



Oracle Business Intelligence Enterprise Edition 11.1.1.7.1

OBIEE SampleApp V309 R2

User Guide

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1 Introduction to SampleApp

The Sample Application (SampleApp) for Oracle Business Intelligence Suite Enterprise Edition Plus (EE) is a comprehensive set of illustrative examples and best practices for OBIEE. It demonstrates a broad range of OBIEE 11g capabilities including Enhanced visualizations such as interactive dashboards, modeling best practices, Action Framework, BI Publisher, Scorecard and Strategy Management, Mobile style sheets, Semantic layer modeling, Multi-source federation and integration with products such as Essbase, ORE, Oracle OLAP, ODM, TimesTen, Endeca and more.

Disclaimer: The SampleApp contents and its example custom codes, including but not limited to, any example custom Java programs, JavaScript, SQL, SQL Loader Scripts, Shell Scripts, R Scripts and reports, are distributed free for demonstrative purposes only. It is neither maintained nor supported by Oracle as a licensed product. We specifically do not guarantee accuracy of the results produced by any of these custom utilities. You must accept and comply with OTN License Agreement to use OBI EE SampleApp.

1.1 Image Contents

1.1.1 Software

The SampleApp V309 R2 image includes following preconfigured and integrated software:

- Oracle Linux 5.9 (el5PAE)
- OBIEE 11.1.1.7.1 (including Mobile App Designer, OBIEE Essbase/EPM Suite)
- Oracle Database 12c
- Oracle TimesTen 11.2.2.5.1
- Endeca Server 7.5.1
- Endeca Studio 3.0
- Endeca Integrator 3.0
- Oracle Application Express 4.2, APEX Listener 2.0.1
- R-2.15.1, ORE 1.3
- Java SE Development Kit 7u17, JROCKIT 1.6.0.37
- Oracle SQL Developer 3.2.20
- EPM 11.1.2.2 Standalone (Offered as a separate download for the SampleApp OTN page)

1.1.2 Content Organization

The dashboards and analyses within SampleApp are grouped together by related functional/ product areas. It is sequenced and organised under dashboards as shown in the screenshot here.

Once SampleApp is deployed, navigate to “General Index” dashboard to see the full list of its contents. “Configuration” dashboard contains the setup details such as SampleApp Launchpad, URLs and login credentials, database diagram, dimensional hierarchy diagrams, rpd physical, logical and logical hierarchy diagram and so on. Many of the other dashboard pages have inline help documentation on the contents exhibited on those respective pages/ analyses.



1.2 Recordings/ Viewlets

Several practical Viewlets on SampleApp and OBIEE 11.1.1.7.1 are publically available under YouTube channel <http://www.youtube.com/user/OracleBITechDemos>. Subscribe to the 'ORACLE BI TECH DEMOS' YouTube Channel to receive automatic updates when new videos are posted

1.3 Deploying the image

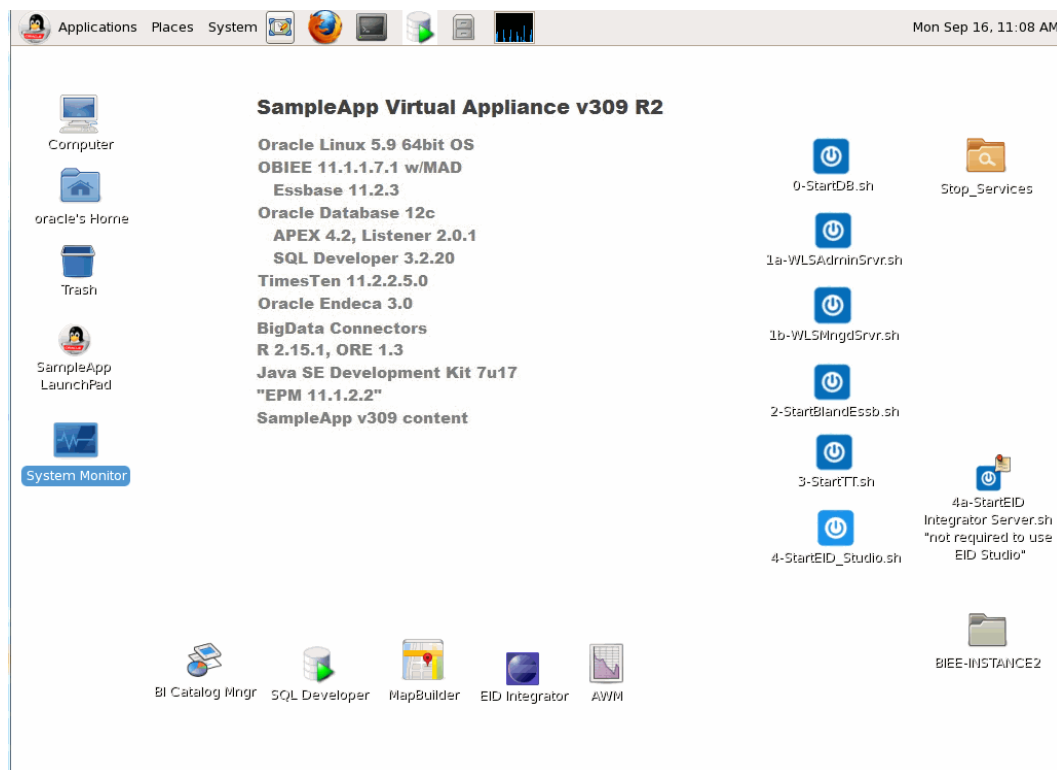
Refer to “**SampleApp V309 R2 Quick Deployment**” doc for step by step deployment instructions. Refer “**Deploying additional R packages**” section in the deploy doc to deploy the additional packages required for ORE examples.

1.4 Starting Services on the image

Notes: 1.) Your host file (/etc/hosts) is automatically updated to reflect your current VM IP address 2.) BIEE services may not start up if VPN service is running on the host machine

1.4.1 Startup Scripts

- To fulfill the dependencies, it is important to start the services in the sequence indicated in screenshot below – from 0 to 4. Wait for each of them to start completely before proceeding to next.
- Start scripts are accessible from the Desktop as shown below. They are marked using the blue “gear” icons. They are also accessible from terminal by navigating to the Desktop folder via cmd line.
- For full details on start services/ ram usage and startup order use the SampleApp Launch Pad “Recommended Startup order and RAM Usage” page
- Scripts to stop these services are saved under the folder “Stop Services” on the desktop.



