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Deploying the OBI SampleApp Virtual Appliance version 309 R2

Quick Deployment: Step-by-step instructions to deploy the SampleApp Virtual Machine v309 R2

Announcement: **SampleAppv309 R2 is now available.**

Visit us on YouTube at **Oracle BI TECHDEMOs** for dozens of viewlets on SampleApp and OBI 11.1.1.7. 1 Click here to subscribe and receive automatic updates when new videos are posted.

Image Details

- Oracle Linux 5.9 (el5PAE)
- OBIEE 11.1.1.7.1 /MAD
- Includes OBIEE Essbase/EPM Suite
    o Essbase 11.2.3
- Oracle Database 12c
- Oracle TimesTen 11.2.2.5.1
- Endeca Server 7.5.1
- Endeca Studio 3.0
- Endeca Integrator 3.0
- Oracle APEX Listener 2.0.1
- Oracle Application Express 4.2
- R-2.15.1
- JROCKIT 1.6.0.37
- ORE 1.3
- Java SE Development Kit 7u17
- Oracle SQL Developer 3.2.20
- EPM 11.1.2.2 Standalone
    o Offered as a separate download from FTP.ORACLE.COM

STEP BY STEP DEPLOYMENT

1. **Prepare your host system.**
    Minimum 8GB of real memory; more is better.

Turn on Virtual Assist features in the BIOS (usually done by default). Refer to Troubleshooting   tips in Step 12 for more details.

~84GB disk space needed to download and install. (This includes the 24GB unzipped .vmdk file and ~59GB of the imported image). Once the image is imported, the 24GB .vmdk file can be removed and the imported appliance of 59GB is all that you need to run the image.
Download and install [Free Download Manager](#) or an ftp client of your choice.

Download and install [7Zip](#).

Download and install md5sum (optional)

2.   **Download and install** [Oracle Virtual Box](#) (4.2 and above is supported)

3.   Sign in to the SampleApp page at
http://www.oracle.com/technetwork/middleware/bi-foundation/obiee-samples-167534.html

4.   **Click to accept the OTN license.**
Select the **OBIEE 11.1.1.7.1 - Sample Application** (V309R2) entry
click to accept the OTN license

5.   **Download all files and documentation pertaining to the v309R2 release to a single directory**

- Download files SampleAppv309R2.zip.001 through .005
- Download the SampleAppv309R2 image key file
- Download the SampleApp v309R2 quick deployment guide.pdf
- Download the Whats New in v309R2.pdf
- Download the SampleApp v309R2 User Guide.pdf
- **(optional)** only if a standalone EPM MW home is required (not typical) Download the SampleAppv309R2_EPMStandalone.zip (optional standalone EPM MW home)-see section 15 below

6. When all zip files are downloaded, unpack them with 7zip.

In a command window or 7z file Manager, run the following command (or 7z file manager). It will create a directory called **SampleAppv309R2-export**

- 7z x SampleAppv309R2.zip.001
- (Typical extraction time will take 20 to 30 minutes)
  Result:
  SampleAppv309R2GA-disk1.vmdk (23GB)
- Download the SampleApp v309R2 image key file (ovf), extract and place it in the **SampleAppv309R2-export** directory that was created during the image extract

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- Your OVF and VMKD file should both be in the same directory
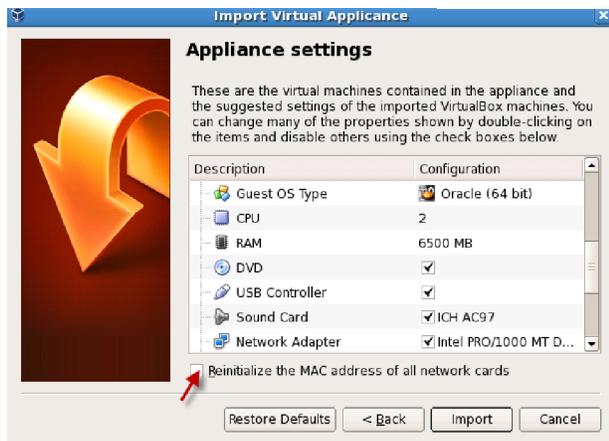
7. **Start Oracle Virtual Box Manager**

Click File / Import Appliance (Ctrl-I) (you will need ~60GB of free space)
Click Open appliance...
Navigate to and Select SampleAppv309R2GA.ovf machine definition file
Check [x] Reinitialize the MAC address of all network cards

Wait for it to complete (typical import takes about 60 minutes). Your virtual machine is ready.

