Installation of the Oracle Identity Manger

The installation of the Oracle Identity Manager 11g is quite complex and contains some pitfalls that requires problem analysis and investigations. In this tutorial we will lead through the installation process of all required product components and development tools. We point out necessary troubleshooting steps and include the analysis of some of the problems. We also provide a detailed list of required installation packages and patches. While analysis during this work was rather time consuming, following the documented steps that circumvent the pitfalls can save a lot of time.

Software versions used:
- *Oracle Identity and Access Management (11.1.1.5)*
- *Oracle SOA Suite 11g (11.1.1.6.0)*
- *Oracle Weblogic Server 10.3.6 Linux 32-bit*
- *Java SE Development Kit 6 Update 33 (Linux 32-bit)*
- *Repository Creation Utility 11.1.1.6.0 Linux*
- *Oracle JDeveloper 11g (11.1.1.6.0) Studio Edition, Linux*

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2   Introduction

In this tutorial we want to look at the installation of the Oracle Identity Manager, as it can be downloaded from the Oracle Technology Network. The whole process is quite complex since

it includes the installation of at least four separate products, i.e. Java, Weblogic Server, Fusion SOA Suite and the OIM itself. As a prerequisite we need a full installation of an Oracle database, and the express edition is not sufficient. In this work we want to install the product in Virtual Box. As a starting point we use an appliance originating from the Oracle Developer Days 2011, which is also available at the OTN. In this appliance the database is already configured and running. However we have to verify and adjust some system parameters. We use the repository creation utility (RCU) to create the database schemas required for the SOA suite and OIM. The installation of the OIM consists of the following steps:

- Installation of Weblogic Server;
- Installation of the SOA Suite;
- Installation of the OIM software;
- Creating a WLS domain for SOA and OIM
- Configuration of the OIM server.

Additionally we have to install some updates and patches to make the configuration work. In order not to further raise the complexity, we omit the configuration for high availability and SSL, which however is very often a requirement for production environments. We also want to install the OIM Design Console which is needed for development and configuration. The Design Console is only available for Windows and it requires a complete OIM installation. So we will repeat the installation of the listed components on Windows and install and configure the Design Console subsequently. Some OIM features use business processes from the SOA suite which can be developed in JDeveloper. We also make an installation if the IDE and demonstrate how to open an OIM process in the SOA composite editor of JDeveloper.

We will include links to the online documentation of Oracle which can be used to look up detailed descriptions of every step. We will also create machine snapshots repeatedly to save the current state of our work. When we run into trouble we can go back to a previous snapshot and try a different approach.

3 Preparations for the OIM installation

Before we dive into the installation we want to take a look at the certification matrix and choice of product versions. After that, we prepare the Linux appliance by extending the disk space and configuring the network.

3.1 Certification Matrix and Choice of products

For a choice of products we consult the download page[1] and the certification matrix. First of all, we want to clarify some terms since Oracle's choice of product names is confusing. The following table shows the products include in two different product suites.

Product Suite and Version/Abbreviation	Products included	Certification Matrix File
Identity Management (11.1.1.6.0) Oracle-IDM	- HTTP Server - Internet Directory (OID) - Directory Integration Platform (DIP) - Virtual Directory	fmw-11gr1certmatrix.xls

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[1] Download Page for Oracle Identity Management:
http://www.oracle.com/technetwork/middleware/downloads/oid-11g-161194.html

Oracle Identity and Access Management (11.1.1.5.0) OIM&OAM	• Directory Services Manager • Identity Federation (OIF) • Security Developer Tools • Enterprise Manager Fusion Middleware Control • Access Manager (OAM) • Adaptive Access Manager (OAAM) • Identity Manager (OIM) • Identity Navigator (OIN) • Oracle Security Token Service (OSTS) • Oracle Entitlements Server (OES)	identity-accessmgmt-11gr1certmatrix-161244.xls

Table 1.   Product Suites around Oracle Identity Management.

We use the abbreviations Oracle-IDM and OIM&OAM for the product suites. Note that Oracle-IDM is mainly concerned with directory service products.
Since we want to install OIM, we look at the newest downloads available for the OIM&OAM suite (05.08.2012).

Figure 1.   **Downloads for OIM&OAM 11.1.1.5**

Version 11.1.1.5 is the most up-to-date version available. Let's look at the certification Matrix.

The link for "System Requirements and Supported Platforms for Oracle Identity and Access Management "is accessible from
http://www.oracle.com/technetwork/middleware/ias/downloads/fusion-certification-100350.html

There are the certification matrix for the releases 11gR1 and 11gR2
11gR1   http://www.oracle.com/technetwork/middleware/id-mgmt/identity-accessmgmt-11gr1certmatrix-161244.xls
11gR2   http://www.oracle.com/technetwork/middleware/id-mgmt/identity-accessmgmt-11gr2certmatrix-1714221.xls
 We save them to D:\15Work\06OracleIdentityManagement

Download of the R2 release is yet not available via OTN (05.08.2012).
Let's find a valid configuration for the 11gR1 release from the certification Matrix.

Figure 2.   **Certification Matrix for the OIM and OAM 11gR1 Release.**

The highest certified WLS is 10.3.5. We can choose between Oracle and JRockit JDK, both are in versions Java 1.6.

Initially we wanted to install on Linux 6.3.However this installation failed. Although the certification matrix lists Oracle Linux 6.1+ as certified, the OIM installer fails with an invalid prerequisite check (see 8.1.4). Instead we use an OEL 5.5 Oracle appliance from the developer days, which comes with a preinstalled database.

3.2   Oracle Developers Days Appliance

From earlier installations I have two appliances available. (See 7.1.1 and 7.1.2)

```
07.08.2012  19:29      4.352.576.000 Oracle_Developer_Day.ova
20.04.2012  18:03      4.523.038.208 Oracle_Developer_Days.ova
```

These appliances are almost identical. Both appliances are delivered with Oracle Linux 5.5 32-bit. Since the older appliance is already installed on my system, we continue with it. It is already updated it to release 5.8. and has the latest guest additions installed.
We rename this virtual machine to 12OEL55_ODD by exporting it to an appliance and importing it again, using the new name.

We check if it is a 32-bit system.

```
[oracle@localhost ~]$ cat /etc/*-release
Enterprise Linux Enterprise Linux Server release 5.8 (Carthage)
Oracle Linux Server release 5.8
Red Hat Enterprise Linux Server release 5.8 (Tikanga)
[oracle@localhost ~]$ cat /proc/version
Linux version 2.6.32-300.21.1.el5uek (mockbuild@ca-build56.us.oracle.com) (gcc version 4.1.2 20080704 (Red
Hat 4.1.2-50)) #1 SMP Wed Apr 18 18:57:56 EDT 2012
[oracle@localhost ~]$ uname -a
Linux localhost.localdomain 2.6.32-300.21.1.el5uek #1 SMP Wed Apr 18 18:57:56 EDT 2012 i686 i686 i386
GNU/Linux
[oracle@localhost ~]$ uname -m
i686
```

This tells us that we are running on a 32-bit Linux kernel. Before proceeding with the installation we need to extend the hard disk space first.

3.2.1   Providing more disk space

We want to use the machine 12OEL55_ODD for OIM installation. However there is too little disk space. We create a further 100GB HDD and install it in the machine.
We use the Virtual Box Manager to create a new virtual hard disk.
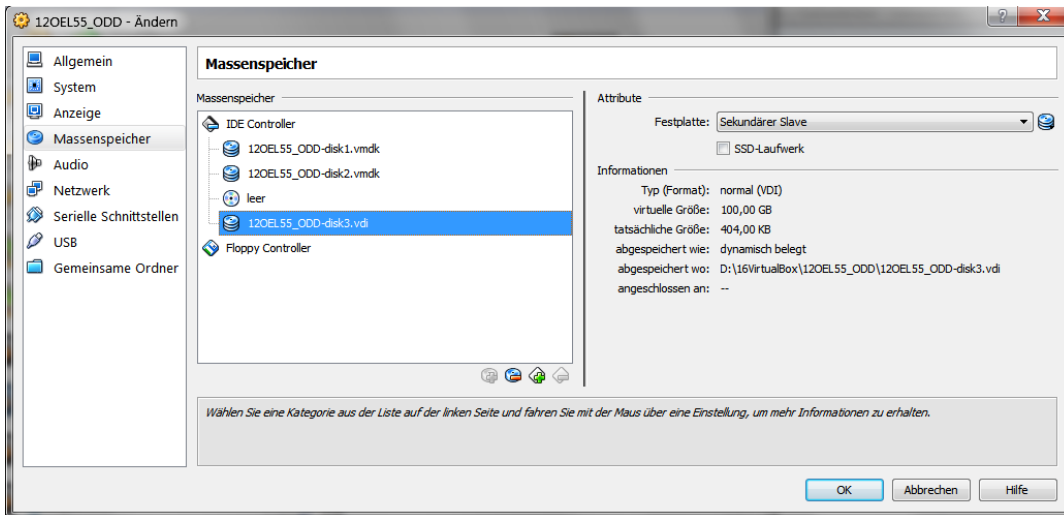
Figure 3.   **Creating a new Hard Disk for the VM 12OEL55_ODD**

We initialize the partition with the "Logical Volume Management". Then we add it to a new volume group "volgrp_sdc"
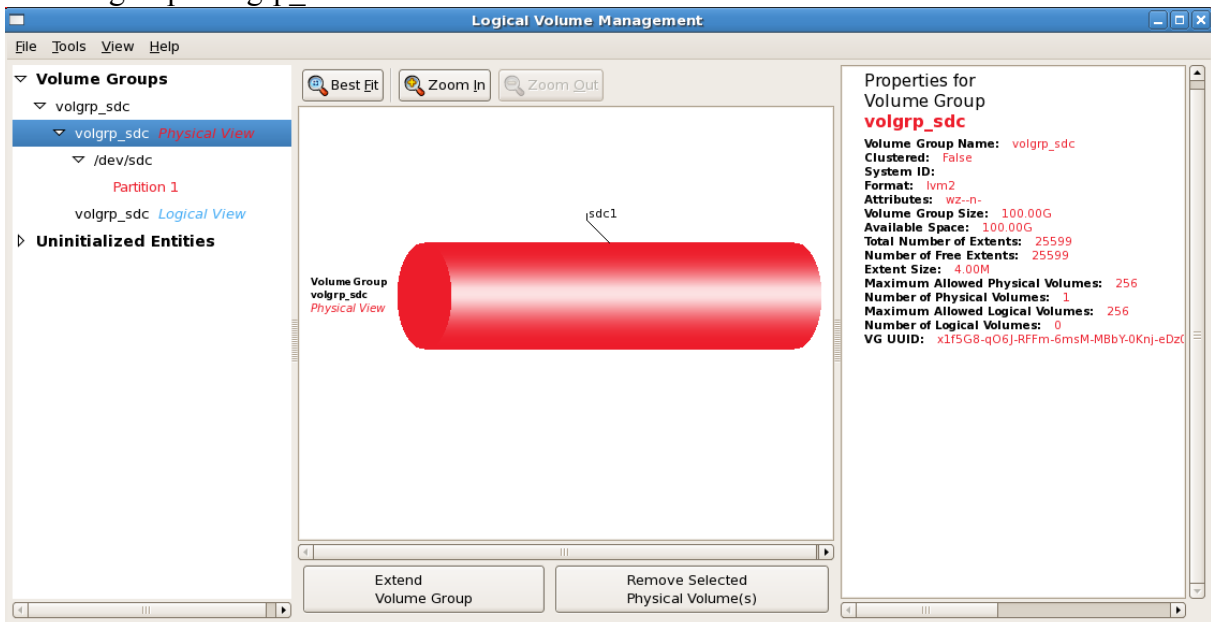
Figure 4.   **Physical view of the newly created volume group volgrp_sdc.**

We create a new logical volume and mount it to /opt/oracle.
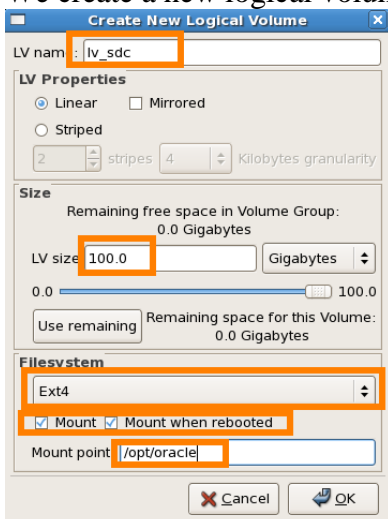
Figure 5.   **Creating a logical volume on 12OEL55_ODD.**

After that, the space is available in the file system.

```
[oracle@12oe155 odd opt]$ df -h
Filesystem          Size  Used Avail Use% Mounted on
/dev/sda1            11G  2.9G  6.7G  30% /
/dev/sdb1            12G  9.4G  1.7G  86% /home
tmpfs               4.0G  284M  3.7G   8% /dev/shm
01SharedFolder      346G  262G   85G  76% /media/sf 01SharedFolder
/dev/mapper/volgrp sdc-lv sdc
                     99G  188M   94G   1% /opt/oracle
[oracle@12oe155_odd opt]$
```

We change the owner of this directory to oracle.

```
[oracle@12oe155_odd oracle]$ su
Password:
 [root@12oe155_odd oracle]# chown oracle:oracle /opt/oracle/
[root@12oe155_odd oracle]# ls -la /opt/oracle/
total 28
drwxr-xr-x 3 oracle oracle  4096 Aug 10 18:57 .
drwxr-xr-x 7 root   root    4096 Aug 10 18:57 ..
drwx------ 2 root   root   16384 Aug 10 18:57 lost+found
[root@12oe155_odd oracle]#
```

We also check if this machine can handle 8 GB of RAM since we want to run OIM and the database together on this system. The discussion in the web[2] claims it depends on the PAE support in the kernel and CPU.

```
[oracle@12oe155_odd ~]$ cat /proc/meminfo
MemTotal:        8266620 kB
MemFree:         7009192 kB
Buffers:           35300 kB
Cached:           877088 kB
```

Ok.

3.2.2   Network setup

We set up the network as depicted in the following figure.

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[2] http://www.linuxquestions.org/questions/red-hat-31/memory-limit-for-32-bit-redhat-as-4-server-764162/
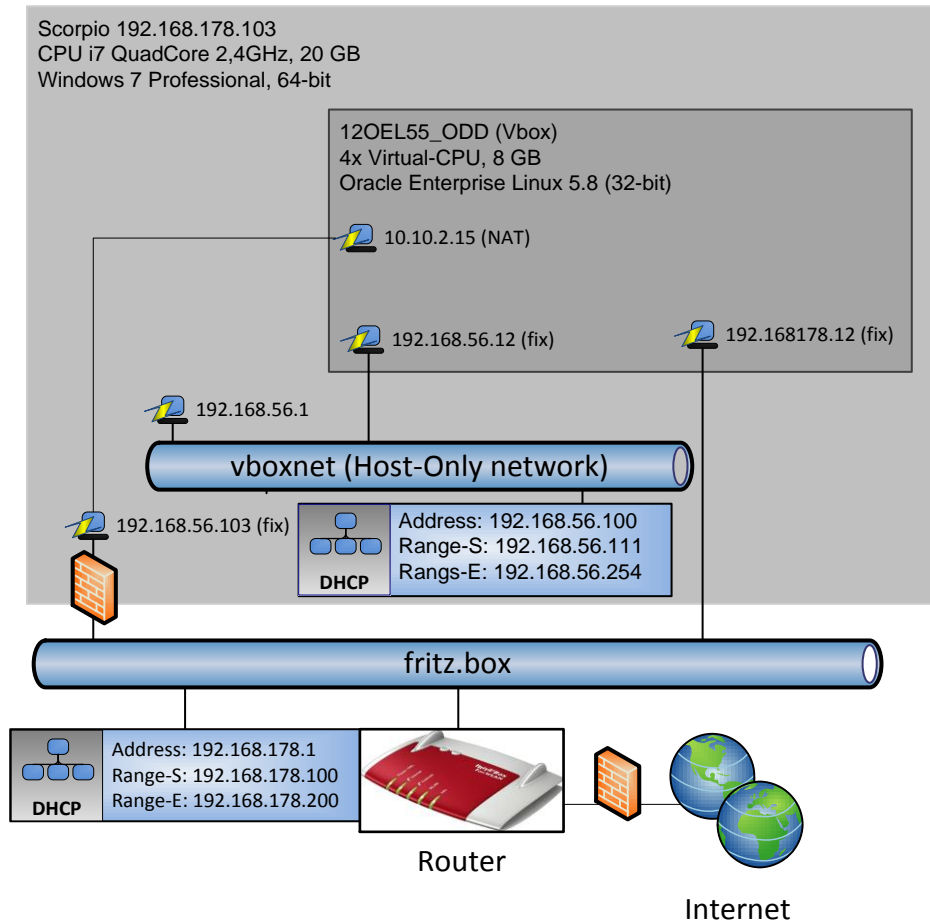
Figure 6.   **Network Configuration for the machine 12OEL55_ODD.**

We use the NAT address for internet access from the virtual machine. We connect a second network interface to the vboxnet, which is a "host-only" configuration. If we move the host machine Scorpio, which is a windows laptop, to another network, the IP-addresses in the vboxnet will not change.