SampleApp LaunchPad Screenshot:

Welcome to the Sample Application Online Launch Pad

[ORACLE BI TECHDEMO Youtube Channel](#) dozens of tutorials, overviews and example viewlets



[Start Here: SampleApp Setup and Configuration](#)

[SampleApp Software Inventory](#)

[Product Startup and Resource Matrix](#)

[URLs and Login Credentials](#)

For Product Log file analysis please use the Launch Pad from the desktop of your virtual appliance

Example: Starting WebLogic Admin Server

Few notes on WLS startup:

- On the desktop, double click on Startup Scripts folder and select "1a-WLSAdminSrvr.sh" and choose 'Run in Terminal' option. (/home/oracle/Desktop/).
- Wait for the message that shows "Server started in RUNNING mode". This indicates that WLS is up. Leave this terminal window open.

```
<Mar 17, 2011 2:34:46 AM PDT> <Notice> <WebLogicServer> <BEA-000365> <Server state changed to RUNNING>
<Mar 17, 2011 2:34:46 AM PDT> <Notice> <WebLogicServer> <BEA-000360> <Server started in RUNNING mode>
```

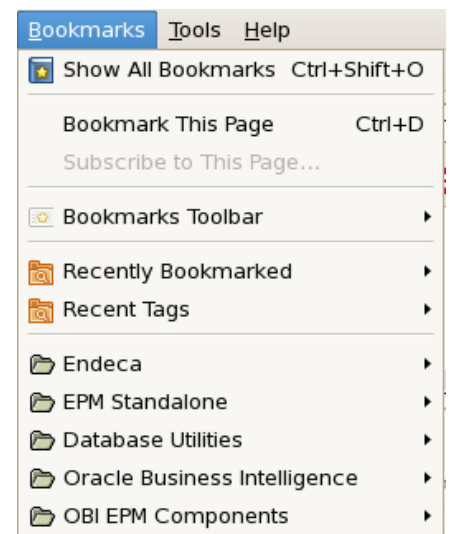
1.4.2 Shortcuts and Scripts

1.4.2.1 URL Bookmarks

Several URLs such as OBIEE login page, WLS Console and EM pages are bookmarked in Firefox browser within the image. Please navigate to File menu > Bookmarks to access these shortcuts.

1.4.2.2 SampleApp Scripts

Several custom scripts and utilities are saved on virtual box image providing examples of functional customizations on the image. Dashboard page 9.11 *SampleApp Scripts* provides an overview of these scripts. For further details on these scripts, refer to *Functional Scripts* section of this document



1.5 Image Software Inventory

See software inventory PDF available from the Launch Pad to complete deployment details

Software	Details
OBI EE	Version: 11.1.1.7.1 RCU Login: DEV_BIPLATFORM/Admin123 Middleware Home: /home/oracle/obiee http://localhost:9704/analytics (weblogic/Admin123) Plus all other functional users described in dashboard page <i>0.2 Configuration -> Users</i>
Weblogic Server	Version: 10.3.6.0 Admin Login : weblogic/Admin123 Console URL: http://localhost:7001/console/ EM URL: http://localhost:7001/em/
Oracle Database	EM: https://localhost:5500/em/login Users: sys/Admin123 system/Admin123 ORACLE_SID=orcl ORACLE_HOME= /home/oracle/app/oracle/product/12.1.0/dbhome_1 ORACLE_BASE=/home/oracle/app/oracle
Apex	http://localhost:9704/apex http://localhost:9704/apex/apex_admin Admin/Welcome! APEX_PUBLIC_USER/Admin123
Times Ten	Version: 11.2.2.5.1 Datastore – BISAMPLE_TT Login: BISAMPLE_TT/BISAMPLE_TT BI_AGGS_TT/BI_AGGS_TT Home: /home/oracle/TimesTen/tt1122/ Daemon port : 53396 Instance: tt1122 TimesTen server port : 53397
Endeca	EID Studio=/home/oracle/Endeca/Discovery/3.0.0/endeca-portal EID Workspace= /home/oracle/endeca/Discovery/Workspace Integrator=/home/oracle/Endeca/Discovery/3.0.0/Integrator Endeca Server= /home/oracle/obiee/user_projects/domains/bifoundation_domain/EndecaServer EID Studio logon http://localhost:8081/web admin@oracle.com /Admin123
ORE	Version: R-2.15.1 and ORE 1.3
OLAP AWM	Version: 11.2.0.3 Path - /home/oracle/scripts/awm
Map Builder	Version: 11.1.1.6.0
SQL Developer	Version: 3.2.20

2 Accessing SampleApp Contents

2.1 Connecting to Analytics

From within the image: Open the Firefox browser on the desktop, and connect to <http://localhost:9704/analytics>

From outside the image: First find out the IP address of the machine. To get the IP address of the VM machine, open a terminal window and type the command `/sbin/ifconfig`. This command will display the ip address of the VM. Note down the ip address under the heading `inet addr`.

Eg:- `inet addr:192.168.56.101`

```
[oracle@localhost bin]$ /sbin/ifconfig
eth0      Link encap:Ethernet  HWaddr 08:00:27:37:EE:68
          inet addr:192.168.56.101  Bcast:192.168.56.255  Mask:255.255.255.0
          inet6 addr: fe80::a00:27ff:fe37:ee68/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:2 errors:0 dropped:0 overruns:0 frame:0
          TX packets:48 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:1180 (1.1 KiB)  TX bytes:7552 (7.3 KiB)
          Interrupt:177 Base address:0xd020
```

Once you have the ip address, from your host machine browser, type in the analytics URLs you need to access web based UIs from the image. NOTE: this requires VPN services to be turned off.

2.2 OBIEE Cache is ON

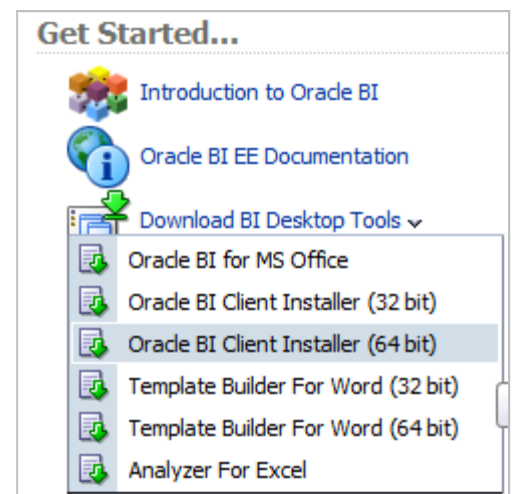
OBIEE server cache is turned on by default on the image. Some specific examples may require you to disable or bypass cache to allow direct db access.