Important: By default your virtual appliance will import to your local C:\users directory. If you do not have adequate space at this location or would like to deploy to a different location you can edit the path of the Virtual Disk Image as shown in the screenshot below- Note: Do not change the value of the vmdk file when modifying your path.

Note: Shown in yellow is the portion of the virtual disk you should be modifying if necessary
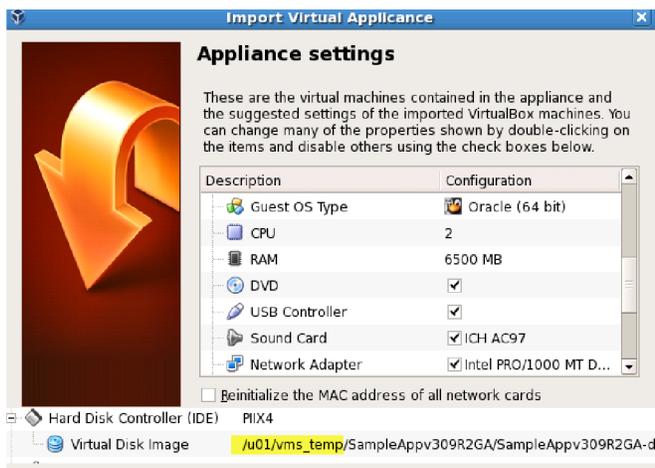
8. **Virtual Machine Settings**

By default your virtual machine is configured with the following parameters which is ideal for an 8GB host system

- 6.1 GB ram
- 2 processors
- Bridged Network adapter

Users with more physical host memory can allocated more memory to the virtual machine

You can edit any of the VM configurations by clicking on edit/settings

9. **Start your VM**

Your VM will auto logon as oracle/oracle. Upon logon your IP address will be displayed with further instructions on getting up and running. Note: If your VM does not have an active network connection no IP address will be displayed.

Note: Bridge networking is ideal when your virtual machine has the ability to obtain its own IP address. (Examples include "at home, host machine on wifi", in "in office, host machine hardwired connection). Open a browser on your local host machine to access OBI using the IP address provided at the time of image start up.

NAT networking is ideal when your virtual machine cannot obtain an IP address of its own. In this case, your virtual machine will always have an IP address of 10.2.0.15. Depending on your networking configuration your VM may still have access to the "web" but users will have to configure port forwarding to access OBI from a remote browser. See how to setup port forwarding on YouTube.

Confirm your VBox tools are up to date prior to continuing as a reboot will be necessary once completed. Proceed to step 11 to upgrade your VBox tools. A good indication that your vbox tools require updating is the inability to change your VM screen resolution. See minute 3:20 in the following YouTube video on how to upgrade your vbox tools or see the txt version in step 11 below.

10. Deploying additional R packages

SampleApp Dashboard "8.13 Oracle R Enterprise" contains several ORE-OBIEE integration examples. These R content examples require additional R packages to be installed on the Virtual Image. These packages are free to download from the web (CRAN), but it could not be included in the original VB image for legal distribution reasons. Those examples will not work until these packages are installed. Follow the below instructions and deploy the additional R packages in to your SampleApp image.

Step 1: Please navigate to "/home/oracle/scripts/R" folder inside the image and execute "download_additional_R_packages.sh". Please check the second line in "download_additional_R_packages.sh" script and make sure to use correct proxy settings applicable to your network. In case your image does not have access to internet, then download the files listed in that script from a different machine that has internet access and then transfer it in to "/home/oracle/scripts/R" folder in your image.

Step 2: Once the packages are downloaded and available, execute "install_additional_R_packages.sh" script which will deploy the required packages in to your SampleApp environment.

POST STARTUP CHECKLIST

Starting services, installing VBox tools, importing troubleshooting, customized screen resolution

11. Starting Services

From the desktop of your virtual machine, click on the SampleApp Launch Pad.