Additionally we configure a "bridged" network interface temporarily, only to test the access to servers running on 12OEL55_ODD from within the fritz.box network. We will disable it later.

3.2.3   Changing network routes

In some situations we encountered, that the connection to the internet fails, due to routing errors. If this happens we check the routing table first.

```
[oracle@12oel55_odd ~]$ netstat -rn
Kernel IP routing table
Destination     Gateway         Genmask         Flags   MSS Window  irtt Iface
10.0.2.0        0.0.0.0         255.255.255.0   U         0 0          0 eth0
192.168.56.0    0.0.0.0         255.255.255.0   U         0 0          0 eth1
169.254.0.0     0.0.0.0         255.255.0.0     U         0 0          0 eth1
0.0.0.0         192.168.56.1    0.0.0.0         UG        0 0          0 eth1
```

As we can see in the last line, that the default gateway is the router of the host-only network (i.e. the vbox software router). This will not give us any internet connections. Instead the table should look like this.

```
[root@12oel55 odd network-scripts]# netstat -rn
Kernel IP routing table
Destination     Gateway         Genmask         Flags   MSS Window  irtt Iface
10.0.2.0        0.0.0.0         255.255.255.0   U         0 0          0 eth0
192.168.56.0    0.0.0.0         255.255.255.0   U         0 0          0 eth1
169.254.0.0     0.0.0.0         255.255.0.0     U         0 0          0 eth1
```

```
0.0.0.0        10.0.2.2        0.0.0.0        UG        0 0        0 eth0
```

Here the default gateway is connected to the NAT-router of virtual box which connects to the internet via the host computer.

We achieve this configuration by switching to the root user and changing two network configuration files in the directory /etc/sysconfig/network-scripts

In ifcfg-eth0, we add the gateway by adding the line in green.

```
[oracle@12oel55_odd network-scripts]$ cat ifcfg-eth0
# Advanced Micro Devices [AMD] 79c970 [PCnet32 LANCE]
DEVICE=eth0
BOOTPROTO=dhcp
ONBOOT=yes
HWADDR=08:00:27:73:47:b1
TYPE=Ethernet
GATEWAY=10.0.2.2
```

In ifcfg-eth1 we remove the line with the gateway.

```
[oracle@12oel55_odd network-scripts]$ cat ifcfg-eth1
# Advanced Micro Devices [AMD] 79c970 [PCnet32 LANCE]
DEVICE=eth1
BOOTPROTO=none
ONBOOT=yes
HWADDR=08:00:27:84:87:d5
NETMASK=255.255.255.0
IPADDR=192.168.56.12
#GATEWAY=192.168.56.1
TYPE=Ethernet
USERCTL=no
IPV6INIT=no
PEERDNS=yes
```

Now we have to restart the network and internet connection should work again.

```
[root@12oel55_odd network-scripts]# /etc/init.d/network restart
Shutting down interface eth0:                        [  OK  ]
Shutting down interface eth1:                        [  OK  ]
Shutting down loopback interface:                    [  OK  ]
Bringing up loopback interface:                      [  OK  ]
Bringing up interface eth0:
Determining IP information for eth0... done.
                                                     [  OK  ]
Bringing up interface eth1:                          [  OK  ]
```

Ok.

4   Installation of Oracle Identity Manager 11.1.1.5.0

We follow the instructions of the Quick install guide
http://docs.oracle.com/cd/E23943_01/install.1111/e10033/configtwo.htm#CEGFJHDF.

The documentation home for Oracle Identity and Access Management (11.1.1.6) can be found here: http://docs.oracle.com/cd/E23943_01/im.htm.

Since the Oracle XE database cannot be used for the OIM installation we use a database from an Oracle appliance. This machine is only 32-bit. So we continue the installation on 11ORA63 and only use this appliance as database machine.

4.1   Using the Repository Creation Utility 11.1.1.6

Initially we started out to run the RCU on the machine 11OEL63 (Oracle Linux 6.3 64-bit) While it was successful for some required schemas, it failed for all OIM schemas. We continue the RCU configurations on machine 12OEL55_ODD. In both situation we used the distribution from 7.1.9.

4.1.1 Checking the database

The document
http://docs.oracle.com/html/E18558_01/fusion_requirements.htm#CHDGICGE
lists the preconditions for the database. We check our database which is running on the
machine 12OEL55_ODD.

```
[oracle@localhost ~]$ sqlplus

SQL*Plus: Release 11.2.0.2.0 Production on Tue Aug 7 10:49:22 2012

Copyright (c) 1982, 2010, Oracle.  All rights reserved.

Enter user-name: sys as sysdba
Enter password:

Connected to:
Oracle Database 11g Enterprise Edition Release 11.2.0.2.0 - Production
With the Partitioning, OLAP, Data Mining and Real Application Testing options

SQL> select * from nls_database_parameters
where parameter='NLS_CHARACTERSET';
  2
PARAMETER
----------------------------
VALUE
--------------------------------------------------------------------------------
NLS_CHARACTERSET
AL32UTF8

SQL> show parameter shared_pool_size;

NAME                                 TYPE        VALUE
------------------------------------ ----------- ------------------------------
shared_pool_size                     big integer 0
SQL> alter system set shared pool size=147456K;

System altered.

SQL> show parameter SGA_MAX_SIZE;

NAME                                 TYPE        VALUE
------------------------------------ ----------- ------------------------------
sga_max_size                         big integer 436M
SQL> show parameter DB_BLOCK_SIZE;

NAME                                 TYPE        VALUE
------------------------------------ ----------- ------------------------------
db block size                        integer     8192
SQL> show parameter open cursors;

NAME                                 TYPE        VALUE
------------------------------------ ----------- ------------------------------
open_cursors                         integer     300
SQL> alter system set open_cursors=1000;

System altered.

SQL> commit;

Commit complete.

SQL> select * from all registry banners;

BANNER
--------------------------------------------------------------------------------
Oracle Database Catalog Views Release 11.2.0.2.0 - Production
Oracle Database Packages and Types Release 11.2.0.2.0 - Development
Oracle Workspace Manager Release 11.2.0.2.0 - Development
JServer JAVA Virtual Machine Release 11.2.0.2.0 - Development
Oracle XDK Release 11.2.0.2.0 - Development
Oracle Database Java Packages Release 11.2.0.2.0 - Development
Oracle Expression Filter Release 11.2.0.2.0 - Development
Oracle Text Release 11.2.0.2.0 - Development
Oracle XML Database Release 11.2.0.2.0 - Development
Oracle Rules Manager Release 11.2.0.2.0 - Development
Oracle Multimedia Release 11.2.0.2.0 - Development

BANNER
--------------------------------------------------------------------------------
OLAP Analytic Workspace Release 11.2.0.2.0 - Development
Oracle OLAP API Release 11.2.0.2.0 - Development
OLAP Catalog Release 11.2.0.2.0 - Development
Spatial Release 11.2.0.2.0 - Development
Oracle Enterprise Manager Release 11.2.0.2.0 - Development
OWB Release 11.2.0.1.0 - Development
```

```
Oracle Application Express Release 4.1.0.00.32 – Development

18 rows selected.
```

We restart the database for the changes to take effect. (It's not clear if it is necessary).

```
SQL> shutdown
Database closed.
Database dismounted.
ORACLE instance shut down.
SQL> startup
ORACLE instance started.

Total System Global Area  456146944 bytes
Fixed Size                  1344840 bytes
Variable Size             356518584 bytes
Database Buffers           92274688 bytes
Redo Buffers                6008832 bytes
Database mounted.
Database opened.
SQL>
```

Ok.

4.1.2   Running the RCU from 11OEL63

We follow the instructions at: Creating Database Schema Using the Oracle Fusion Middleware Repository Creation Utility (RCU)
http://docs.oracle.com/cd/E23943_01/install.1111/e10033/before.htm#BABDJHDE)
This is the first part of the RCU installation which we run on the Linux 6.3-64bit machine using the

We install the RCU and start it.

```
[oracle@11oel63 bin]$ pwd
/home/oracle/Downloads/rcu 11.1.1.6/rcuHome/bin
[oracle@11oel63 bin]$
[oracle@11oel63 bin]$ RCU_JDBC_TRIM_BLOCKS=TRUE
[oracle@11oel63 bin]$ echo $RCU_JDBC_TRIM_BLOCKS
TRUE
[oracle@11oel63 bin]$ linux32=bash
[oracle@11oel63 bin]$ echo $linux32
bash
[oracle@11oel63 bin]$ ./rcu
```

The GUI of the RCU starts up.

We run the RCU against the Database from the "12OEL55_ODD" appliance.
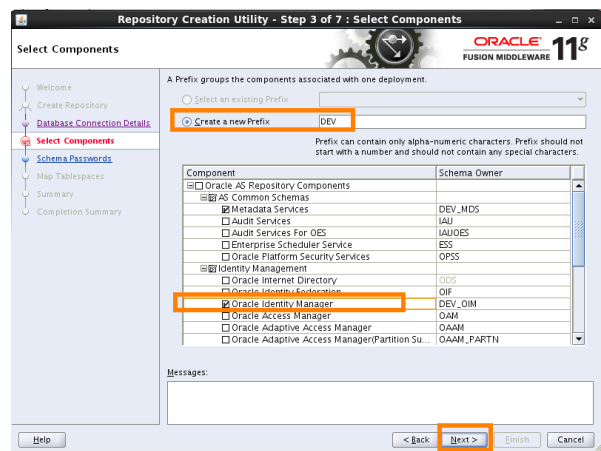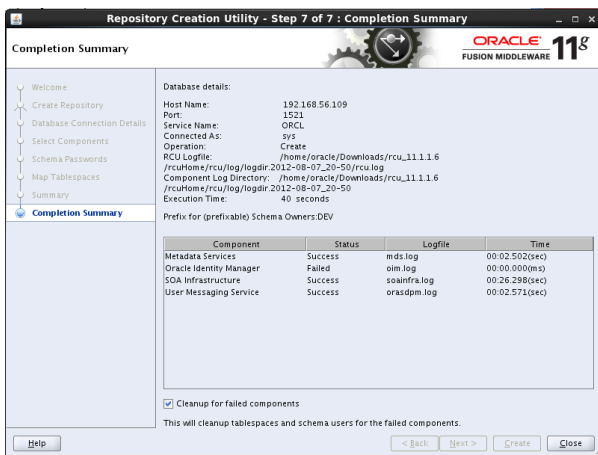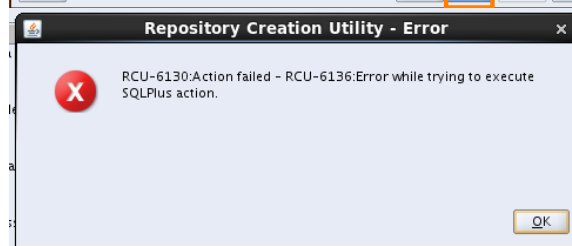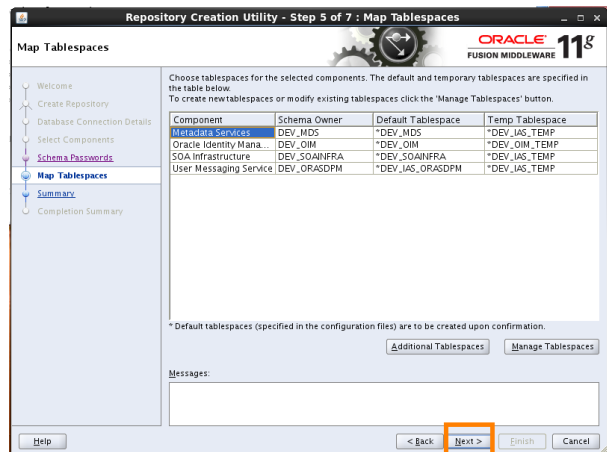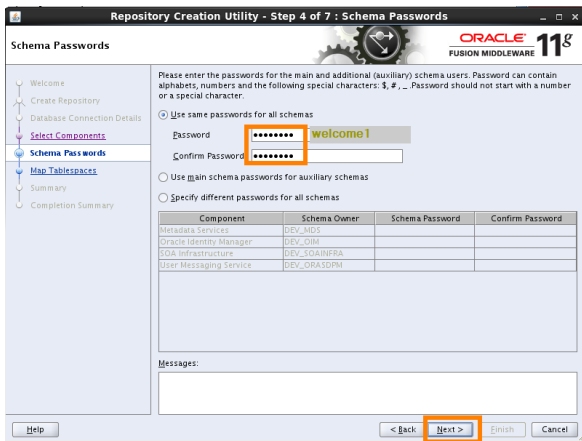
Only a part of the schemas are created. The following section contains some analysis information. We continue the schema creation on the machine 12OEL55_ODD.

Troubleshooting
Error message in file: /home/oracle/Downloads/rcu_11.1.1.6/rcuHome/rcu/log/logdir.2012-08-07_20-50/rcu.log

```
2012-08-07 21:00:49.873 NOTIFICATION rcu: oracle.sysman.assistants.rcu.backend.action.JDBCAction::perform:
Performing JDBCScript Action Command: /home/oracle/Downloads/rcu_11.1.1.6/rcuHome/rcu/integration//o
im/sql/param.sql CMDLINE Parameters Length: 0
2012-08-07 21:00:49.873 NOTIFICATION rcu:
oracle.sysman.assistants.common.dbutil.jdbc.JDBCEngine::parseNexecuteScript: ParseNexecute Script:
/home/oracle/Downloads/rcu_11.1.1.6/rcuHome/rcu/integration//oim/s
ql/param.sql
2012-08-07 21:00:49.894 NOTIFICATION rcu: oracle.sysman.assistants.rcu.backend.action.JDBCAction::perform:
**** Sql script DONE****
2012-08-07 21:00:50.060 ERROR rcu: oracle.sysman.assistants.rcu.backend.action.SQLPlusAction::perform:
Error initializing SQLPlusEngine:
```

```
java.io.IOException: java.io.IOException: java.io.IOException: java.io.IOException: java.io.IOException:
java.io.IOException: java.io.IOException: java.io.IOException: java.io.IOException: java.io.IOException:
java.io.IOException: java.io.IOException: Error initializing sqlplus.
        at
oracle.sysman.assistants.common.dbutil.sqlplus.SQLPlusEngine.setDefaultEngineSettings(SQLPlusEngine.java:21
44)
        at oracle.sysman.assistants.common.dbutil.sqlplus.SQLPlusEngine.initialize(SQLPlusEngine.java:352)
        at oracle.sysman.assistants.rcu.backend.action.SQLPlusAction.perform(SQLPlusAction.java:211)
        at oracle.sysman.assistants.rcu.backend.task.AbstractCompTask.execute(AbstractCompTask.java:245)
        at oracle.sysman.assistants.rcu.backend.task.ActualTask.run(TaskRunner.java:306)
```

A google search suggests:

- Run from a 32-bit windows
- Run as administrator on Windows.

We don't want to install it on Windows; instead we run it from the same machine where the database is located, i.e. 12OEL_ODD, which is a 32-bit Linux.