2.3 Admintool access to SampleApp RPD

For admintool access, you must install the OBIEE Admintool client on your host windows box. OBIEE client can be downloaded from the “Get Started” section on the Home page in your OBIEE environment.

Install OBIEE Admintool client locally. On your host machine where OBIEE client is installed, create an ODBC connection to connect to the BI Server. To do this, you need to access the IP address of the VM image. To get the IP address of the image, from the running image, open a terminal window and type the command `/sbin/ifconfig`

Note down the ip address under the heading `inet addr`. Eg:- `inet addr:192.168.56.101`. Confirm that you can ping this IP address from your host machine, and complete ODBC Connection. You can now connect with admintool to your VM RPD.



2.4 Importing Oracle OLAP metadata using local BI Admin tool

If you have a local install of BI Admin Tool on your host and want to import OLAP metadata from the database inside the VM, you need to update the JAVAHOST parameter to the right value in NQSConfig.ini file on your local Admin Tool install.

JAVAHOST_HOSTNAME_OR_IP_ADDRESSES = "192.168.56.101:9810";

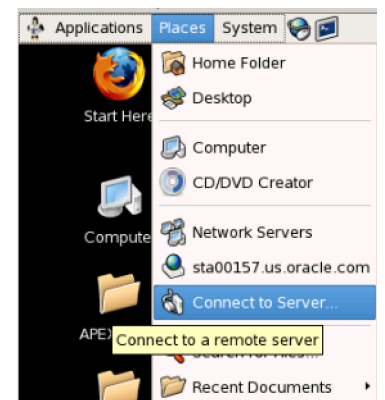
NOTE: Replace the server IP 192.168.56.101 with the right IP of you VM.

2.5 Accessing a Host Shared Folder

In order to access a shared folder on the host environment, perform the following.

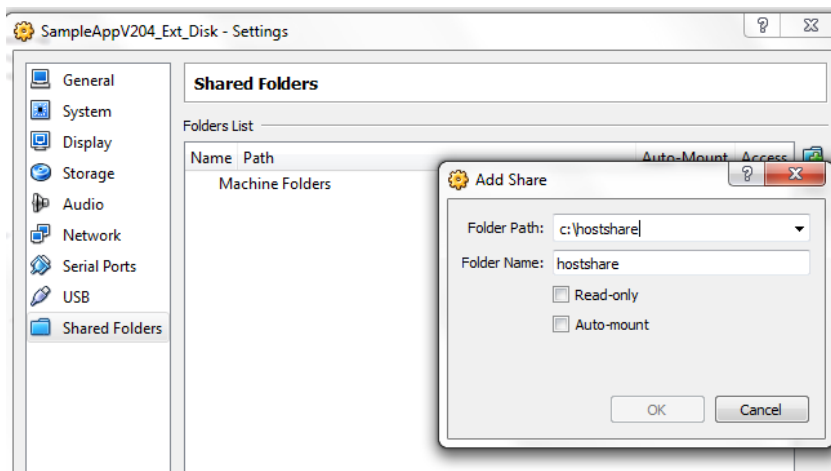
Option 1

- Login to the VM image.
- On the tool bar, click on Places->Connect to Server
- In the service type, choose Windows Share. Enter the username and domain name of your host machine and click on Connect. After connecting, the shared folders of the host machine will be displayed.



Option 2

Within your VirtualBox Manager, go to Shared Folders and Add a share



Choose a folder path on your host machine and provide a sharename like hostshare

Next, within the VM image, create a folder like /home/oracle/vmshare

Open a terminal and login as root/root. Enter the following command.

```
sudo mount -t vboxsf hostshare /home/oracle/vmshare
```

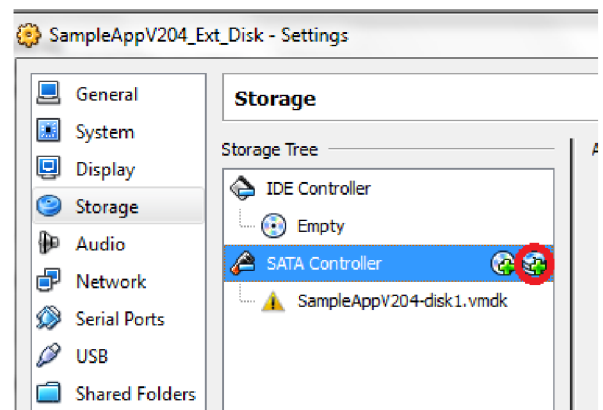
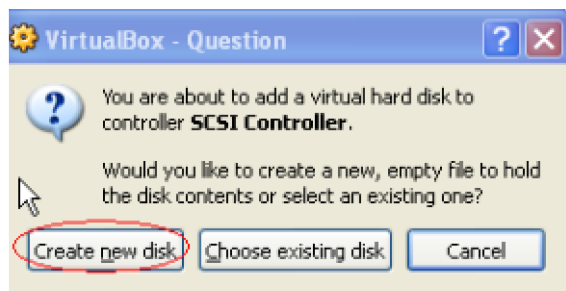
This command will make the c:/hostshare contents available within /home/oracle/vmshare. You can then copy/retrieve files between the image and the host server.

2.6 How to increase disk space on the VM

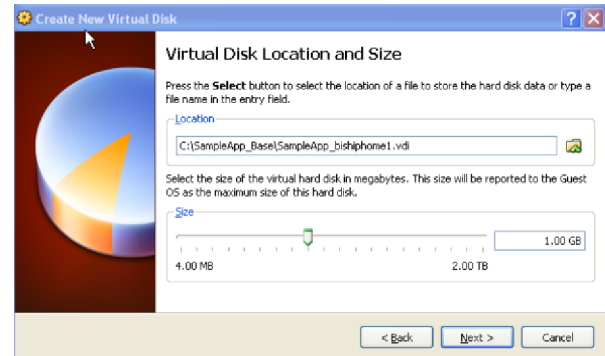
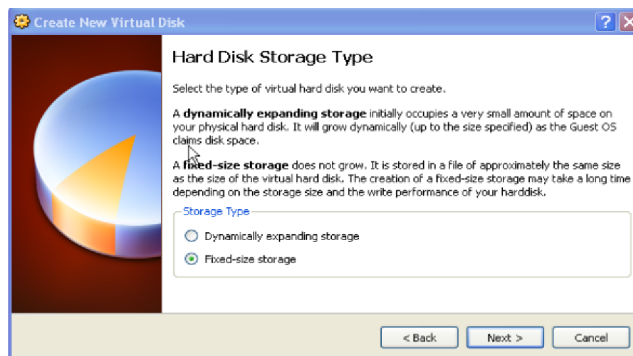
If you are running out of disk space on the /home/oracle drive, follow the steps given below. This will guide you to add a new disk to the existing /home/oracle drive