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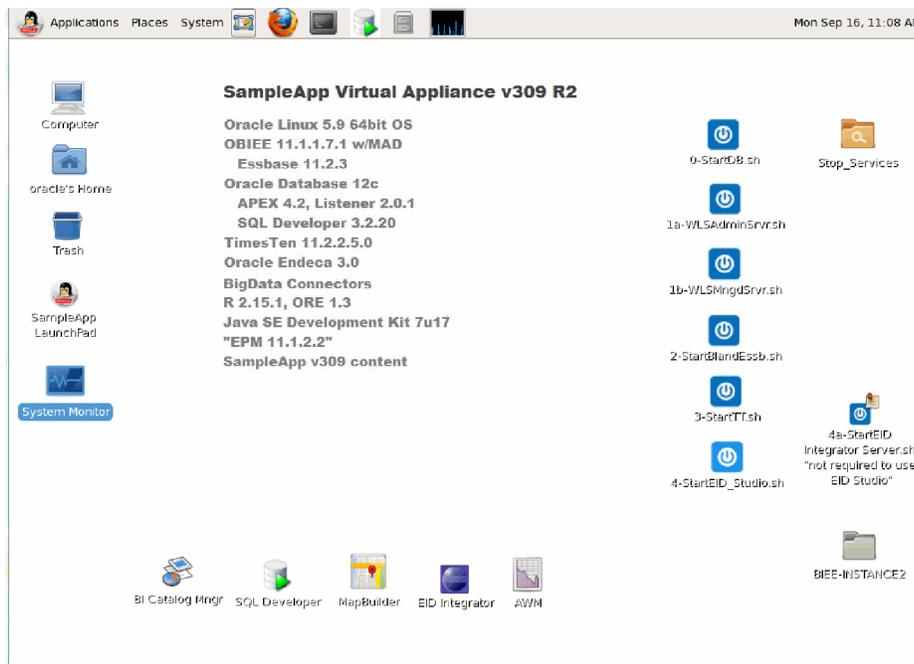
Then click on the Product Startup and Matrix Link. This page will walk users through the proper startup process and resource consumption.

Standard OBI Demo "Total startup idle ram consumption for Standard OBI Demo is between **4.5 and 5GB** ram including OS"

Start Oracle 12c DB
0-StartDB.sh / **700mb** ram consumption

WLS Admin Server
1a-WLSAdminSrvr.sh /**900mb - 1GB** ram consumption

Start Oracle BI Managed Server
1b-WLSMngdSrvr.sh /**1.2GB** ram consumption

Note: Starting the managed server also start the Essbase EAS console, APS and EIS and FR services automatically
Note: The Endeca Server and all data domains start automatically with your Managed Server

Start OPMN Services and Essbase Server
2-StartBIandEssb.sh **600-700mb** ram consumption

Start Oracle TimesTen
3-StartTT.sh **250mb** ram consumption

Note: When Starting the WLS Managed Server you may receive the following "warning" message post startup. This is not an error or a operational issue. This warning is referring to the order in which WLS Managed server is starting necessary EID dgraph services

```
<Sep 17, 2013 10:22:00 PM EDT> <Error> <com.endeca.opmodel.control.DGraph> <OES-
000021> <OES-000021: Could not promote leader for domain: warranty_bi, exception
 encountered while executing external function 'mdex:appoint-leader', caused by
Tried to promote to leader, but another leader exists for index 'warranty_bi' at
```

12. Upgrading your vbox tools (if necessary/optional)

From menu options click device/Install guest additions

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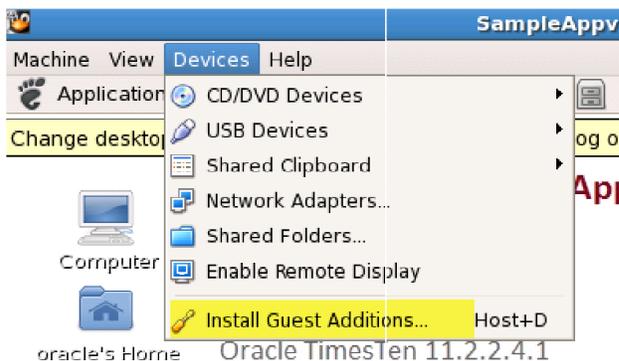
When initiated you will receiving the following pop up box. Click edit/select all and copy
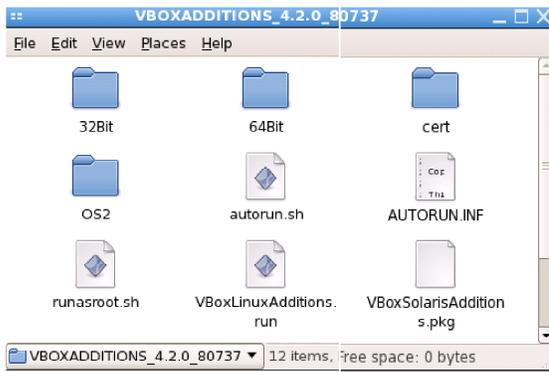

Return to your VM desktop and create a folder called vbox and paste the contents you just copied into it. Right click on the vbox folder and select "open in terminal". Change to user root/root and change permissions to VBoxLinuxAdditions.run. To do this, from the open cmd prompt type- chmod 777 VBoxLinuxAdditions.run

At the next command prompt type - ./VBoxLinuxAdditions.run. Allow process to complete, answer where prompted and then reboot.