4.1.3   Running the RCU from the "12OEL55_ODD" VM

This is the second part of the RCU installation which we run on the Linux 5.8-32bit machine. We install the RCU on the "12OEL55_ODD" appliance and run it. Eventually we succeed in creating the schemas for OIM.
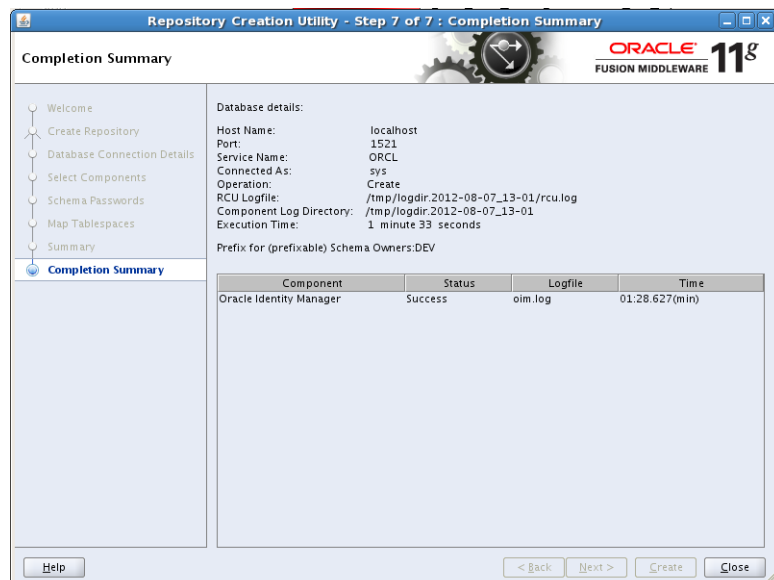
Figure 7.   **Successful creation of the OIM schema on the "Oracle Developer Days" VM.**

The following shell output shows the start of the RCU and successful termination.

```
[oracle@localhost bin]$ pwd
/home/oracle/Download/rcu11.1.1.6/rcuHome/bin
[oracle@localhost bin]$ ./rcu
Failed to initialize logger with location :/home/oracle/Download/rcu11.1.1.6/rcuHome/rcu/log/logdir.2012-
08-07_13-01/rcu.log
Initializing logger using the following location :/tmp/logdir.2012-08-07_13-01/rcu.log
Aug 7, 2012 1:04:30 PM org.quartz.core.QuartzScheduler <init>
INFO: Quartz Scheduler v.1.6.0 created.
Aug 7, 2012 1:04:30 PM org.quartz.impl.jdbcjobstore.JobStoreSupport initialize
INFO: Using thread monitor-based data access locking (synchronization).
Aug 7, 2012 1:04:30 PM org.quartz.impl.jdbcjobstore.JobStoreSupport cleanVolatileTriggerAndJobs
INFO: Removed 0 Volatile Trigger(s).
Aug 7, 2012 1:04:30 PM org.quartz.impl.jdbcjobstore.JobStoreSupport cleanVolatileTriggerAndJobs
INFO: Removed 0 Volatile Job(s).
Aug 7, 2012 1:04:30 PM org.quartz.impl.jdbcjobstore.JobStoreTX initialize
INFO: JobStoreTX initialized.
Aug 7, 2012 1:04:30 PM org.quartz.impl.StdSchedulerFactory instantiate
INFO: Quartz scheduler 'OIMQuartzScheduler' initialized from an externally provided properties instance.
Aug 7, 2012 1:04:30 PM org.quartz.impl.StdSchedulerFactory instantiate
INFO: Quartz scheduler version: 1.6.0
Aug 7, 2012 1:04:32 PM org.quartz.core.QuartzScheduler shutdown
INFO: Scheduler OIMQuartzScheduler_$_NON_CLUSTERED shutting down.
Aug 7, 2012 1:04:32 PM org.quartz.core.QuartzScheduler standby
INFO: Scheduler OIMQuartzScheduler_$_NON_CLUSTERED paused.
```

```
Aug 7, 2012 1:04:32 PM org.quartz.core.QuartzScheduler shutdown
INFO: Scheduler OIMQuartzScheduler_$_NON_CLUSTERED shutdown complete.
[EL Info]: 2012-08-07 13:04:39.125--ServerSession(9723181)--EclipseLink, version: Eclipse Persistence
Services - 1.1.0.r3634
[EL Info]: 2012-08-07 13:04:39.944--ServerSession(9723181)--
file:/home/oracle/Download/rcu11.1.1.6/rcuHome/rcu/integration/oim/iam_rcu_comp/ext/jps-internal.jar-
JpsDBDataManager login successful
 [oracle@localhost bin]$
```

Ok.

We continue with the installation of the OIM components.

4.2   Installation of Weblogic Server

We download Weblogic server from the SOA Suite download site. See download at 7.1.3.
The Sun JDK and JRockit JDKs are bundled with this distribution.
We start the installation program and choose the proposed default configurations.

```
[oracle@12oel55_odd sf_01SharedFolder]$ pwd
/media/sf_01SharedFolder
[oracle@12oel55_odd sf_01SharedFolder]$ ./wls1036_linux32.bin
```

This will create the following installations:

```
[oracle@12oel55_odd Middleware01]$ ll
total 176
drwxr-x--- 6 oracle oracle   4096 Aug 10 19:42 coherence_3.7
-rw-rw---- 1 oracle oracle    397 Aug 10 19:42 domain-registry.xml
drwxr-x--- 8 oracle oracle   4096 Aug 10 19:41 jdk160_29
drwxr-x--- 7 oracle oracle   4096 Aug 10 19:41 jrockit_160_29_D1.2.0-10
drwxr-x--- 2 oracle oracle   4096 Aug 10 19:41 logs
drwxr-x--- 7 oracle oracle  32768 Aug 10 19:41 modules
-rw-r----- 1 oracle oracle    623 Aug 10 19:41 ocm.rsp
-rw-r----- 1 oracle oracle 109300 Aug 10 19:41 registry.dat
-rw-r----- 1 oracle oracle   2644 Aug 10 19:41 registry.xml
drwxr-x--- 8 oracle oracle   4096 Aug 10 19:41 utils
drwxr-x--- 9 oracle oracle   4096 Aug 10 19:41 wlserver_10.3
[oracle@12oel55_odd Middleware01]$
```

4.3   Sicherungspunkt 1

We create a snapshot of the virtual machine with following notes.
- Update to OEL 5.8
- Update to VBoxGuestAdditions-4.1.16
- 100GB disk mounted to /opt/oracle
- Running rcu11.1.1.6 against DB for OIM installation.
- Installation of WLS 10.3.6 for 32-bit Linux

4.4   Installation of Java 1.6 Update 33

The minimum requirement for the OIM installation is JDK 1.6 Update 30, however the JDK
that was installed together with WLS is Java 1.6 Update 29. We thus have to install another
Java (see 7.1.4).

```
[oracle@12oel55_odd java]$ pwd
/opt/oracle/java
[oracle@12oel55_odd java]$ /media/sf_01SharedFolder/jdk-6u33-linux-i586.bin
…
[oracle@12oel55_odd java]$ ls
jdk1.6.0_33
```

4.5   Installing the SOA Suite

We use the generic installers of the SOA Suite (see 7.1.5). We unpack the distribution to the download directory on the VM.

```
[oracle@12oel55 odd soa 11.1.1.6]$ pwd
/opt/oracle/Download/soa_11.1.1.6
[oracle@12oel55_odd soa_11.1.1.6]$ ls
Disk1 Disk2 Disk3 Disk4 Disk5 readme.htm
[oracle@12oel55_odd soa_11.1.1.6]$
```

We start the SOA installer.

```
[oracle@12oel55_odd Disk1]$ pwd
/opt/oracle/Download/soa_11.1.1.6/Disk1
[oracle@12oel55 odd Disk1]$ ./runInstaller
Starting Oracle Universal Installer...

Checking if CPU speed is above 300 MHz.    Actual 2372 MHz    Passed
Checking Temp space: must be greater than 150 MB.   Actual 6810 MB    Passed
Checking swap space: must be greater than 512 MB.   Actual 1694 MB    Passed
Checking monitor: must be configured to display at least 256 colors.   Actual 16777216    Passed
Preparing to launch Oracle Universal Installer from /tmp/OraInstall2012-08-11_01-58-13PM. Please wait ...
Please specify JRE/JDK location ( Ex. /home/jre ), <location>/bin/java should exist
:/opt/oracle/java/jdk1.6.0_33
[oracle@12oel55_odd Disk1]$ Log: /home/oracle/app/oraInventory/logs/install2012-08-11_01-58-13PM.log
```

The installation process passes error free. We save the response and summary file:

```
[oracle@12oel55_odd oracle]$ ll /opt/oracle/
total 36
drwxrwxr-x  4 oracle oracle  4096 Aug 11 13:35 Download
-rw-r-----  1 oracle oracle  1291 Aug 11 14:00 FMW SOA 11.1.1.6 response.txt
-rw-r-----  1 oracle oracle   460 Aug 11 14:07 FMW SOA 11.1.1.6 summary.txt
drwxrwxr-x  3 oracle oracle  4096 Aug 11 13:54 java
drwx------  2 root   root   16384 Aug 10 18:57 lost+found
drwxr-x--- 11 oracle oracle  4096 Aug 11 14:01 Middleware01

[oracle@12oel55_odd oracle]$ cat FMW_SOA_11.1.1.6_summary.txt
Install Oracle SOA Suite
        Directory Details
                Middleware Home Location: /opt/oracle/Middleware01
                Oracle Home Location: /opt/oracle/Middleware01/Oracle_SOA1
                Application Server Type: WebLogic Server
                Application Server Location: /opt/oracle/Middleware01
        Disk Space
                Oracle Home Size: 1642 MB
                Available: 86304 MB
        Applications
                Oracle BPEL PM, Mediator, Rules, B2B, Human Workflow
                Oracle Business Activity Monitoring (BAM)
                Oracle Enterprise Manager
```

4.6   Installing OIM

Now we are ready to install the OIM. We copy the distribution (see 7.1.6) into the download directory.

```
[oracle@12oel55_odd oracle]$ ls -l /opt/oracle/Download/iam_11.1.1.5/
total 16
drwxr-xr-x 5 oracle oracle 4096 May  5  2011 Disk1
drwxrwxr-x 3 oracle oracle 4096 May  5  2011 Disk2
drwxrwxr-x 3 oracle oracle 4096 May  5  2011 Disk3
drwxrwxr-x 3 oracle oracle 4096 May  5  2011 Disk4
```

We start the installer.

```
[oracle@12oel55_odd Disk1]$ ./runInstaller -jreLoc /opt/oracle/java/jdk1.6.0_33/jre
Starting Oracle Universal Installer...

Checking if CPU speed is above 300 MHz.    Actual 2372 MHz    Passed
Checking Temp space: must be greater than 150 MB.   Actual 6810 MB    Passed
Checking swap space: must be greater than 512 MB.   Actual 1694 MB    Passed
Checking monitor: must be configured to display at least 256 colors.   Actual 16777216    Passed
Preparing to launch Oracle Universal Installer from /tmp/OraInstall2012-08-11_02-34-22PM. Please wait
...[oracle@12oel55_odd Disk1]$ Log: /home/oracle/app/oraInventory/logs/install2012-08-11_02-34-22PM.log
```

The installer runs without errors.
We save the response and summary file.

```
[oracle@12oel55_odd oracle]$ cat /opt/oracle/FMW_SOA_11.1.1.6_summary.txt
Install Oracle SOA Suite
        Directory Details
                Middleware Home Location: /opt/oracle/Middleware01
                Oracle Home Location: /opt/oracle/Middleware01/Oracle_SOA1
                Application Server Type: WebLogic Server
                Application Server Location: /opt/oracle/Middleware01
        Disk Space
                Oracle Home Size: 1642 MB
                Available: 86304 MB
        Applications
                Oracle BPEL PM, Mediator, Rules, B2B, Human Workflow
                Oracle Business Activity Monitoring (BAM)
                Oracle Enterprise Manager
```

We make another machine snapshot.

4.7   Sicherungspunkt 2

Installation of:
        -JDK 1.6 Update 33
        -FMW_SOA_11.1.1.6
        -FMW_IAM_11.1.1.5

4.8   Creating a new Weblogic Domain for OIM and SOA

The prerequisites for configuring the OIM are listed here
(http://docs.oracle.com/cd/E23943_01/install.1111/e12002/oidonly.htm#INOIM1210) and
state that we need to create a WLS domain first (point 6).
To create the domain we follow the instructions at
http://docs.oracle.com/cd/E23943_01/install.1111/e12002/oidonly.htm#CDDFJBCC (16.3.4
Procedure).

We start the configuration wizard in the IDM-Home:

```
[oracle@12oel55_odd bin]$ pwd
/opt/oracle/Middleware01/Oracle_IDM1/common/bin
[oracle@12oel55_odd bin]$ ./config.sh
```

We provide the screens of the configuration:
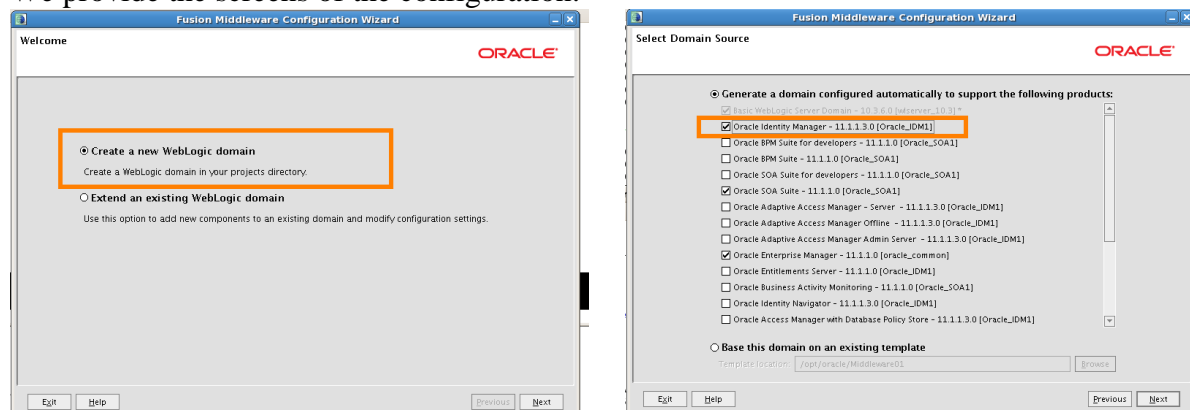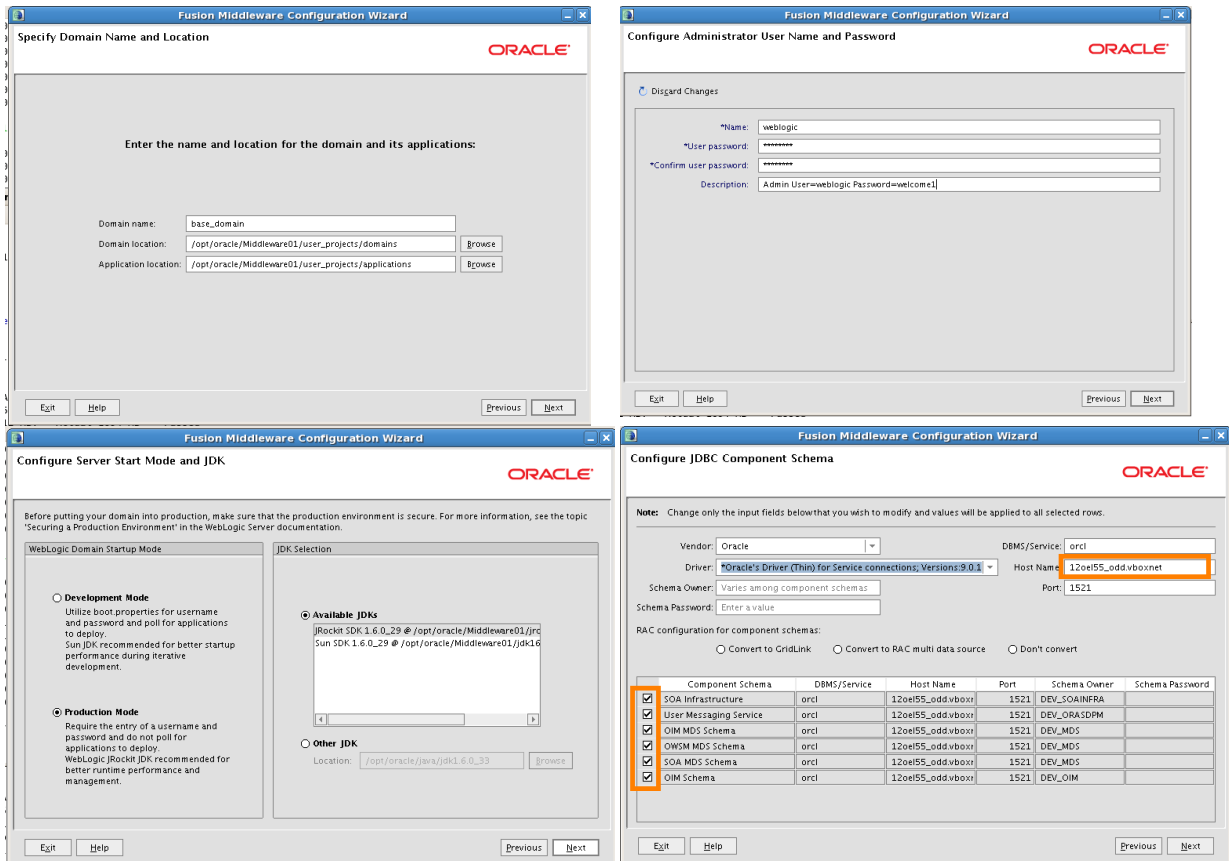
The wizard performs a jdbc schema test with the following result.

```
Component Schema=SOA Infrastructure
Driver=oracle.jdbc.xa.client.OracleXADataSource
URL=jdbc:oracle:thin:@12oel55 odd.vboxnet:1521/orcl
User=DEV_SOAINFRA
Password=********
SQL Test=select 1 from schema_version_registry where owner=(select user from dual) and mr_type='SOAINFRA'
and version='11.1.1.6.0'

CFGFWK-20850:  Test Successful!

Component Schema=User Messaging Service
Driver=oracle.jdbc.OracleDriver
URL=jdbc:oracle:thin:@12oel55_odd.vboxnet:1521/orcl
User=DEV_ORASDPM
Password=********
SQL Test=select 1 from schema_version_registry where owner=(select user from dual) and mr_type='ORASDPM'
and version='11.1.1.6.0'

CFGFWK-20850:  Test Successful!

Component Schema=OIM MDS Schema
Driver=oracle.jdbc.OracleDriver
URL=jdbc:oracle:thin:@12oel55 odd.vboxnet:1521/orcl
User=DEV_MDS
Password=********
SQL Test=select 1 from schema_version_registry where owner=(select user from dual) and mr_type='MDS' and
version>='11.1.1.2.0'

CFGFWK-20850:  Test Successful!

Component Schema=OWSM MDS Schema
Driver=oracle.jdbc.OracleDriver
URL=jdbc:oracle:thin:@12oel55_odd.vboxnet:1521/orcl
User=DEV MDS
Password=********
SQL Test=select 1 from schema_version_registry where
                              owner=(select user from
                              dual) and mr_type='MDS' and
                              version='11.1.1.6.0'

CFGFWK-20850:  Test Successful!

Component Schema=SOA MDS Schema
Driver=oracle.jdbc.OracleDriver
URL=jdbc:oracle:thin:@12oel55_odd.vboxnet:1521/orcl
User=DEV_MDS
```

```
Password=********
SQL Test=select 1 from schema_version_registry where owner=(select user from dual) and mr_type='MDS' and
version='11.1.1.6.0'

CFGFWK-20850:  Test Successful!

Component Schema=OIM Schema
Driver=oracle.jdbc.OracleDriver
URL=jdbc:oracle:thin:@12oel55_odd.vboxnet:1521/orcl
User=DEV_OIM
Password=********
SQL Test=select 1 from schema_version_registry where owner=(select user from dual) and mr_type='OIM' and
version='11.1.1.5.0'

CFGFWK-20850:  Test Successful!
```