To begin with, shutdown the image. Go to the Settings->Storage of the image. Choose SATA Controller and click on the Hard Disk option

Create New Disk



Choose Fixed –size storage option



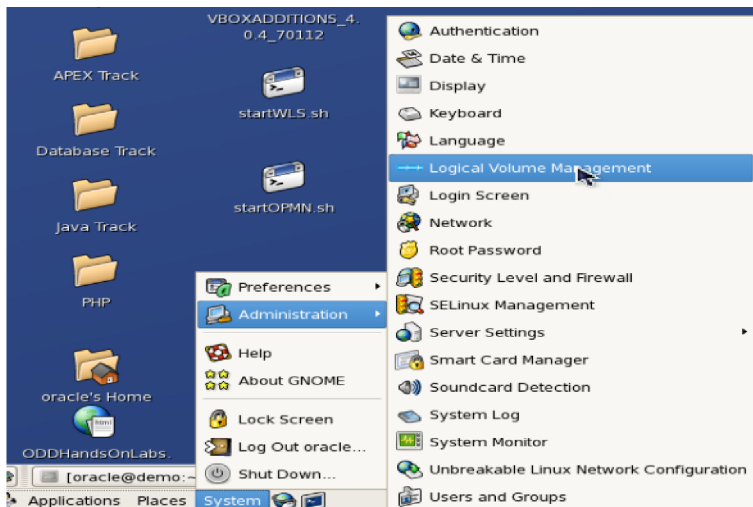
Set the size as 1.00 GB and provide the appropriate file path and file name on your setup. (Place the file in the same directory as the other vmdk files of the image for ease of use)

Click on Finish. Next start the image and follow the steps given below to make this 1Gb visible to the linux file system and to add it to the /home/oracle drive

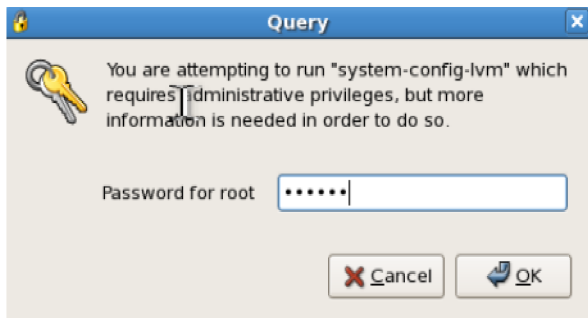
Once the image comes up, first check the existing size of / by executing the command df on a terminal window

```
oracle@obieesampleapp:~/app/oracle/oradata/orcl
[oracle@obieesampleapp orcl]$ df -h
Filesystem                Size      Used Avail Use% Mounted on
/dev/mapper/VolGroup00-LogVol100  74G    43G    27G   62% /
/dev/mda1                  95M     15M     79M    20% /boot
tmpfs                     3.9G     0    3.9G    0% /dev/shm
[oracle@obieesampleapp orcl]$
```

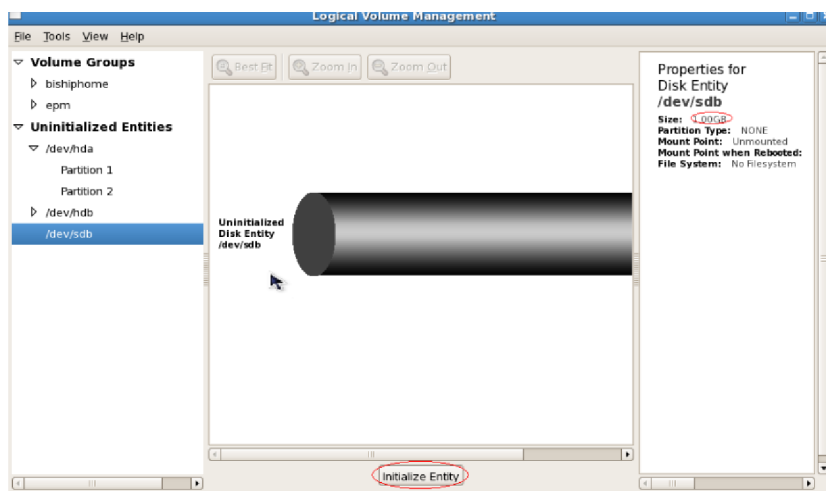
Next, click on System->Administration->Logical Volume Management



In the dialog box that comes up, enter the password for the root as root

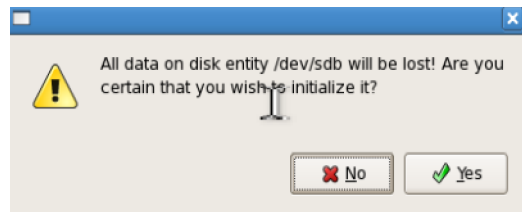


In the Logical Volume Management screen, go to the uninitialized disk entry and click on the Initialize Entry button

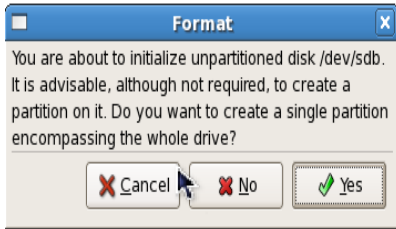


Click Yes on the dialog box

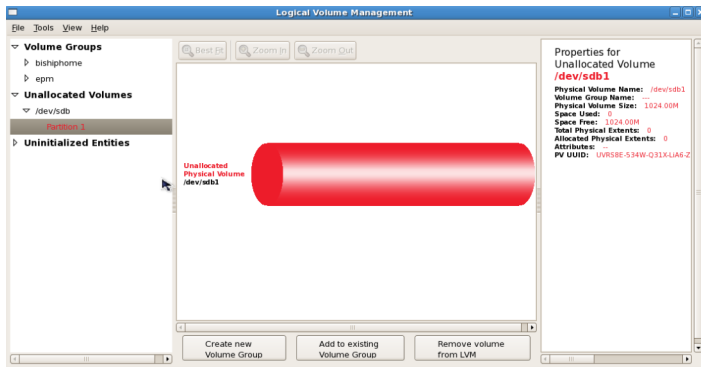
NOTE: MAKE SURE YOU ARE CHOOSING THE UNINITIALIZED DISK AND NOT ANY OTHER DISK BECAUSE THE NEXT STEP WILL DELETE ALL THE DATA ON THE DISK



