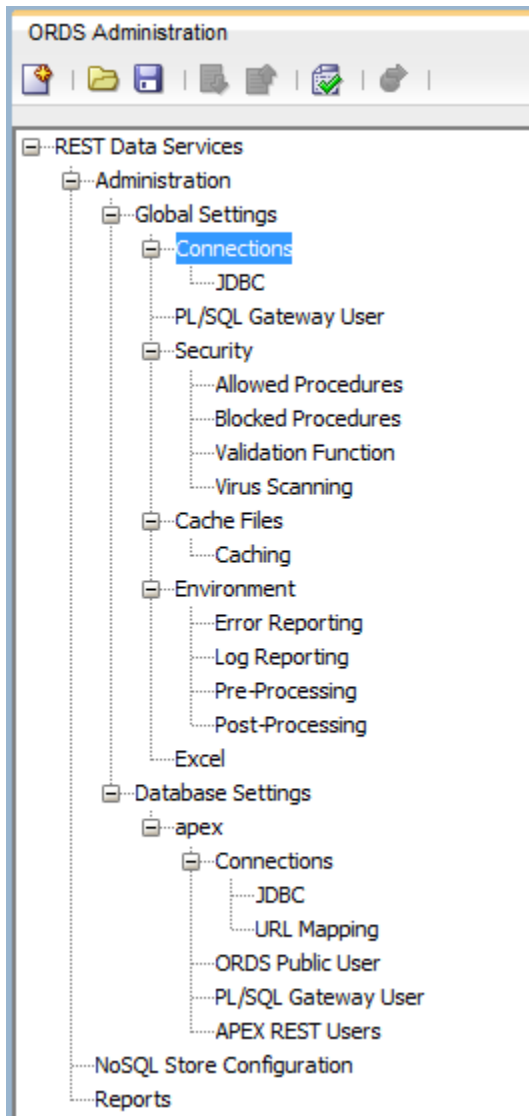
Install Summary

ORDS File Locations
Run Standalone Mode
ORDS Users
Install Summary

- ORDS Installation Summary
 - ORDS War File
 - File Name: C:\sqldeveloper-4.1.0.19.07-no-jre\sqldeveloper\ords\ords.war
 - Version: 3.0.0.121.10.23
 - Configuration Location: C:\Users\212391205\Documents\OTN\Book_Proposal\PACKT\Oracle_REST_Data_Services_Configu
 - Run in Standalone Mode when installation completes
 - Http Port: 8085
 - APEX Static Resources Location: C:\oradexe\app\orade\product\11.2.0\server\apex\images
 - ORDS Administrator: ORDS
 - ORDS User: RESTFUL

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- REST Data Services
 - Administration
 - Global Settings
 - Connections
 - JDBC
 - PL/SQL Gateway User
 - Security
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 - Excel
 - Database Settings
 - apex
 - Connections
 - JDBC
 - URL Mapping
 - ORDS Public
 - PL/SQL Gateway
 - APEX REST
 - NoSQL Store Configuration
 - Reports

Database Settings - apex

Test Settings [Close]

Validation Information:

Validating settings completed successfully.

[Close]