We continue with the dialog.
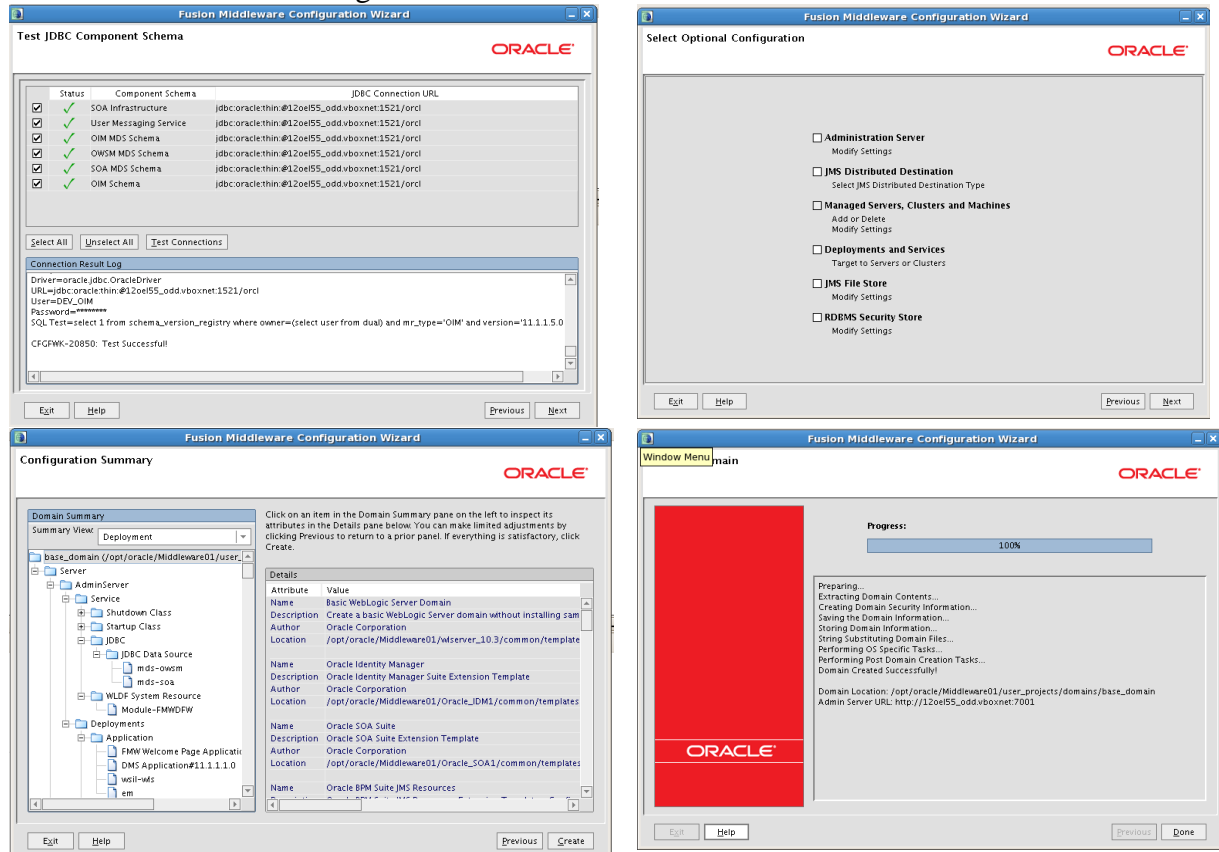
This concludes the successful configuration of the WLS Domain.

4.9   Starting the Admin Server

As a prerequisite for the OIM configuration we need to start the Admin Server as described in
(http://docs.oracle.com/cd/E23943_01/install.1111/e12002/start_stop.htm#CHDBGEGA).

```
[oracle@12oel55_odd base_domain]$ pwd
/opt/oracle/Middleware01/user_projects/domains/base_domain
[oracle@12oel55_odd base_domain]$ ./startWebLogic.sh
```

We are prompted for username and password. (weblogic/welcome1)

4.10   Sicherungspunkt 3

We make another machine snapshot with the notes:

- Creating Domains for OIM and SOA;
- Admin Server started.

4.11   OIM Configuration

The configuration of the OIM consists of three parts.
- Configuration of the Server
- Configuration of the OIM Design Console
- Configuration of the OIM Remote Manager (optional)

During the configuration process of the OIM server we ran into sever problems which could not be resolved without a patch for OIM. The analysis is contained in 8.1.5.

Therefor we have to patch the installation first and start the configuration subsequently.

4.11.1   Applying OIM Patch 13399365

There is a patch for the OIM with the patch id 13399365 (see 7.1.7 for further information and download link), which upgrades OIM from version 11.1.1.5.0 to 11.1.1.5.2.

The patch can only be obtained via Oracle support at https://support.oracle.com .

There is a readme contained in the zip distribution of the patch. We extract the readme file to file:///D:/15Work/06OracleIdentityManagement/p13399365/README.html and follow it.

The deployment of the patch is divided into two parts. The first part is called OPatch stage and patches the OIM software distribution. The second part is called patch_weblogic stage and patches the configured WLS domain. Since the WLS domain is not configured for OIM yet we run the patch_weblogic stage after the OIM configuration. This means that we will conduct the following activities.

- Deploying OPatch stage;
- Configuring OIM;
- Deploying patch_weblogic stage.

But before we start we want to introduce some configurations that will make the working environment more comfortable.

We edit the .bashrc to include some alias definitions for fast navigation.

```
alias mh='cd /opt/oracle/Middleware01'
alias dh='cd /opt/oracle/Middleware01/user_projects/domains/base_domain'
alias nh='cd /opt/oracle/Middleware01/wlserver_10.3/common/nodemanager'
alias ns='cd /opt/oracle/Middleware01/wlserver_10.3/server/bin'
```

We include a boot.properties file for the Admin server to prevent the user and password prompt.

```
[oracle@12oel55_odd base_domain]$ pwd
/opt/oracle/Middleware01/user_projects/domains/base_domain
[oracle@12oel55_odd base_domain]$ mkdir ./servers/AdminServer/security
[oracle@12oel55_odd base_domain]$ echo "username=weblogic" > ./servers/AdminServer/security/boot.properties
[oracle@12oel55_odd base_domain]$ echo "password=welcome1" >>
./servers/AdminServer/security/boot.properties
```

4.11.2   OIM Patch 13399365 (OPatch Stage)

We check the currently installed OPatch version:

```
[oracle@12oel55_odd Middleware01]$ find . -name OPatch
./Oracle_IDM1/inventory/Templates/OPatch
./Oracle_IDM1/OPatch
```

```
./Oracle_SOA1/inventory/Templates/OPatch
./Oracle_SOA1/OPatch
./oracle_common/inventory/Templates/OPatch
./oracle_common/OPatch
[oracle@12oel55_odd Middleware01]$ cd ./Oracle_IDM1/OPatch
[oracle@12oel55_odd OPatch]$ ./opatch version
Invoking OPatch 11.1.0.8.3

OPatch Version: 11.1.0.8.3

OPatch succeeded.
[oracle@12oel55_odd OPatch]$ ORACLE_HOME=/opt/oracle/Middleware01/Oracle_IDM1
[oracle@12oel55_odd OPatch]$ ./opatch lsinventory
Invoking OPatch 11.1.0.8.3

Oracle Interim Patch Installer version 11.1.0.8.3
Copyright (c) 2010, Oracle Corporation.  All rights reserved.


Oracle Home       : /opt/oracle/Middleware01/Oracle_IDM1
Central Inventory : /home/oracle/app/oraInventory
   from           : /etc/oraInst.loc
OPatch version    : 11.1.0.8.3
OUI version       : 11.1.0.9.0
OUI location      : /opt/oracle/Middleware01/Oracle_IDM1/oui
Log file location : /opt/oracle/Middleware01/Oracle_IDM1/cfgtoollogs/opatch/opatch2012-08-22_13-59-22PM.log

Patch history file: /opt/oracle/Middleware01/Oracle_IDM1/cfgtoollogs/opatch/opatch_history.txt


OPatch detects the Middleware Home as "/opt/oracle/Middleware01"

Lsinventory Output file location :
/opt/oracle/Middleware01/Oracle_IDM1/cfgtoollogs/opatch/lsinv/lsinventory2012-08-22_13-59-22PM.txt

--------------------------------------------------------------------------------
Installed Top-level Products (1):

Oracle IDM Suite                                         11.1.1.5.0
There are 1 products installed in this Oracle Home.


There are no Interim patches installed in this Oracle Home.


--------------------------------------------------------------------------------

OPatch succeeded.
```

The OPatch version is ok.
We proceed with the installation of the patch.

We extract the patch to the Patch_Top directory at /opt/oracle/Download/13399365.
We set the PATH variable to include opatch and check the path for unzip.

```
[oracle@12oel55_odd Middleware01]$ PATH=/opt/oracle/Middleware01/Oracle_IDM1/OPatch:$PATH
[oracle@12oel55_odd Middleware01]$ which opatch
/opt/oracle/Middleware01/Oracle_IDM1/OPatch/opatch
[oracle@12oel55_odd Middleware01]$ which unzip
/usr/bin/unzip
```

We set the ORACLE_HOME and apply the patch.

```
[oracle@12oel55_odd 13399365]$ pwd
/opt/oracle/Download/13399365
[oracle@12oel55_odd 13399365]$ ORACLE_HOME=/opt/oracle/Middleware01/Oracle_IDM1
[oracle@12oel55_odd 13399365]$ opatch apply
Invoking OPatch 11.1.0.8.3

Oracle Interim Patch Installer version 11.1.0.8.3
Copyright (c) 2010, Oracle Corporation.  All rights reserved.


Oracle Home       : /opt/oracle/Middleware01/Oracle_IDM1
Central Inventory : /home/oracle/app/oraInventory
   from           : /etc/oraInst.loc
OPatch version    : 11.1.0.8.3
OUI version       : 11.1.0.9.0
OUI location      : /opt/oracle/Middleware01/Oracle_IDM1/oui
Log file location : /opt/oracle/Middleware01/Oracle_IDM1/cfgtoollogs/opatch/opatch2012-08-22_14-11-12PM.log

Patch history file: /opt/oracle/Middleware01/Oracle_IDM1/cfgtoollogs/opatch/opatch_history.txt


OPatch detects the Middleware Home as "/opt/oracle/Middleware01"
```

OIMInstallationTutorial.docx

```
ApplySession applying interim patch '13399365' to OH '/opt/oracle/Middleware01/Oracle_IDM1'

Running prerequisite checks...

OPatch detected non-cluster Oracle Home from the inventory and will patch the local system only.


Please shutdown Oracle instances running out of this ORACLE_HOME on the local system.
(Oracle Home = '/opt/oracle/Middleware01/Oracle IDM1')


Is the local system ready for patching? [y|n]
y
User Responded with: Y
Backing up files and inventory (not for auto-rollback) for the Oracle Home
Backing up files affected by the patch '13399365' for restore. This might take a while...
Backing up files affected by the patch '13399365' for rollback. This might take a while...

Patching component oracle.oim.server, 11.1.1.5.0...
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/platform/iam-platform-entitymgr.jar"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/platform/iam-platform-configmbeans.jar"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/platform/iam-platform-workflowservice.jar"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/platform/iam-platform-auth-server.jar"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/platform/iam-platform-canonic.jar"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/icf/intg/icf-oim-intg.jar"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/taskflows/ForgotPasswordTaskFlow.jar"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/taskflows/IdentityTaskFlow.jar"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/features/iam-features-oimupgrade.zip"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/features/iam-features-passwordmgmt.zip"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/features/iam-features-reconciliation.zip"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/features/iam-features-asyncwsclient.zip"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/features/iam-features-spmlws.zip"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/features/iam-features-accesspolicy.zip"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/features/iam-features-tasklist.zip"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/features/iam-features-requestactions.zip"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/features/iam-features-ldap-sync.zip"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/features/iam-features-identity.zip"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/features/iam-features-configservice.zip"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/features/iam-features-oimdataproviders.zip"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/features/Xellerate.zip"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/features/iam-features-callbacks.zip"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/features/iam-features-request.zip"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/features/iam-features-sso.zip"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/features/iam-features-notification.zip"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/features/iam-features-selfservice.zip"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/loginmodule/wls/oimsignaturembean.jar"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/loginmodule/wls/oimsigmbean.jar"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/loginmodule/wls/OIMAuthenticator.jar"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/loginmodule/wls/oimmbean.jar"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/setup/lib/iam-platform-
deploymentframework.jar"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/patching/oim.ear"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/patching/oimdb.zip"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/apps/spml-xsd.ear"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/apps/spml-dsml.ear"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/platform/iam-platform-auth-client.jar"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/platform/iam-platform-context.jar"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/platform/iam-platform-pluginframework.jar"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/platform/iam-platform-utils.jar"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/client/oimclient.jar"
Copying file to "/opt/oracle/Middleware01/Oracle IDM1/server/lib/xlAPI.jar"
Copying file to "/opt/oracle/Middleware01/Oracle IDM1/server/lib/xlAdapterUtilities.jar"
Copying file to "/opt/oracle/Middleware01/Oracle IDM1/server/lib/xlDataObjectBeans.jar"
Copying file to "/opt/oracle/Middleware01/Oracle IDM1/server/lib/xlDataObjects.jar"
Copying file to "/opt/oracle/Middleware01/Oracle IDM1/server/lib/xlDDM.jar"
Copying file to "/opt/oracle/Middleware01/Oracle IDM1/server/lib/xlScheduler.jar"
Copying file to "/opt/oracle/Middleware01/Oracle IDM1/server/lib/xlVO.jar"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/bin/DW2PS1Upgrade.sh"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/bin/DW2PS1Upgrade.bat"
Copying file to
"/opt/oracle/Middleware01/Oracle_IDM1/common/templates/applications/oracle.oim_11.1.1.3.0_template_patch.ja
r"
Copying file to "/opt/oracle/Middleware01/Oracle IDM1/server/webapp/admin.war"
Copying file to "/opt/oracle/Middleware01/Oracle IDM1/server/webapp/xlWebApp.war"
Copying file to "/opt/oracle/Middleware01/Oracle IDM1/server/features/iam-features-Scheduler.zip"
Copying file to "/opt/oracle/Middleware01/Oracle IDM1/server/lib/xlCache.jar"
Copying file to "/opt/oracle/Middleware01/Oracle IDM1/server/apps/role-sod.ear"
Copying file to
"/opt/oracle/Middleware01/Oracle IDM1/server/workflows/composites/OAACGRoleAssignSODCheck.zip"
Copying file to "/opt/oracle/Middleware01/Oracle IDM1/server/lib/xlAttestation.jar"
Copying file to "/opt/oracle/Middleware01/Oracle IDM1/server/ssointg/oimcfgtool.jar"
Copying file to "/opt/oracle/Middleware01/Oracle IDM1/server/platform/iam-platform-kernel.jar"
Copying file to
"/opt/oracle/Middleware01/Oracle_IDM1/common/templates/applications/oracle.oim_11.1.1.3.0_extendIDM11gR1dev
_template.zip"
Copying file to
"/opt/oracle/Middleware01/Oracle IDM1/common/templates/applications/oracle.oim 11.1.1.3.0 template.jar"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/inventory/Scripts/ext/jlib/ojdbc6dms.jar"
```

```
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/apps/spml-xsd.ear"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/bin/oracle/iam/MLSLanguageSeedingConfig.class"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/bin/oracle/iam/PatchAutomationPAAS.class"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/bin/oracle/iam/UpdateOAACGConfig.class"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/bin/boot.properties"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/bin/opatch-import-export.template"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/bin/patch_weblogic.sh"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/bin/patch_weblogic.bat"
Copying file to
"/opt/oracle/Middleware01/Oracle IDM1/server/patching/features/authzpolicydefn/RequestTemplateManagementPol
icies.xml"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/patching/metadata/iam-features-ldap-
sync/LDAPRole.xml"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/patching/mt/LDAPRoleMT.xml"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/seed_data/lib/seedSchedulerData.jar"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/seed data/seed-rcu-data.xml"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/setup/deploy-files/deploySDPClient.properties"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/setup/deploy-files/deploySDPClient.py"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/setup/deploy-files/oimupgrade.jar"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/setup/deploy-files/patchJob.xml"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/setup/deploy-files/patchTask.xml"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/setup/deploy-files/setup.xml"
Copying file to "/opt/oracle/Middleware01/Oracle IDM1/temp/RequestTemplateManagementPolicies.xml"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/bin/weblogicImportMetadataOpatch.py"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/oes/oimpds.jar"
Copying file to
"/opt/oracle/Middleware01/Oracle_IDM1/server/bin/oracle/iam/PatchAutomationPAASNotification.class"
Copying file to "/opt/oracle/Middleware01/Oracle IDM1/server/patching/importDir/md2/metadata/iam-features-
identity/IdentityNotificationEvent.xml"
Copying file to
"/opt/oracle/Middleware01/Oracle_IDM1/server/seed_data/Seed/Template/templates/template2.properties"
Copying file to
"/opt/oracle/Middleware01/Oracle_IDM1/server/seed_data/Seed/Template/templates/notification2.zip"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/setup/deploy-files/generate.sh"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/features/iam-features-authzpolicydefn.zip"
Copying file to "/opt/oracle/Middleware01/Oracle IDM1/server/bin/oracle/iam/OIMJMSModuleQueueConfig.class"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/lib/ContextDataUpgrade.jar"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/client/oimclient.zip"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/server/apps/TaskDetails.ear"

Patching component oracle.oim.design console, 11.1.1.5.0...
Copying file to "/opt/oracle/Middleware01/Oracle IDM1/designconsole/lib/iam-platform-auth-client.jar"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/designconsole/lib/iam-platform-context.jar"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/designconsole/lib/iam-platform-pluginframework.jar"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/designconsole/lib/iam-platform-utils.jar"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/designconsole/lib/oimclient.jar"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/designconsole/lib/xlAPI.jar"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/designconsole/lib/xlAdapterUtilities.jar"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/designconsole/lib/xlDataObjectBeans.jar"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/designconsole/lib/xlDataObjects.jar"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/designconsole/lib/xlDDM.jar"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/designconsole/lib/xlFvcUtil.jar"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/designconsole/lib/xlScheduler.jar"
Copying file to "/opt/oracle/Middleware01/Oracle IDM1/designconsole/lib/xlVO.jar"
Copying file to "/opt/oracle/Middleware01/Oracle IDM1/designconsole/lib/XellerateClient.jar"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/designconsole/lib/xlCache.jar"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/designconsole/lib/xlAttestation.jar"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/designconsole/fvc.properties"

Patching component oracle.oim.remote_manager, 11.1.1.5.0...
Copying file to "/opt/oracle/Middleware01/Oracle IDM1/remote manager/lib/iam-platform-utils.jar"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/remote manager/lib/oimclient.jar"
Copying file to "/opt/oracle/Middleware01/Oracle IDM1/remote manager/lib/xlAPI.jar"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/remote_manager/lib/xlDataObjects.jar"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/remote_manager/lib/xlScheduler.jar"
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/remote manager/lib/xlVO.jar"
Copying file to "/opt/oracle/Middleware01/Oracle IDM1/remote manager/lib/oimclient.jar"

Patching component oracle.as.upgrade, 11.1.1.5.0...
Copying file to "/opt/oracle/Middleware01/Oracle_IDM1/jlib/oimua.jar"
ApplySession adding interim patch '13399365' to inventory

Verifying the update...
Inventory check OK: Patch ID 13399365 is registered in Oracle Home inventory with proper meta-data.
Files check OK: Files from Patch ID 13399365 are present in Oracle Home.
Execution of 'sh /opt/oracle/Download/13399365/custom/scripts/post -apply 13399365 ':

log dir does not exist hence creating one

Return Code = 0

The local system has been patched and can be restarted.


OPatch succeeded.
[oracle@12oel55_odd 13399365]$
```