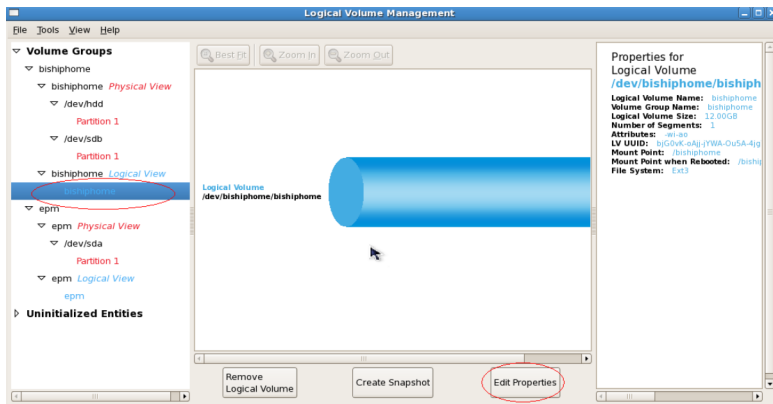
Select 'Yes' in the next dialog box



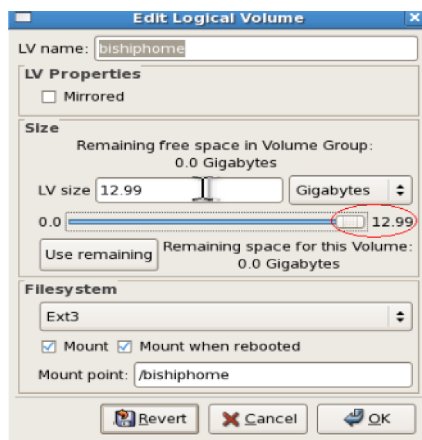
Next, add the new volume to an existing Volume group



Next, go to the logical volume and click on Edit properties.



Increase the LV size to the maximum value and select 'Ok'.



Finally, close the Logical Volume Management screen and check for the increased disk size.

3 Functional Scripts

Several custom scripts and utilities are saved on the virtual box image, for use within the image itself, or for code reuse on other environments outside of the image itself, These scripts provide example of functional customization to ease some tasks, or increase the example scope on the image. Dashboard page 9.11 SampleApp Scripts provides an overview of these scripts.

The screenshot shows a web dashboard titled "SampleApp Scripts, Utilities and Code Samples". It features a navigation bar with links like "Home", "Catalog", and "Dashboards". The main content area is organized into several panels:

- Overview and Purpose:** Describes the SampleApp Scripts and Utilities as powerful tools for OBIEE Administrators and Developers.
- Presentation Catalog Utilities:** Includes sections for Statistics, Analyses Error Checker, References Checker, and ACL Permissions, each with a brief description and a file path.
- SampleApp Data Inflator:** Explains that these scripts expand data volume in the SampleApp database.
- Physical SQL Generator:** Describes a utility to generate logical and physical SQLs without executing queries.
- Usage Tracking - Physical From Clause Parser:** Details a script that parses physical SQL statements to extract table names.
- WLS Sample User Creation Scripts:** Provides an example for importing security data into a WLS security realm.
- Network and Spatial - Code Samples:** Lists several Java scripts for network and spatial calculations, such as LinkTravelTimeCalculator.java.

Scripts are saved under the scripts folder indicated in the screenshot below. Most of these sub folders contains a README.txt file that explains the purpose and usage of respective scripits.

```
[oracle@obieesample scripts]$ cd /home/oracle/scripts
[oracle@obieesample scripts]$ ll
total 56
drwxrwxr-x 5 oracle oracle 4096 Mar  1 05:26 ACLDump
drwxrwxr-x 2 oracle oracle 4096 Feb  5 23:43 ActionSamples
drwxrwxr-x 4 oracle oracle 4096 Feb  8 07:20 awm
drwxrwxr-x 3 oracle oracle 4096 May 15 05:45 checkanalyses
drwxrwxr-x 2 oracle oracle 4096 May  7 06:40 ConcurrencySimulation
drwxrwxr-x 2 oracle oracle 4096 Feb  8 07:14 mapbuilder
drwxrwxr-x 3 oracle oracle 4096 Jul 16  2012 ndm
drwxrwxr-x 3 oracle oracle 4096 May  9 06:30 PhysicalSQLGenerator
-rwxrwxrwx 1 oracle oracle  127 Apr  5  2012 purgeadr.sh
drwxrwxr-x 5 oracle oracle 4096 May 15 05:45 ReferenceChecker
drwxrwxr-x 4 oracle oracle 4096 Jul 23  2012 SampleDataInflator
drwxrwxr-x 2 oracle oracle 4096 Feb 26 02:12 UTPhysicalFromClauseParser
drwxrwxr-x 6 oracle oracle 4096 May 15 05:45 webcatstats
drwxrwxr-x 2 oracle oracle 4096 Jul 20  2012 WLSSampleUserCreationScripts
```

Attention: The SampleApp scripts code, SQL, SQL Loader Scripts, Shell Scripts, R Scripts and reports, are distributed free for demonstrative purposes only. It is neither maintained nor supported by Oracle as a licensed product. We specifically do not guarantee the accuracy of the results produced by any of these custom utilities, in particular when used with different OBIEE releases than the one used in the source VB image.

3.1 Data Inflation Scripts

Description

SampleApp Data inflation SQL scripts enable you to dramatically expand the volume of data in OBIEE SampleApp (up to tens of millions rows). These scripts are written in PL/SQL and sequentially increase data volume in some dimension tables, in revenue fact table, or to change the time window period of the main fact tables.

The data inflation scripts inflate data volume on the following tables:

- Employee (Value based dimension)
- Customers
- Products (Regular and Ragged/Skiplevel)
- Time
- Main revenue facts (SAMP_REVENUE_F and relational aggregates)

The scripts ages facts data: shift ahead or back in time the exact time period initially covered by original fact data.

31 # of Orders (Cnt Distinct)	32 # of Cust with Orders (Cnt Distinct)	33 # of Empl with Orders (Cnt Distinct)	35 # of Products with Orders (Cnt Distinct)	T62 # of Days	T66 # of Years	T64 # of Months	23 Avg # of Orders by Customer
20,000,000	10,000	1,027	1,000	4,048	11.08	133	2,000.00

Facts impacted by aging scripts are : SAMP_REVENUE_F and relational aggregates, SAMP_HEADCOUNT_F, SAMP_QUOTAS_F, SAMP_TARGETS_F, SAMP_CUSTOMERS_D (Dimension table)

These scripts can be run on the BISAMPLE_EXA schema (and also BISAMPLE schema) to inflate the data to your needs. BISAMPLE_EXA schema sits on a separate default tablespace called bisample_exa which has been defined with AUTOEXTEND on. Hence be careful when you run the inflator script for large volumes as the tablespace will continue to grow and might occupy all the available disk space on the image. If you wish to generate large volumes of data, then consider increasing the VM image size (refer to section How to increase space on the VM) or restore the BISAMPLE_EXA schema on a different more powerful machine and run the scripts.