13. Troubleshooting tips

a) After importing the appliance, when you start the image, you may hit the following error.
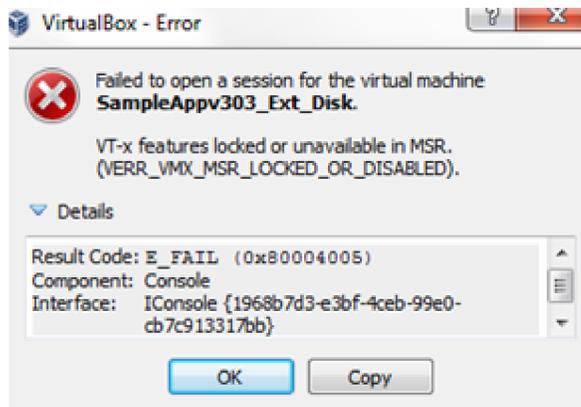
This may be because hardware virtualization is not enabled on your machine. In order to determine if it is enabled, go to http://www.microsoft.com/en-us/download/details.aspx?id=592 download the hardware detection tool and execute it on your machine. If virtualization is not enabled, then enable it by following the steps outlined in http://www.microsoft.com/windows/virtual-pc/support/configure-bios.aspx

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Once hardware virtualization is enabled and the machine is rebooted, you should be able to start the image.

b) While the image is starting up, after the following initial few messages, you see a blank screen. If this happens, then stop the image. Go back to Virtual Box Manager and click on the image's settings. Go to display and increase the Video memory from 1MB to 6MB. Start the image and you should no longer see the blank screen.

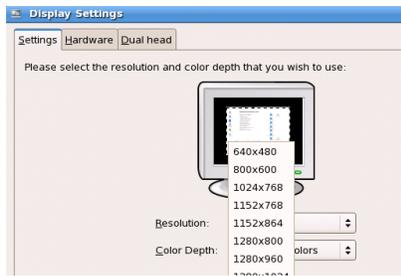## 14. Update your screen resolution

Navigate to system/Administrator/display
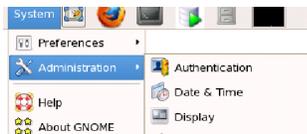
Select the hardware tab, select your desired resolution and hit ok
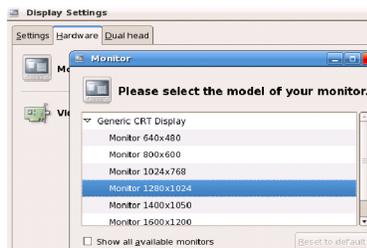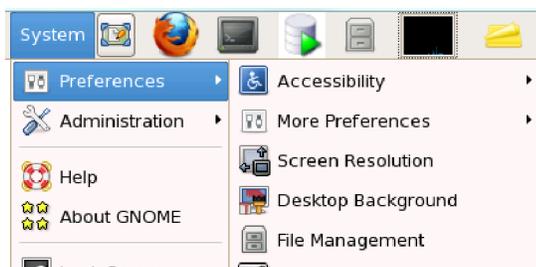

Click on the settings tab, select your desired resolution again and click ok

Log out of your Virtual Box image and log back in.

Once logged back in select system/preferences/screen resolution and set your resolution

OPTIONAL EPM DEPLOYMENT PROCESS

15. Standalone EPM MW home deployment

   a) A separate EPM MW home deployment is available for download from the SampleApp HomePage on OTN (epmStandaloneV309R2.tar.gz)

   b) Download to your v309R2 image and unzip to/home/oracle, the following directory will be created (/home/oracle/epm)
   - It is recommended that you extract the image using the following command line. "tar -zxvf epmStandaloneV309R2.tar.gz" Note: you must extract to /home/oracle

   c) **Startup scripts**, once the above mentioned tar is extracted navigate to /home/oracle/epm and you will see a folder 5-StandaloneEPM. You can choose to copy this directory to your desktop or run the start/stop scripts directly from this folder

   d) Use the 0.2 Configuration/EPM Configuration dashboard for additional deployment details.

   e) Windows Client Installers are accessible via "workspace/install" Components included with Standalone EPM Deployment