We check the logfile for errors. Ok.

OPatch Stage Ok.

4.11.3   Configuration of the OIM Server

We proceed with the configuration of the OIM server as documented in
http://docs.oracle.com/cd/E23943_01/install.1111/e12002/oidonly.htm#CDDDIAIC .

We start the AdminServer.

```
[oracle@12oel55_odd base_domain]$ pwd
/opt/oracle/Middleware01/user_projects/domains/base_domain
 [oracle@12oel55_odd base_domain]$ ./startWebLogic.sh
```

We start the configuration wizard.

```
[oracle@12oel55_odd bin]$ pwd
/opt/oracle/Middleware01/Oracle_IDM1/bin
[oracle@12oel55_odd bin]$ ./config.sh
Starting Fusion Middleware Configuration Wizard
ORACLE_HOME set as /opt/oracle/Middleware01/Oracle_IDM1
PATH set as
/opt/oracle/Middleware01/Oracle IDM1/bin:/opt/oracle/Middleware01/Oracle IDM1/OPatch:/usr/java/latest/bin:/
home/oracle/app/oracle/product/TimesTen/tt1121/bin:/home/oracle/app/oracle/product/TimesTen/tt1121/quicksta
rt/sample_code/oci:/home/oracle/app/oracle/product/TimesTen/tt1121/quickstart/sample_code/odbc:/home/oracle
/app/oracle/product/TimesTen/tt1121/quickstart/sample_code/odbc/xla:/home/oracle/app/oracle/product/TimesTe
n/tt1121/quickstart/sample_code/jdbc:/home/oracle/app/oracle/product/TimesTen/tt1121/quickstart/sample_code
/odbc_drivermgr:/home/oracle/app/oracle/product/TimesTen/tt1121/quickstart/sample_code/proc:/home/oracle/ap
p/oracle/product/TimesTen/tt1121/quickstart/sample code/ttclasses:/home/oracle/app/oracle/product/TimesTen/
tt1121/quickstart/sample_code/ttclasses/xla:/home/oracle/app/oracle/product/TimesTen/tt1121/ttoracle_home/i
nstantclient_11_1:/home/oracle/app/oracle/product/TimesTen/tt1121/ttoracle_home/instantclient_11_1/sdk:/hom
e/oracle/app/oracle/product/TimesTen/tt1121/3rdparty/ant/bin:/usr/java/latest/bin:/usr/kerberos/bin:/usr/lo
cal/bin:/usr/bin:/bin:/usr/X11R6/bin:/home/oracle/app/oracle/product/11.2.0/dbhome_2/bin:/home/oracle/bin:/
home/oracle/app/oracle/product/11.2.0/dbhome_2/bin
LD LIBRARY PATH set as
/opt/oracle/Middleware01/Oracle IDM1/lib:/home/oracle/app/oracle/product/11.2.0/dbhome 2/lib
Starting Oracle Universal Installer...

Checking Temp space: must be greater than 150 MB.   Actual 6808 MB     Passed
Checking swap space: must be greater than 500 MB.   Actual 1694 MB     Passed
Checking monitor: must be configured to display at least 256 colors.   Actual 16777216     Passed
Preparing to launch Oracle Universal Installer from /tmp/OraInstall2012-08-22 02-29-52PM. Please wait
...[oracle@12oel55_odd bin]$ Log: /home/oracle/app/oraInventory/logs/install2012-08-22_02-29-52PM.log

[oracle@12oel55_odd bin]$
```

We provide the screens of the dialog.

OIMInstallationTutorial.docx
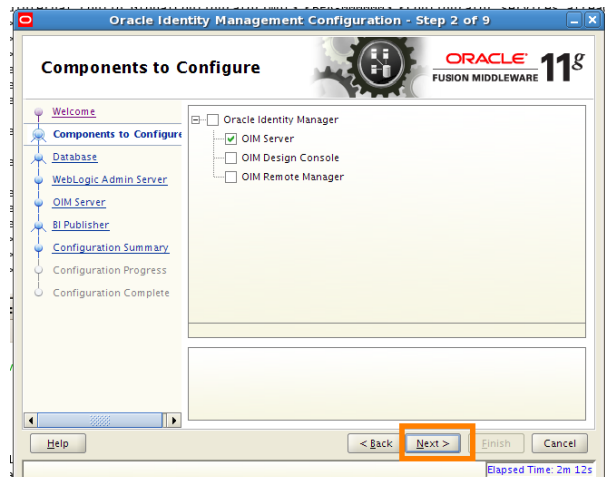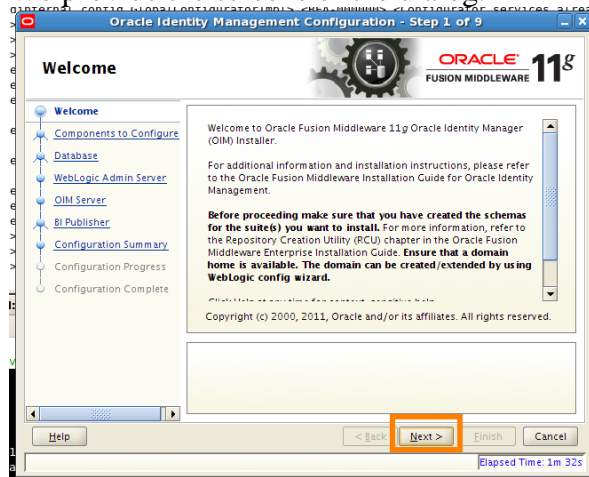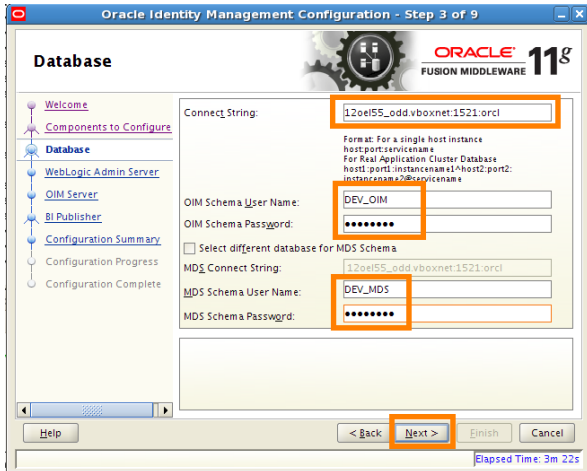
12oel55_odd.vboxnet:1521:orcl
DEV_OIM   welcome1
DEV_MDS   welcome1

192.168.56.12:7001
weblogic
welcome1
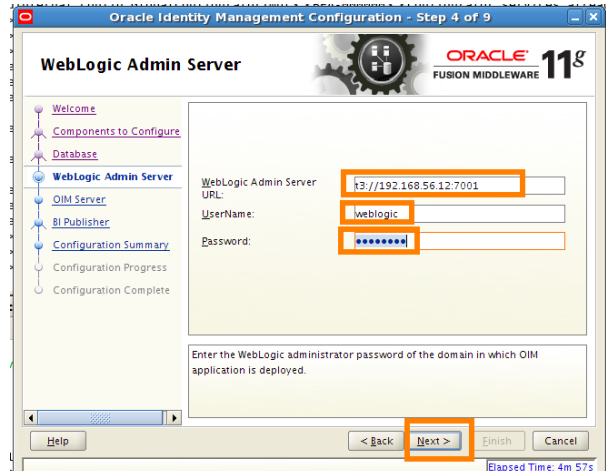
192.168.56.12:7001
weblogic
welcome1
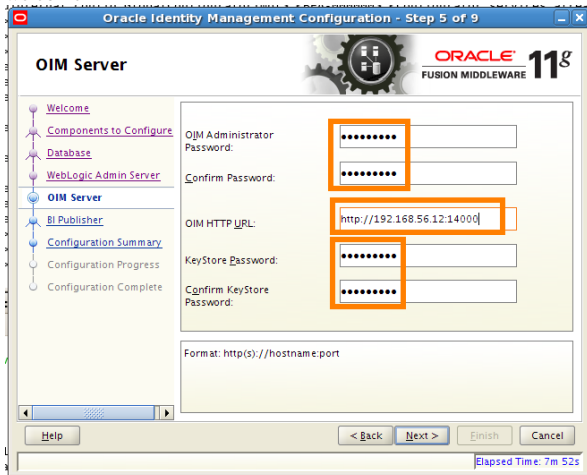
welcome1X
welcome1X
http://192.168.56.12:14000
welcome1X
welcome1X
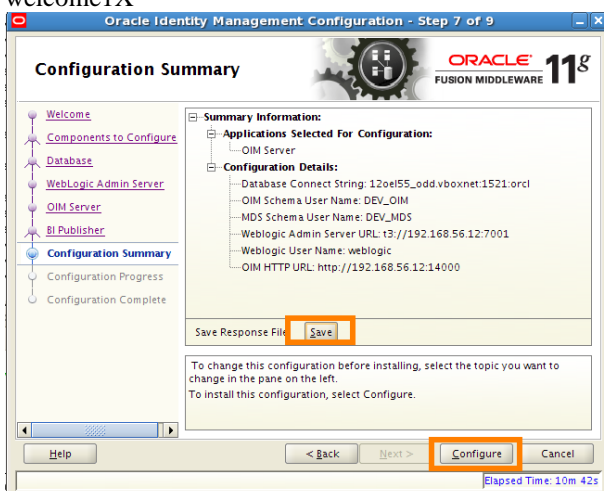
/opt/oracle/FMW_OIM_11.1.1.5_config_response.txt
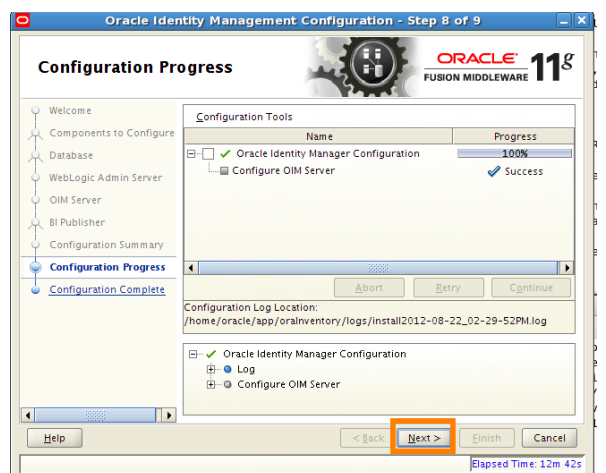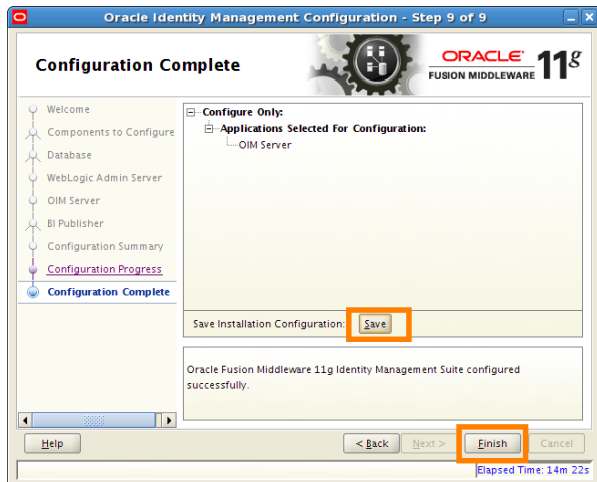
/opt/oracle/FMW_OIM_11.1.1.5_config_summary.txt
Ok.

We follow with the post-configuration steps documented at
http://docs.oracle.com/cd/E23943_01/install.1111/e12002/oidonly.htm#autoId28.

We adjust the XEL_HOME variable.

```
[oracle@12oel55_odd bin]$ pwd
/opt/oracle/Middleware01/Oracle_IDM1/server/bin
[oracle@12oel55_odd bin]$ vi setEnv.sh
…
#XEL_HOME=..
XEL_HOME=/opt/oracle/Middleware01/Oracle_IDM1/server
export XEL_HOME
…
```

We will leave the step 216.8.9 Setting oamEnabled Parameter for Identity Virtualization
Library" for later.

We start the Admin Server.