Usage

For more details on execution sequence of various scripts, program specifications etc, please refer to SampleApp_Data_Inflator_Guide. The code and the guide can be found on the image in the directory:

/home/oracle/scripts/SampleDataInflator

Disclaimers

- These scripts affect only the main Oracle relational db datasource which is the BISAMPLE and/or BISAMPLE_EXA schema . These scripts do not handle the other datasources like TimesTen, Essbase etc.
- Once these scripts are executed, data within BISAMPLE schema will no longer be the same as rest of the data sources and some federation examples may show discrepancy between sources after relational data is inflated.
- Any pre-built or hardcoded filters with SampleApp or using BISAMPLE data may no longer work as expected
- The purpose of these scripts is only to create large data volumes that may support performance testing of OBIEE platform. The facts distribution of created data will either mimic the initial existing dataset, or be random (your choice). Besides volume, the inflated data will not generate meaningful business like facts distribution. If you choose the random data generation option, then the existing charts in SampleApp will show a completely different pattern as the newly generated fact values are random numbers and don't have the distribution pattern of the initial dataset.

3.2 Webcat Analysis

Description

Web Catalog Statistics Application, which is prepackaged with in SampleApp image, acts as a reporting layer for the Webcat metadata objects. It provides detailed insight into Web catalog content, spots dormant catalog objects, assists in performing Webcat impact analysis for metadata changes, presents automated dashboard index and more. There is an interesting set of dashboards that leverage these results and facilitate some very useful analyses. Take a look at dashboard 9.31 Webcat Analysis for some examples.

Once the underlying web catalog objects are modified (new objects added or existing object attributes modified or deleted), statistics need to be refreshed.

Usage

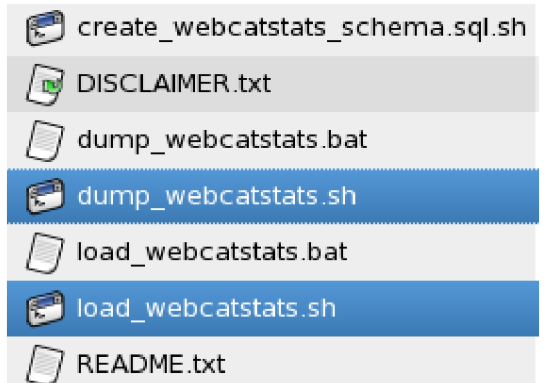
Webcatstats scripts can be found under the folder `/home/oracle/scripts/webcatstats`

- **create_webcatstats_schema.sql**: This script creates db schema objects required for loading webcat statistics data. This only needs to be executed once. By default, these objects are created in the BIRCU_BIPLATFORM schema.
- **dump_webcatstats**: This script executes OBIEE catalog manager to dump Presentation catalog information into flat files. These files are saved under `/rep` directory.
- **load_webcatstats**: This script leverages sqlldr (SQL Loader) to parse and load the catalog manager reports (output from previous script) into the BIRCU_BIPLATFORM schema.
- **Refreshing Webcat Statistics**: In order to refresh webcat stats in the image, run `dump_webcatstats` first and followed by `load_webcatstats`. This will replace the old data by the new data in the table.
-

ATTENTION: OBIEE Cache may need to be cleared to report the last results of the scripts on the dashboards

9.31 Webcat Analysis

[Overview](#), [Dormant Objects](#), [Automatic Dashboards Index](#), [Dashboards Bridge to Analysis](#), [Analysis Bridge to Dashboards](#), [Analysis Bridge to Columns](#), [Columns Bridge to Analysis](#), [Objects Not Exposed in any Dashboard](#), [Full Orphan Objects](#)



3.3 Webcat Error Checker

Description

These are another set of useful scripts that help in validating the integrity of all the analyses within your environment. Ongoing updates to the RPD, changes to the database tables etc could lead to some of the existing analyses to break. Webcat error checker can be run on these catalogs to detect these broken analyses. Each analysis is iterated in an automated way to verify that it successfully resolves into a logical query and can execute to produce a resultset. The results of this utility are written to a file which can then be loaded into a database table by a distinct subscript.

9.41 Webcat Errors Checker

[Syntax Issues - Overview](#), [Syntax Issues - Details](#), [Execution Issues - Overview](#), [Execution Issues - Details](#)

Dashboard 9.41 Webcat Errors Checker shows some examples of this application.









Usage

Webcat error checker scripts can be found on the image under

[*/home/oracle/scripts/checkanalyses*](#)

This application can be executed in two modes which you can swap by editing the runcheck file within the script directory.

- **Isql** - In this mode, reports that cannot be resolved to a logical SQL are identified. The report is not actually executed and hence this mode executes quicker.
- **exec** – In this mode, reports are executed on the physical database and number of rows returned by the server are displayed. Reports with no results as well as reports with odbc errors will display 0 rows. Having OBIEE cache turned on or off may influence the results when running this mode.

 CheckAnalyses.jar	3.0 MB	java archive
 DISCLAIMER.txt	898 bytes	link to plain text document
 exec-out.txt	126.3 KB	plain text document
 load-exec-out.sh	554 bytes	shell script
 load-Isql-out.sh	554 bytes	shell script
 Isql-out.txt	126.2 KB	plain text document
 README.txt	1.6 KB	plain text document
 runCheck	444 bytes	plain text document

By default, the configuration is running both modes, Isql then exec. Once the scripts completes, the loading of each Isql and exec results in db table must be completed by running the load scripts. The results will be appended to the existing data in the table, with a run date marker.

ATTENTION: OBIEE Cache may need to be cleared to report the last results of the scripts on the dashboards

3.4 Webcat Reference Checker

Description

This utility searches through the object XML of each Presentation Catalog object (including Analyses, dashboards, Actions etc) and reports the occurrence(s) of a search string supplied to it as a REGEX pattern. If the search is for Presentation Catalog references, the utility checks the validity of the target object and reports it as valid or broken. In essence, it highlights all the objects whose target object references are no longer valid (either removed or moved to different location within the catalog. For example, if an analysis has an action link that points to a target and if the target has been moved or removed, then this utility will identify this as an error and report it. The invalid target object could be an analysis, dashboard, prompt, target document (in case of scorecards) etc.