4.11.4   Sicherungpunkt 4

We make a snapshot with the following comments.
- OIM Patch 13399365 (OPatch Stage)
- Configuration of the OIM Server

4.11.5   OIM Patch 13399365 (patch_weblogic Stage)

We proceed with applying the second stage of the patch as described in the accompanying
readme file
(file:///D:/15Work/06OracleIdentityManagement/p13399365/README.html#BGBBBFHD)

We edit the weblogic.profile as follows:

```
[oracle@12oel55_odd bin]$ pwd
/opt/oracle/Middleware01/Oracle_IDM1/server/bin
[oracle@12oel55_odd bin]$  cat weblogic.profile

# For passwords if you dont want to put password </optional> in this file just comment it out from here, you will be
promted for it in rumtime.

#Neccessary env variables   [Mandatory]
ant_home=/opt/oracle/Middleware01/modules/org.apache.ant_1.7.1
java_home=/opt/oracle/java/jdk1.6.0_33
mw_home=/opt/oracle/Middleware01
```

```
oim_oracle_home=/opt/oracle/Middleware01/Oracle_IDM1

#DB configuration variables [Mandatory]
operationsDB.user=DEV_OIM
# Database password is optional. if you want to  give it on terminal itself leave it commented. Otherwise uncomment
it.
OIM.DBPassword=welcome1
operationsDB.driver=oracle.jdbc.OracleDriver
operationsDB.host=12oel55_odd.vboxnet
operationsDB.serviceName=orcl
operationsDB.port=1521
appserver.type=wls

isMTEnabled=<true/false>
# If you have milty-tenancy enabled in your environment
mdsDB.user=<MDS DB Schema owner>
#Password is optional,  if you want to  give it on terminal itself leave it commented. Otherwise uncomment it.
#mdsDB.password=<MDS DB Schema password>
mdsDB.host=<MDS DB Host>
mdsDB.port=<MDS DB port>
mdsDB.serviceName=<MDS DB ServiceName>

#For domain level configurations [Mandatory]
# put here your admin server related credentials
weblogic_user=weblogic
#Password is optional,  if you want to  give it on terminal itself leave it commented. Otherwise uncomment it.
weblogic_password=welcome1
weblogic_host=localhost
weblogic_port=7001
weblogic.server.dir=/opt/oracle/Middleware01/wlserver_10.3

#oim specific domain level parameters          [Mandatory]
oimserver_host=localhost
oimserver_port=14000
oim_managed_server=oim_server1
oim_domain_dir=/opt/oracle/Middleware01/user_projects/domains/base_domain

#isSODEnabled=<true/false>

# SOA specific details [Mandatory]
soa_home=/opt/oracle/Middleware01/Oracle_SOA1
soa_managed_server=soa_server1
soaserver_host=localhost
soaserver_port=8001
#put here the name of the targets of taskdetails. in non cluster it will be soa server name and in cluster it will be
something like cluster_soa
taskdetails_target_name=soa_server1

isOHSEnabled=false
#Following params is needed only if you have enabled OHS in your env
#ohs_home=/u01/ohs_home
```

Now we patch the weblogic Admin Server. We set the environment and start the Admin Server.

```
[oracle@12oel55_odd Middleware01]$ JAVA_HOME=/opt/oracle/java/jdk1.6.0_33
[oracle@12oel55_odd Middleware01]$ PATH=$JAVA_HOME/bin:$PATH
[oracle@12oel55_odd Middleware01]$ java -version
java version "1.6.0 33"
Java(TM) SE Runtime Environment (build 1.6.0_33-b04)
Java HotSpot(TM) Server VM (build 20.8-b03, mixed mode)
[oracle@12oel55_odd Middleware01]$
```

Now we run the patch script.

```
[oracle@12oel55_odd bin]$ pwd
/opt/oracle/Middleware01/Oracle_IDM1/server/bin
[oracle@12oel55_odd bin]$ ./patch_weblogic.sh
```

There are errors in the logfile at /opt/oracle/Middleware01/Oracle_IDM1/server/setup/deploy-files/ patch_weblogic.log

```
wltaskdef:

redeploy-taskdetails:
  [wldeploy] javax.enterprise.deploy.spi.exceptions.DeploymentManagerCreationException: [J2EE Deployment
SPI:260010]Unable to connect to 't3://localhost:7001' as user, 'weblogic'. Error received: Couldn't connect
to the specified host
```

This is strange. Which password is it using?

Additionally the AdminServer reports:

```
<Aug 22, 2012 3:26:46 PM CEST> <Error> <OIM Authenticator> <BEA-000000> <Authentication of user weblogic
failed because of invalid password>
```

It should use the correct password because it is contained in the weblogic.profile correctly and it successfully connected earlier.

This time however it tries to use the OIM Authenticator. Why is it using the OIM Authenticator?

The control flag of the OIM Authenticator is set to "sufficient", indicating that it is not required to deliver a successful result.

We stop the soa_server, restart the Admin Server and try to apply the patch again.

This time the process terminates successfully.

```
….
remove-ucp-jar:
   [delete] Deleting: /opt/oracle/Middleware01/Oracle_IDM1/server/ext/ucp.jar
     [echo] configuring ohs auth

check-ohs-enabled:
     [echo]  OHS enabled = "${OHSEnabled}"

config-ohs:

BUILD SUCCESSFUL
Total time: 11 minutes 14 seconds
```

We check the logfile /opt/oracle/Middleware01/Oracle_IDM1/server/setup/deploy-files/ patch_weblogic.log for errors. We find the following exception:

```
contextdataupgrade:
    [exec] [EL Info]: 2012-08-22 16:22:23.41--ServerSession(28688943)--EclipseLink, version: Eclipse Persistence Services -
2.3.1.v20111018-r10243
    [exec] [EL Info]: 2012-08-22 16:22:23.47--ServerSession(28688943)--oim login successful
    [exec] Updating orchprocess table with context values
    [exec] java.sql.SQLSyntaxErrorException: ORA-00904: "CONTEXTID": invalid identifier
    [exec]
    [exec]      at oracle.jdbc.driver.T4CTTIoer.processError(T4CTTIoer.java:445)
    [exec]      at oracle.jdbc.driver.T4CTTIoer.processError(T4CTTIoer.java:396)
    [exec]      at oracle.jdbc.driver.T4C8Oall.processError(T4C8Oall.java:879)
    [exec]      at oracle.jdbc.driver.T4CTTIfun.receive(T4CTTIfun.java:450)
    [exec]      at oracle.jdbc.driver.T4CTTIfun.doRPC(T4CTTIfun.java:192)
    [exec]      at oracle.jdbc.driver.T4C8Oall.doOALL(T4C8Oall.java:531)
    [exec]      at oracle.jdbc.driver.T4CPreparedStatement.doOall8(T4CPreparedStatement.java:207)
    [exec]      at oracle.jdbc.driver.T4CPreparedStatement.executeForDescribe(T4CPreparedStatement.java:884)
    [exec]      at oracle.jdbc.driver.OracleStatement.executeMaybeDescribe(OracleStatement.java:1167)
    [exec]      at oracle.jdbc.driver.OracleStatement.doExecuteWithTimeout(OracleStatement.java:1289)
    [exec]      at oracle.jdbc.driver.OraclePreparedStatement.executeInternal(OraclePreparedStatement.java:3593)
    [exec]      at oracle.jdbc.driver.OraclePreparedStatement.executeQuery(OraclePreparedStatement.java:3637)
    [exec]      at oracle.jdbc.driver.OraclePreparedStatementWrapper.executeQuery(OraclePreparedStatementWrapper.java:1495)
    [exec]      at
oracle.iam.oimupgrade.standalone.feature.kernel.ContextDataUpgrade.updateOrchProcessTable(ContextDataUpgrade.java:261)
    [exec]      at oracle.iam.oimupgrade.standalone.feature.kernel.ContextDataUpgrade.main(ContextDataUpgrade.java:234)
    [exec] oracle.iam.oimupgrade.standalone.feature.kernel.OIMUpgradeException: java.sql.SQLSyntaxErrorException: ORA-00904:
"CONTEXTID": invalid identifier
    [exec]
    [exec]      at
oracle.iam.oimupgrade.standalone.feature.kernel.ContextDataUpgrade.updateOrchProcessTable(ContextDataUpgrade.java:284)
    [exec]      at oracle.iam.oimupgrade.standalone.feature.kernel.ContextDataUpgrade.main(ContextDataUpgrade.java:234)
    [exec] Caused by: java.sql.SQLSyntaxErrorException: ORA-00904: "CONTEXTID": invalid identifier
    [exec]
    [exec]      at oracle.jdbc.driver.T4CTTIoer.processError(T4CTTIoer.java:445)
    [exec]      at oracle.jdbc.driver.T4CTTIoer.processError(T4CTTIoer.java:396)
    [exec]      at oracle.jdbc.driver.T4C8Oall.processError(T4C8Oall.java:879)
    [exec]      at oracle.jdbc.driver.T4CTTIfun.receive(T4CTTIfun.java:450)
    [exec]      at oracle.jdbc.driver.T4CTTIfun.doRPC(T4CTTIfun.java:192)
    [exec]      at oracle.jdbc.driver.T4C8Oall.doOALL(T4C8Oall.java:531)
    [exec]      at oracle.jdbc.driver.T4CPreparedStatement.doOall8(T4CPreparedStatement.java:207)
    [exec]      at oracle.jdbc.driver.T4CPreparedStatement.executeForDescribe(T4CPreparedStatement.java:884)
    [exec]      at oracle.jdbc.driver.OracleStatement.executeMaybeDescribe(OracleStatement.java:1167)
    [exec]      at oracle.jdbc.driver.OracleStatement.doExecuteWithTimeout(OracleStatement.java:1289)
    [exec]      at oracle.jdbc.driver.OraclePreparedStatement.executeInternal(OraclePreparedStatement.java:3593)
    [exec]      at oracle.jdbc.driver.OraclePreparedStatement.executeQuery(OraclePreparedStatement.java:3637)
    [exec]      at oracle.jdbc.driver.OraclePreparedStatementWrapper.executeQuery(OraclePreparedStatementWrapper.java:1495)
    [exec]      at
oracle.iam.oimupgrade.standalone.feature.kernel.ContextDataUpgrade.updateOrchProcessTable(ContextDataUpgrade.java:261)
    [exec]      ... 1 more
    [echo] all the sql files coming with patch are applied, now seeding PAAS task, job and notification
```

We don't know if this is relevant but we consider the patch process as successful.

4.11.6   Configuration of Nodemanager

We start the nodemanger.

```
[oracle@12oel55_odd bin]$ pwd
/opt/oracle/Middleware01/wlserver_10.3/server/bin
[oracle@12oel55_odd bin]$ ./startNodeManager.sh
```

This will cause the file nodemanager.properties to be created in the nodemanager home directory.
We edit this file and set the property "StartScriptEnabled=true".

```
[oracle@12oel55_odd nodemanager]$ pwd
/opt/oracle/Middleware01/wlserver_10.3/common/nodemanager
[oracle@12oel55_odd nodemanager]$ grep Start nodemanager.properties
StartScriptName=startWebLogic.sh
StartScriptEnabled=true
```

We restart the nodemanager.
There are some SSL problems with the communication between the Nodemanager and the AdminServer. We disable hostname verification in the Adminserver. We also add the oim_server to the WLS machine "LocalMachine".
We restart nodemanager and Adminserver.
The managed servers are now startable via the nodemanager. Ok.

Now we can login with user xelsysadm/welcome1X at the URL
http://192.168.56.12:14000/oim.
We have to answer some initial security questions.
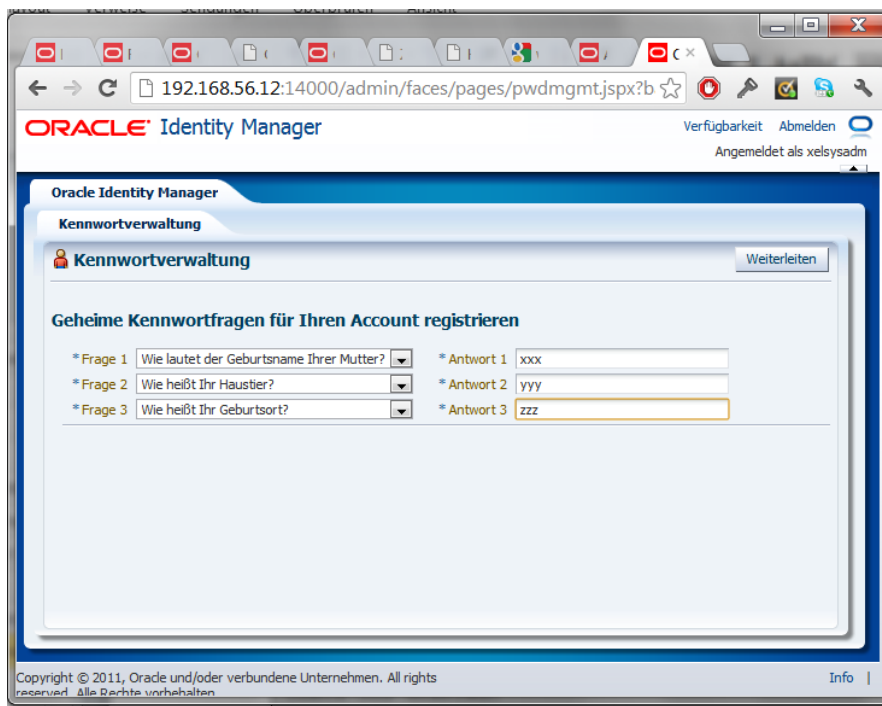
Figure 8.   **Login to the OIM**

4.11.7   Sicherheitpunkt 5

We create a machine snapshot with the following comments:
OIM Patch 13399365 (patch_weblogic Stage)
Nodemanger Configuration
Started Servers:
        -Nodemanager
        -AdminServer

```
-oim_server1
-soa_server1
```

4.12   Installation of the OIM Design Console

To configure the Design Console we follow the instructions at
http://docs.oracle.com/cd/E23943_01/install.1111/e12002/oidonly.htm#CIHDDJEA.
We will install the Design Console on the Host Machine, which is a Windows 7 system.
The following picture illustrates this installation.
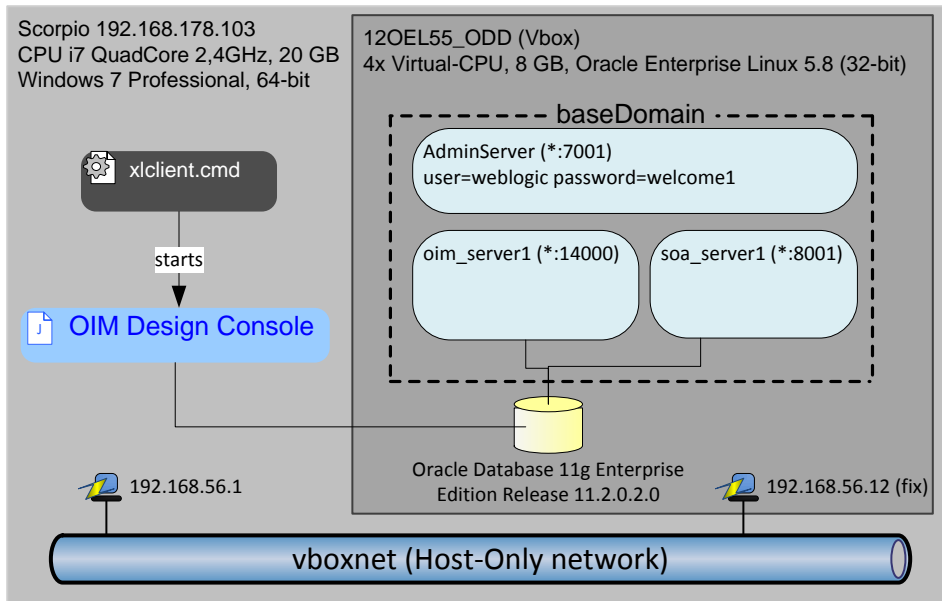
Figure 9.   **Installation of the OIM Design Console on Windows 7, connecting to the OIM running on a Linux virtual machine.**

First we need to install the OIM Software on the windows machine. After that, we start the configuration wizard to configure the Design Console.