9.40 Webcat Reference Check









[Reference Search Overview](#), [Broken Reference Details](#), [Top Target Types by Source Folder](#), [Top Broken References](#), [Objects Referencing a given Target](#), [Targets Referenced by an Object](#)

Dashboard 9.40 Webcat Reference shows some examples of this utility.

Webcat reference check scripts can be found on the image under </home/oracle/scripts/ReferenceChecker>

Usage

- Execute "runReferenceChecker.sh" to search through the catalog and run the checks.
- Then run "load_results.sh" file to upload its result into database. This load truncates the old results in the table and loads the new results instead
-
- **ATTENTION: OBIEE Cache may need to be cleared to report the last results of the scripts on dashboards**

 DISCLAIMER.txt	898 bytes	link to plain text document
 load_results.sh	629 bytes	shell script
 output.txt	688.8 KB	plain text document
 README.txt	859 bytes	plain text document
 ReferenceChecker.jar	3.0 MB	java archive
 regex.txt	847 bytes	plain text document
 runReferenceChecker.sh	277 bytes	shell script
 sequenceddl.sh	433 bytes	shell script

3.5 Webcat ACL Permissions Dump

Description

This utility iterates through each Presentation Catalog object and lists out its Access Control List, other security attributes and permissions. List of fields included in its output are listed below.

Dashboard [9.32 Webcat Errors Checker](#) shows some examples of this application.

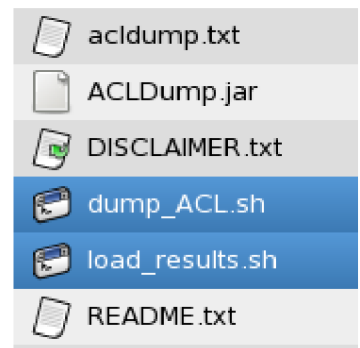
Webcat ACL Permissions Dump scripts can be found on the image under [/home/oracle/scripts/ACLDump](#)

Usage

- Execute "dump_ACL.sh" to dump the ACL info to a tab delimited text file.
- Then run "load_results.sh" file to upload its result into database.

9.32 Webcat ACL Permissions

[Accounts Allowed Object Access](#), [Accounts Denied Object Access](#), [Objects Denied to an Account](#), [Objects Allowed to an Account](#), [Detailed Permissions List](#)



ATTENTION: OBIEE Cache may need to be cleared to report the last results of the scripts on the dashboards

3.6 Physical SQL Generator

Description

This utility is used to generate logical and physical SQLs for OBIEE Analyses without actually executing the queries.

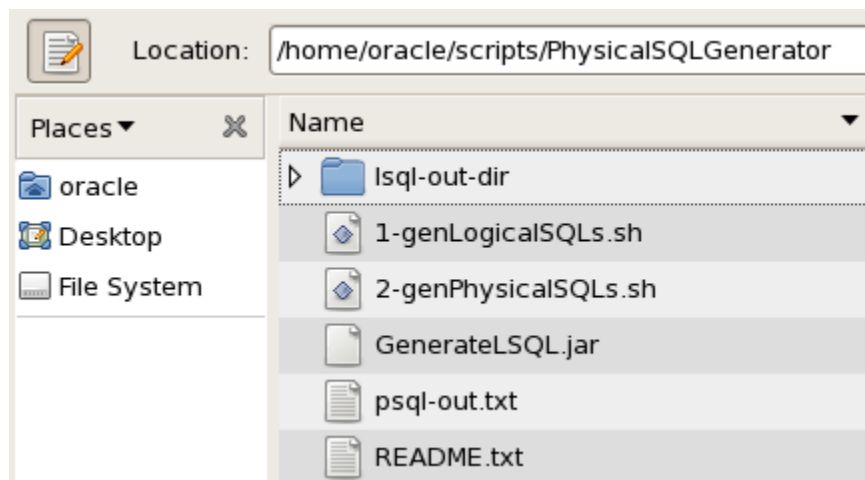
PhysicalSQLGenerator scripts can be found on the image under *</home/oracle/scripts/PhysicalSQLGenerator>*

Usage

The utility has two parts:

1-genLogicalSQLs.sh: this invokes a Java program that iterates through webcatalog and dumps logical SQLs for each analysis. It also sets SKIP_PHYSICAL_QUERY_EXEC and related variables for skipping query execution in the next step. Isql-out-dir is the output directory where logical sqls are saved.

A shell script that iterates and invokes nqcmd for each query and in-turn, register its physical SQL(s) to UT tables. psql-out.txt saves the output from nqcmd execution.



3.7 Concurrency Simulation

Description

This program simulates concurrent execution of BI queries using multiple concurrent users. Dashboard [9.11 SampleApp Scripts > Concurrency Instructions](#) shows some examples of this application.

It first creates N user sessions (based on users_list.txt), then it parallelly invokes and executes one distinct query each for each session. Row counts from the results of those queries gathered and displayed as and when each thread completes. When all the parallel threads complete, user sessions are cleaned up.

'users_list.txt' file contains the list of concurrent users that this program will use for simulation. These users must already be created with a common password inside the security provider used within your WLS deployment. Use 'import_users_to_wls.dat' to create these users on your environment if they don't exist already. You can import the users by navigating to Summary of Security Realms >myrealm >Providers >DefaultAuthenticator page under WLS Console.

Query execution can be monitored in several ways including: 1) Concurrency Simulator dashboard pages 2) WLS metrics such as concurrent queries, users etc 3) Database active sessions.

If you wish to increase the number of concurrent users for simulation, edit users_list.txt and copy/paste the existing users to the number you desire.

NOTE: If you increase concurrent users to a very large number, you may have to edit the database parameters like number of processes, sessions and transactions to handle the large volume. If you fail to do so, then many of the queries will fail and return rowcount as 0, which indicates that the database is not able to handle the large number of concurrent sessions.