We can only install the OIM software into a Middleware Home where WLS 10.3.5 or WLS 10.3.6 is installed.
Therefor we install WLS from the installer E:\01Downloads\wls1035_win32.exe to D:\10Oracle\04OIM as indicated in the following screenshot of the WLS installation wizard.
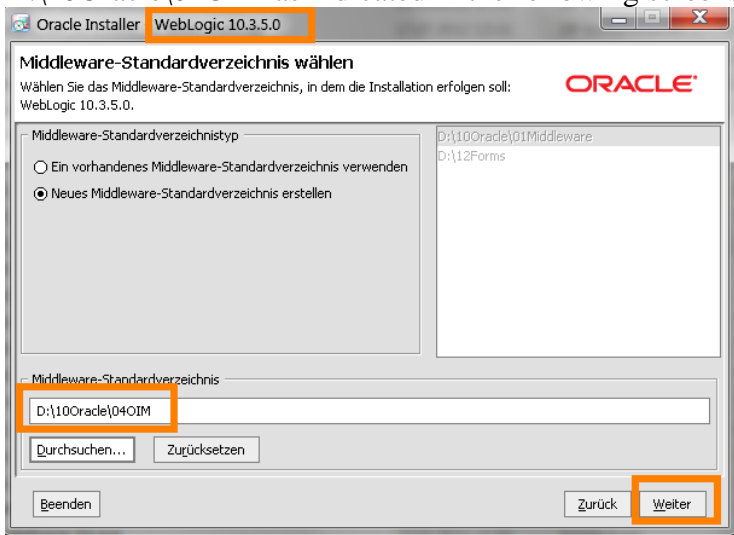
Figure 10.   **WLS Installation as prerequisite for the OIM Design Console Installation.**

We will use the generic OIM installer described in 7.1.6. We run the installation in a CMD-Shell using the JDK 1.6.

```
C:\Users\uScorpio>cd D:\10Oracle\04OIM
C:\Users\uScorpio>d:
D:\10Oracle\04OIM>set JAVA_HOME=D:\13Java\03JavaSE6\jdk1.6.0_33-64bit
D:\10Oracle\04OIM>%JAVA_HOME%\bin\java -version
java version "1.6.0_33"
Java(TM) SE Runtime Environment (build 1.6.0 33-b05)
Java HotSpot(TM) 64-Bit Server VM (build 20.8-b03, mixed mode)
D:\10Oracle\04OIM>E:\01Downloads\ofm iam generic 11.1.1.5.0 disk1 1of1\Disk1\setup.exe
```

This will start the OIM Installer with the following dialog screens:
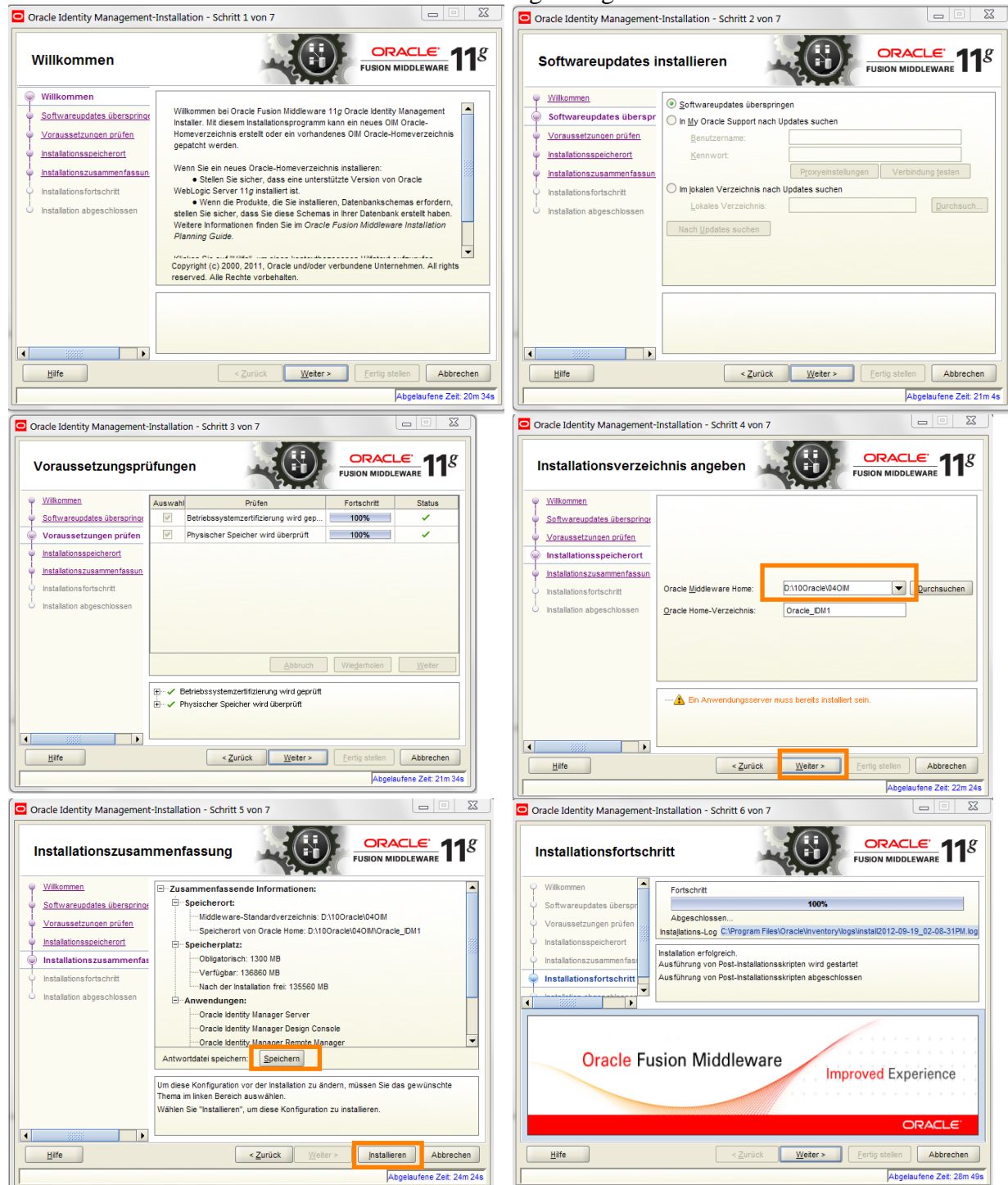
Figure 11.   **Installation dialog for the OIM installation as prerequisite for the design console.**

We save the response file to D:\10Oracle\04OIM\OIM_10.1.1.5_Installation_Response.txt.
The installation log is saved to C:\Program Files\Oracle\Inventory\logs\install2012-09-19_02-08-31PM.log. We save the installation summary to D:\10Oracle\04OIM\
OIM_10.1.1.5_Installation_Summary.txt.

To configure the Design Console we start D:\10Oracle\04OIM\Oracle_IDM1\bin\config.bat

```
C:\Users\uScorpio>d:
D:\>cd D:\10Oracle\04OIM\Oracle_IDM1\bin\
D:\10Oracle\04OIM\Oracle_IDM1\bin>config.bat
```

We provide the screens of the configuration wizard.

Figure 12.   **Dialog to configure the Design Console on Windows.**

We save the following files:
- D:\10Oracle\04OIM\OIM_10.1.1.5_DesignConsole_Response.txt
- D:\10Oracle\04OIM\OIM_10.1.1.5_DesignConsole_Summary.txt
- C:\Program Files\Oracle\Inventory\logs\install2012-09-19_02-44-53PM.log

We now follow the post configuration step of creating a wlfullclient.jar.

```
[oracle@12oel55_odd bin]$ echo $JAVA_HOME
/opt/oracle/Middleware01/jrockit_160_29_D1.2.0-10
[oracle@12oel55_odd bin]$ java -version
java version "1.6.0_29"
Java(TM) SE Runtime Environment (build 1.6.0_29-b11)
Oracle JRockit(R) (build R28.2.0-79-146777-1.6.0_29-20111005-1807-linux-ia32, compiled mode)
[oracle@12oel55_odd lib]$ pwd
/opt/oracle/Middleware01/wlserver_10.3/server/lib
 [oracle@12oel55_odd lib]$ ls -la wlfull*
-rw-rw-r-- 1 oracle oracle 55004433 Aug 22 16:25 wlfullclient.jar
[oracle@12oel55_odd lib]$ mv wlfullclient.jar wlfullclient.jar.org
[oracle@12oel55_odd lib]$ java -jar wljarbuilder.jar 1&>2  > wlfullclient.jar.txt
[oracle@12oel55_odd lib]$ ls -la wlfullclient.jar*
-rw-rw-r-- 1 oracle oracle 55004433 Sep 19 15:09 wlfullclient.jar
-rw-rw-r-- 1 oracle oracle 55004433 Aug 22 16:25 wlfullclient.jar.org
-rw-rw-r-- 1 oracle oracle   295696 Sep 19 15:09 wlfullclient.jar.txt
[oracle@12oel55_odd lib]$ cp wlfullclient.jar /media/sf_01SharedFolder/
```

There was already a wlfullclient.jar contained in that directory. We repeat the creation and verify that the file is identical. For reference we safe the output of the command in a textfile. Finally we copy the file to its target destination.

```
D:\10Oracle\04OIM\Oracle_IDM1\designconsole\ext>copy
D:\16VirtualBox\12OEL55_ODD\01SharedFolder\wlfullclient.jar .
        1 Datei(en) kopiert.
```

Now we start the Design Console.

```
D:\10Oracle\04OIM\Oracle_IDM1\designconsole>xlclient.cmd
```

We use the xelsysadm/welcome1X to login. The Desing Console opens and is connected to the Database running on 12OEL55_ODD. We provide a screenshot.
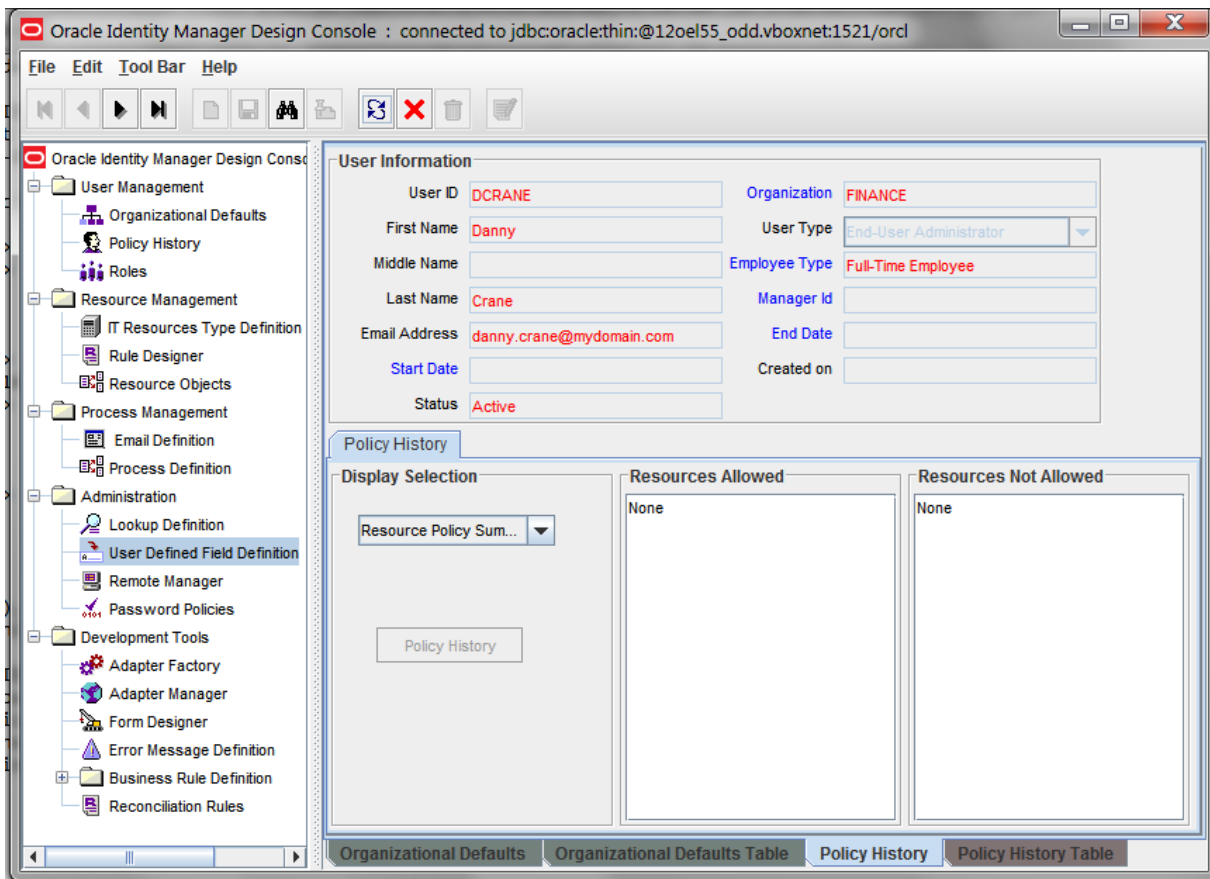
Figure 13.   **OIM Design Console running on Windows 7, connected to the database on 12OEL55_ODD.**

We omit the configuration of the xlconfig.xml and SSL because we don't need it here.

5   Starting and Stopping OIM

We start the Nodemanger first. Then we start the AdminServer, OIM-Server and SOA-Server all in separate shells. To be able to start the managed servers without password prompt, we insert user and password into the script:
/opt/oracle/Middleware01/user_projects/domains/base_domain/bin/
startManagedWebLogic.sh:

```
…
WLS_USER="weblogic"
export WLS_USER

WLS_PW="welcome1"
export WLS_PW
…
```

We start the Nodemanger.

```
cd /opt/oracle/Middleware01/wlserver_10.3/server/bin
./startNodeManager.sh
```

We start the AdminServer

```
cd /opt/oracle/Middleware01/user projects/domains/base domain
./startWebLogic.sh
```

Starting the OIM Server:

```
cd /opt/oracle/Middleware01/user_projects/domains/base_domain/bin
```

```
./startManagedWebLogic.sh oim_server1
```

Starting the SOA Server:

```
cd /opt/oracle/Middleware01/user_projects/domains/base_domain/bin
./startManagedWebLogic.sh soa_server1
```

We stop the servers with Ctrl-C in the shell.

6   JDeveloper

We need JDeveloper for editing workflows. It is already installed in the appliance
12OEL55_ODD, however in an outdated version and not in the studio edition.
Therefore we make a fresh installation.

6.1   Installation of JDeveloper 11.1.1.6.0

We download the latest "JDeveloper Studio Edition" and install it (see 7.1.8).
We consult the installation guide at
http://docs.oracle.com/cd/E23943_01/install.1111/e13666/ojdig.htm.

We start the installer.

```
[oracle@12oel55 odd Middleware01]$ pwd
/opt/oracle/Middleware01
 [oracle@12oel55_odd Middleware01]$ /media/sf_01SharedFolder/jdevstudio11116install.bin
Extracting
0%...............................................................................................100%
```