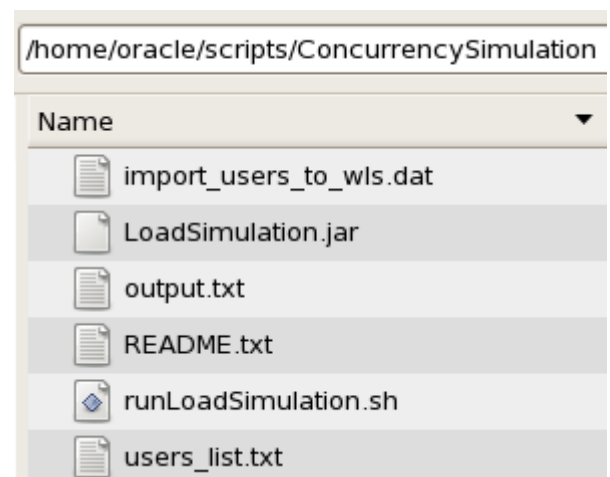
ConcurrencySimulation scripts can be found on the image under [/home/oracle/scripts/ConcurrencySimulation](#)

Usage

```
java -jar LoadSimulation.jar "<hostname>" "<port number>" "<report path>" "<password for users in users_list file>"
```

Example:

```
java -jar LoadSimulation.jar "localhost" "9704" "/shared/7. Server Features/Concurrency Simulation/Simulation/Concurrency" "Admin123"
```



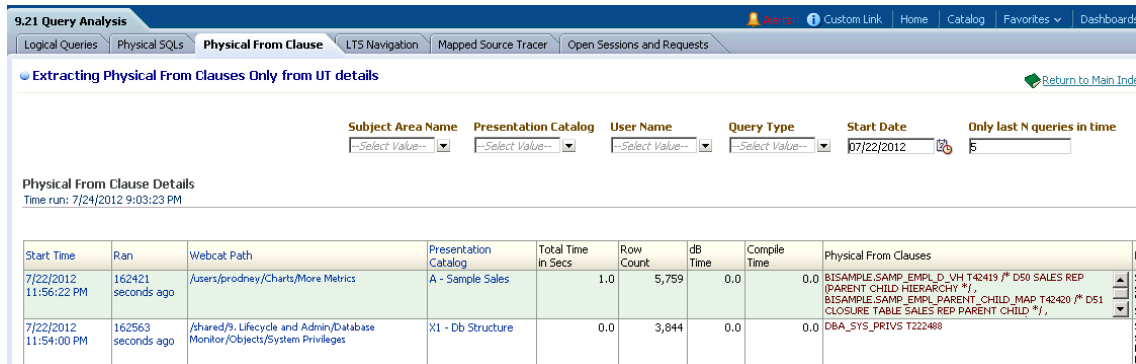
3.8 Usage Tracking (UT) - Access to physical SQLs

Description

Whenever a report is executed, Usage Tracking functionality stores the physical SQL query that OBIEE Server generates into a table called S_NQ_DB_ACCT within the RCU schema. These physical SQL queries are accessible on the UT dashboards in SampleApp, but are often long and can be complicated, thereby making it difficult to manually find out the actual FROM clause within the query, to determine the table names.

UTPhysicalFromClauseParser is an application that parses through these long SQL statements and extracts the contents of the FROM clause within these statements. These FROM clause objects are made available as a view which can then be mapped within the rpd to enable reporting. Dashboard page 'Physical From Clause' under 9.21 Query Analysis shows an example of the usage.

The scripts can be found on the image under /home/oracle/scripts/UTPhysicalFromClauseParser



9.21 Query Analysis

Logical Queries Physical SQLs **Physical From Clause** LTS Navigation Mapped Source Tracer Open Sessions and Requests

Extracting Physical From Clauses Only from UT details

Return to Main Index

Subject Area Name Presentation Catalog User Name Query Type Start Date Only last N queries in time

Physical From Clause Details
Time run: 7/24/2012 9:03:23 PM

Start Time	Ran	Webcat Path	Presentation Catalog	Total Time in Secs	Row Count	dB Time	Compile Time	Physical From Clauses
7/22/2012 11:56:22 PM	162421 seconds ago	/users/prodneey/Charts/More Metrics	A - Sample Sales	1.0	5,759	0.0	0.0	B1SAMPLE.SAMP_EMPL_D_VH T42419 /# D50 SALES REP (PARENT CHILD HIERARCHY *), B1SAMPLE.SAMP_EMPL_PARENT_CHILD_MAP T42420 /# D51 CLOSURE TABLE SALES REP PARENT CHILD *), DBA_SYS_PRIVS T222408
7/22/2012 11:54:00 PM	162563 seconds ago	/shared/B_Lifecycle and Admin/Database Monitor/Objects/System Privileges	X1 - Db Structure	0.0	3,844	0.0	0.0	

Usage

- Connect to your RCU schema (where S_NQ_DB_ACCT table resides) and execute the following
- First execute 1_Create_UT_Obj.sql to create the necessary object types
- Next execute 2_UT_Function.sql to create the function that will parse the query text and extract the FROM clause
- Next execute 3_UT_Source_View.sql to create the view that will expose the results of above mentioned function.

Important Note

On line number 15 in the file 2_UT_Function.sql, there is a function call to extract the strings from the blob column. `dbms_lob.substr(query_blob,1642, 1)`. Although SQL allows a maximum limit of 4000 characters, this code currently only handles 1642 characters, as setting it beyond this value returns a "ORA-06502: PL/SQL: numeric or value error" (possibly due to insufficient memory on the image). This implies that for each query string, this code extracts the first 1642 bytes and then processes these bytes to extract the FROM Clause.

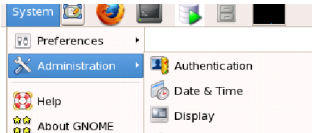
On your environment, consider increasing this limit to 4000 (change the function as `dbms_lob.substr(query_blob,4000, 1)`) if you do not run into this issue.

Disclaimer

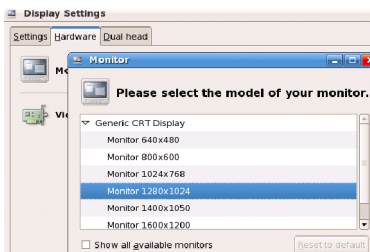
OBIEE Server generates several different kinds of queries depending on what's defined in the analysis and also the relationships in the underlying data model. This application is not guaranteed to handle all possible kinds of queries that the server generates.

3.9 Setting Your VM Screen Resolution

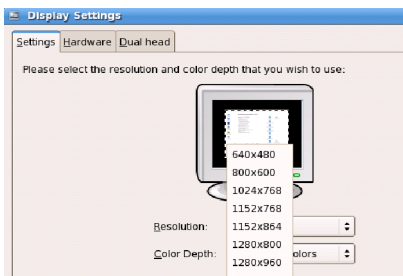
- Navigate to system/Administrator/display



- Select the hardware tab, select your desired resolution and hit ok



- Click on the settings tab, select your desired resolution again and click ok



- Log out of your Virtual Box image and log back in.
- Once logged back in select system/preferences/screen resolution and set your resolution