We provide the screens of the installation dialog.
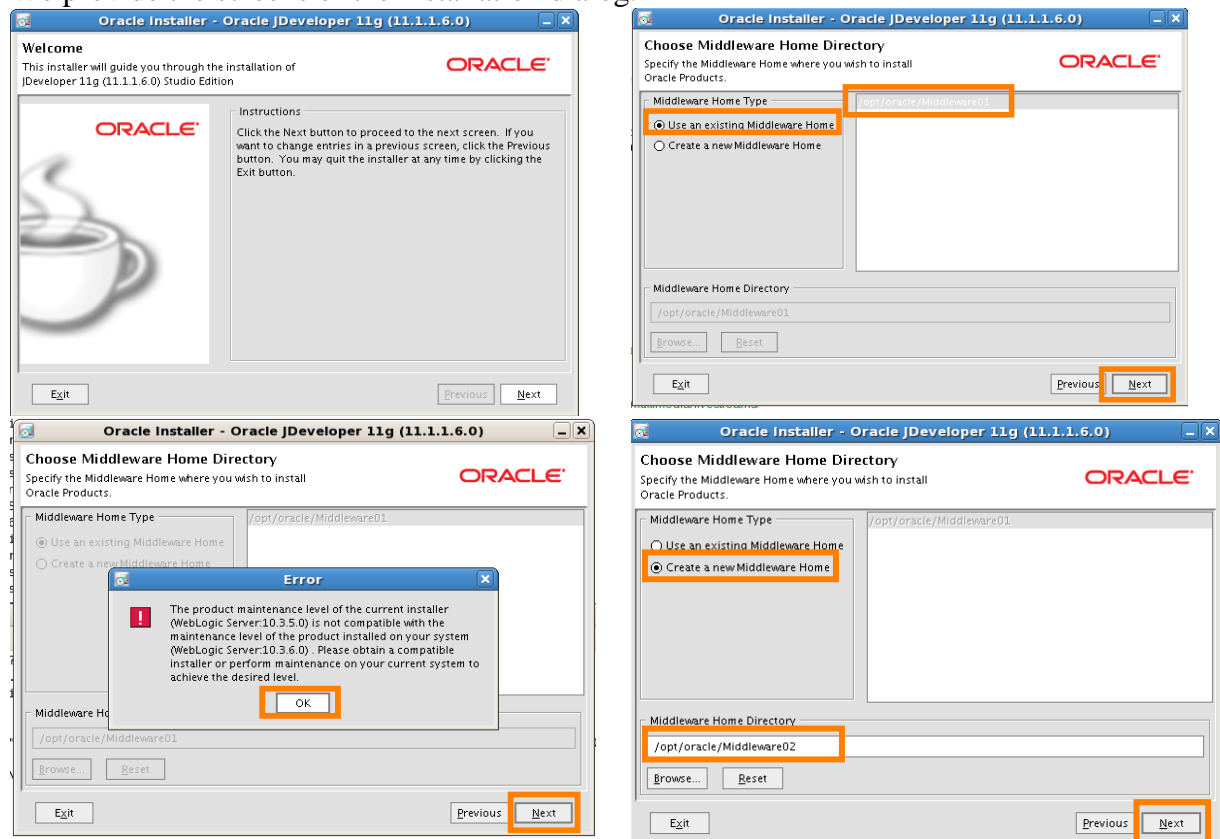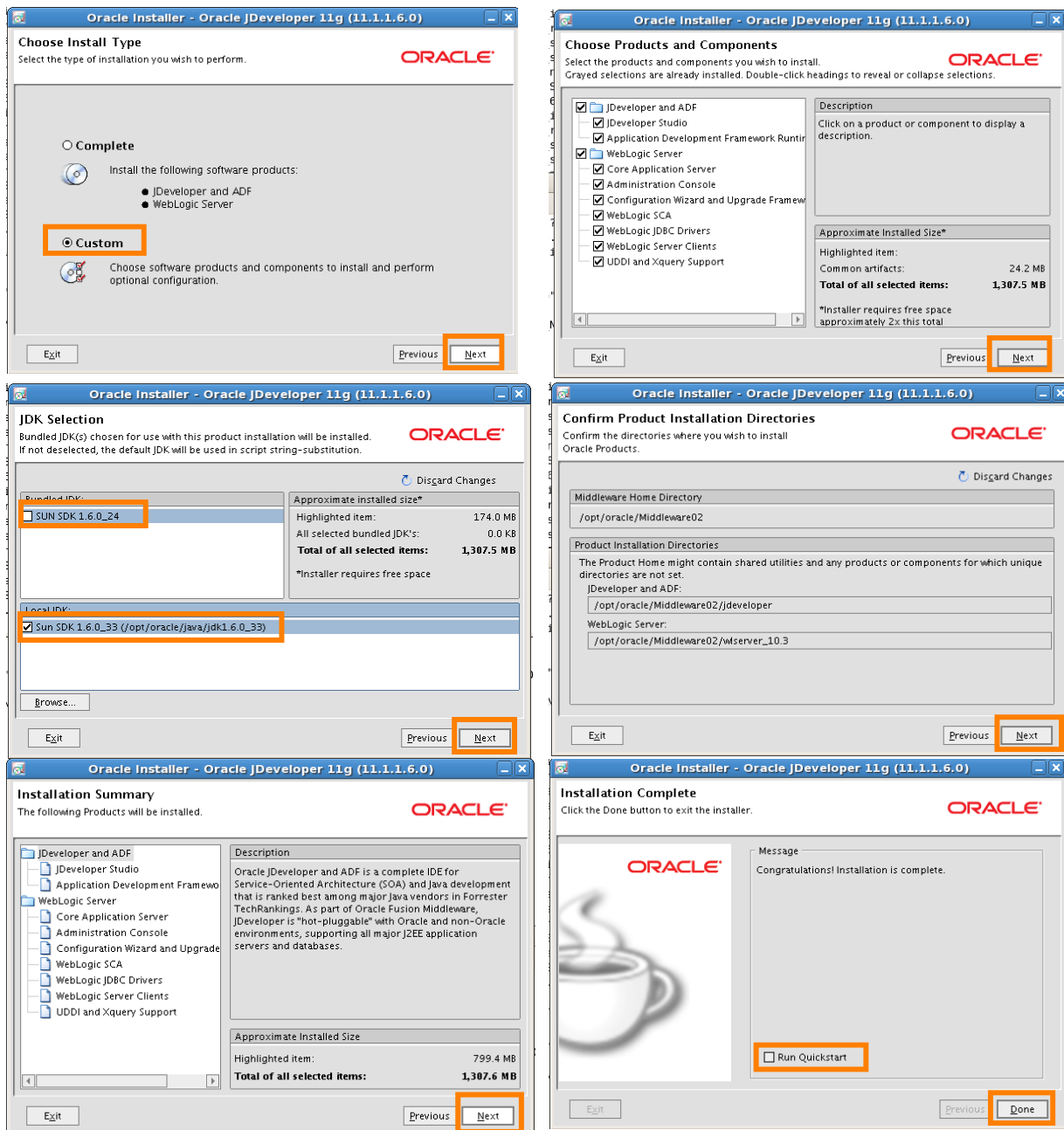
We were not able to use the Middleware01 home directory because we have a newer version of WLS installed. Instead we choose a new Middleware02 home directory. We deselect the old JDK and choose our latest installation of the JDK 1.6. Update 33.

We create a new desktop icon with the Launcher command
/opt/oracle/Middleware02/jdeveloper/jdev/bin/jdev.

6.2 Installation of the SOA Composite Editor

We want to install the SCA (SOA Composite Editor). We start the (Menu->Help->Check for Updates) dialog.
We provide the screens.
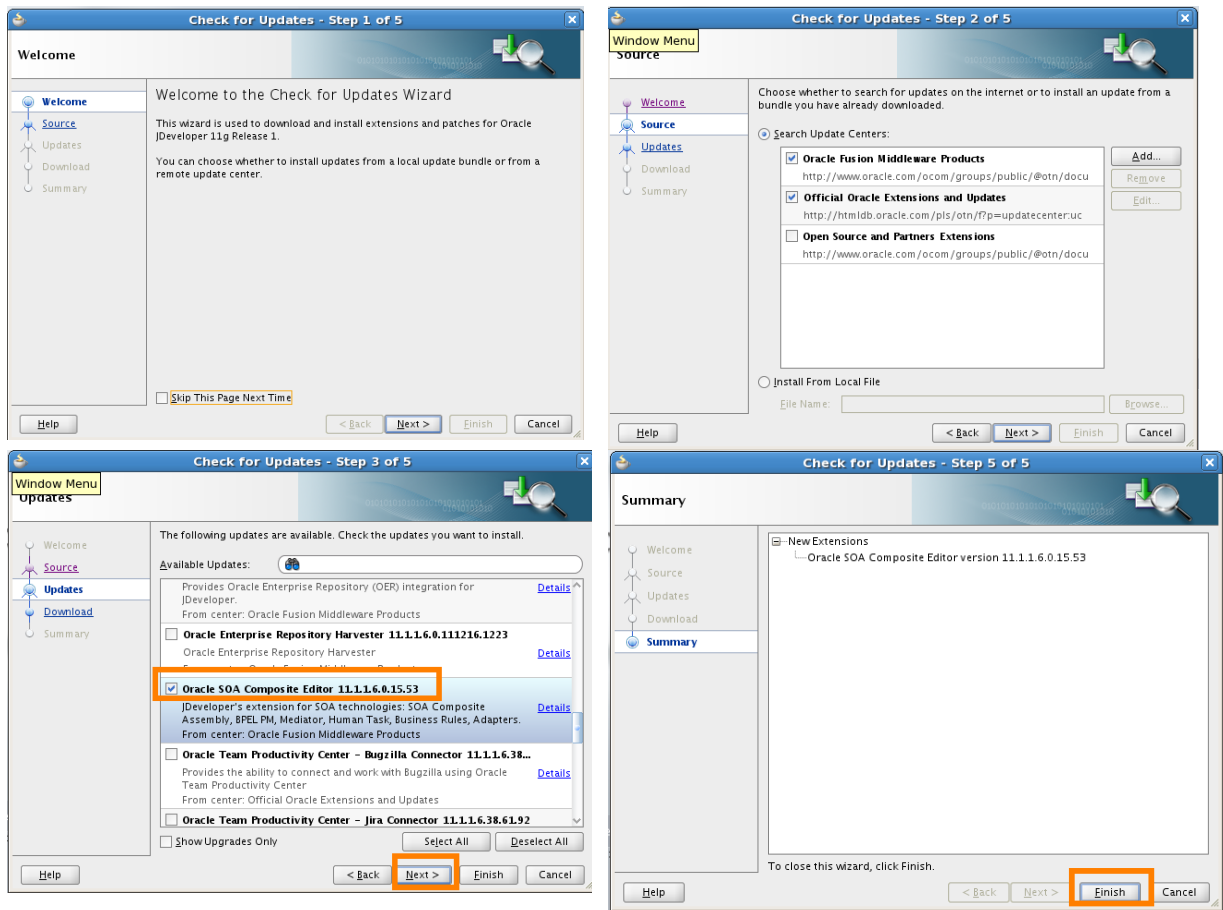
The SOA composite editor is installed after a restart.
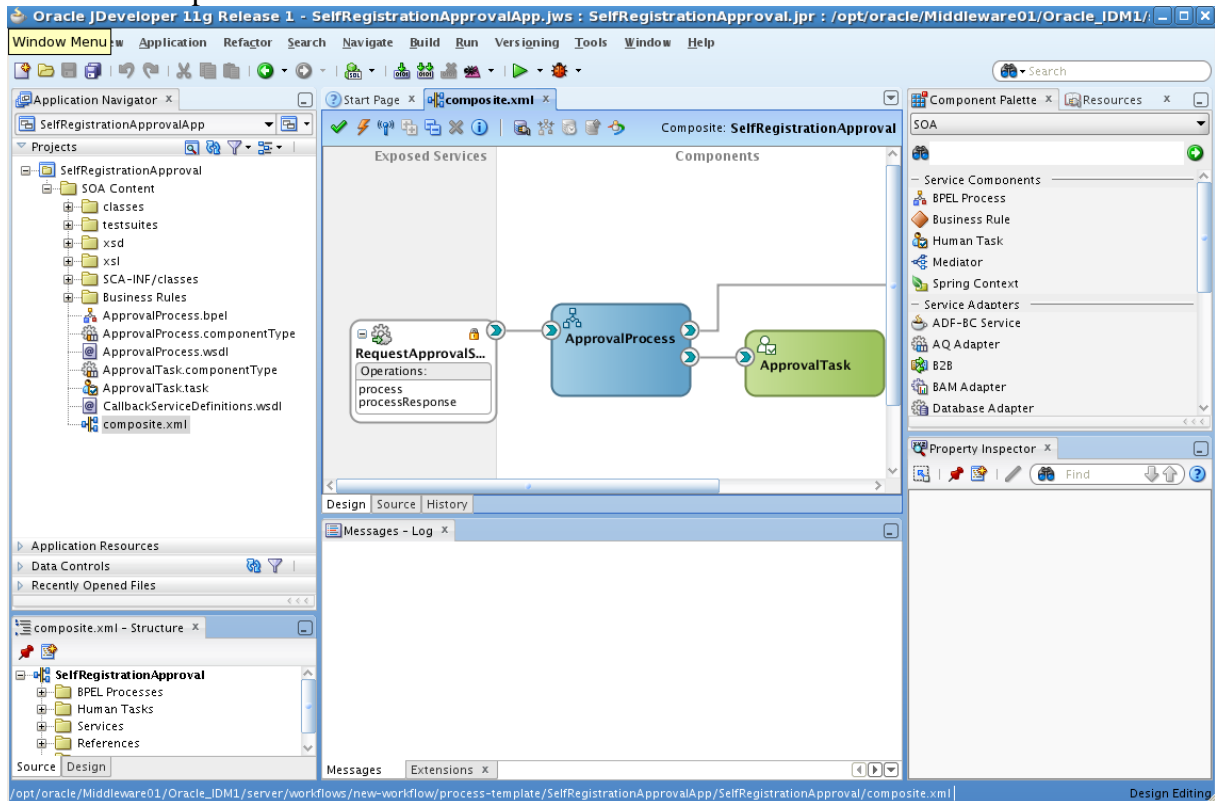
Figure 14.   **JDeveloper with the SOA Composite Editor installed.**

Ok.

6.3   Sicherungspunkt 6

We make snapshot with the following comments.
- JDeveloper Studio Edition 11.1.1.6.0 installed to /opt/oracle/Middleware02
- SOA Component Editor installed.

7   Downloads

This chapter contains all downloads used during this tutorial.

7.1.1   Oracle_Developer_Day.ova

Link   http://www.oracle.com/technetwork/database/enterprise-edition/databaseappdev-vm-161299.html
File   D:\01Downloads\Oracle_Developer_Day.ova
MD5   a3cd505b4a3f56053504caaec61d47c7 (matches website md5)
Notes   This appliance is a 32-bit Linux 5.5
            User/Password oracle/oracle

```
[oracle@localhost ~]$ cat /proc/version
Linux version 2.6.18-194.17.1.0.1.el5 (mockbuild@ca-build9.us.oracle.com) (gcc version 4.1.2
20080704 (Red Hat 4.1.2-48)) #1 SMP Wed Sep 29 15:40:03 EDT 2010
[oracle@localhost ~]$ uname -a
Linux localhost.localdomain 2.6.18-194.17.1.0.1.el5 #1 SMP Wed Sep 29 15:40:03 EDT 2010 i686 i686
i386 GNU/Linux
[oracle@localhost ~]$
[oracle@localhost ~]$ cat /etc/*-release
Enterprise Linux Enterprise Linux Server release 5.5 (Carthage)
Red Hat Enterprise Linux Server release 5.5 (Tikanga)
```

7.1.2   Oracle_Developer_Days.ova

Link   Not available anymore.
File   D:\01Downloads\Oracle_Developer_Days.ova
MD5   ad768aa37c2002cfbee1e2bbf2fa41ee
Notes   This is the older version which I installed on 20.04.2012

7.1.3   Weblogic Server 10.3.6 Linux 32-bit

Link   http://www.oracle.com/technetwork/middleware/ias/downloads/wls-main-097127.html
File   E:\01Downloads\wls1036_linux32.bin
MD5   496f4bb4b31d865d8a32f6f798ae9e9d
Notes

7.1.4   Java SE Development Kit 6 Update 33 (Linux 32-bit)

Link   http://www.oracle.com/technetwork/java/javase/downloads/jdk6-downloads-1637591.html
File   D:\01Downloads\jdk-6u33-linux-i586.bin
MD5   7eb4177d558b4ec2ddc2f792ab087364 (not found)
Notes

7.1.5   Oracle SOA Suite 11g (11.1.1.6.0) Generic Installer

Link	http://www.oracle.com/technetwork/middleware/soasuite/downloads/index.html
File	Part 1: D:\01Downloads\ofm_soa_generic_11.1.1.6.0_disk1_1of2.zip
	Part 2: D:\01Downloads\ofm_soa_generic_11.1.1.6.0_disk1_2of2.zip
MD5	Part 1: 220b3eab930af3ecf6bedda523c17fed (unknown)
	Part 2: 18427a87c217f8617da316054e8c5a95 (unknown)
Notes	Downloaded 8.8.2012.

7.1.6   Oracle Identity and Access Management (11.1.1.5) Generic Installer

Link	http://www.oracle.com/technetwork/middleware/downloads/oid-11g-161194.html
File	D:\01Downloads\ofm_iam_generic_11.1.1.5.0_disk1_1of1.zip
MD5	29373fbaac445a8af717b0153083d337 (unknown)
Notes	

7.1.7   OIM Patch 13399365

Link	xxx
File	D:\01Downloads\p13399365_111150_Generic.zip
MD5	7d73c9c8dedbba520cee8f895bd757ce (ok)
Notes	

7.1.8   Oracle JDeveloper 11g (11.1.1.6.0) Studio Edition, Linux

Link   http://www.oracle.com/technetwork/developer-tools/jdev/downloads/jdeveloper11116-1377208.html
File   D:\01Downloads\jdevstudio11116install.bin
MD5   169cc5cd112235094fd0535af1624861
Notes

7.1.9   Repository Creation Utility 11.1.1.6.0 Linux

Link   http://www.oracle.com/technetwork/middleware/soasuite/downloads/index.html
File   D:\01Downloads\ofm_rcu_linux_11.1.1.6.0_disk1_1of1.zip
MD5   a0512b09951e43766e5079ac2f96ccb8
Notes   Repository Creation Utility 11.1.1.6.0 Size: 399 MB, Check Sum: 201758785
             RCU is used to create and populate the database schemas required by the SOA Suite.
             Note: If you want to use Oracle XE as your database, you need to set the
             RCU_JDBC_TRIM_BLOCKS environment variable to TRUE *prior* to running RCU.

8   Miscellaneous

8.1   OIM Installation on Linux 6.3 Fails

The following subsections contain the steps to install OIM on an Oracle Linux 6.3 VM, which
however failed in the final step of the installation of the OAM.
We provide a description of the failed approach and some analysis for references. If you run
in some of the error conditions you might want to consider to fall back to OEL 5.8. Another
option is proceeding to OIM 11g R2. A friend reported that he managed to install it on OEL
6.3.

8.1.1   Installation of Java (JDK 1.6.0_33 64-Bit)

We install the JDK 1.6 (see download link **Fehler! Verweisquelle konnte nicht gefunden
werden.**) on 11OEL63 at /home/oracle/java:

```
[oracle@11oel63 bin]$ pwd
/home/oracle/java/jdk1.6.0_33/bin
[oracle@11oel63 bin]$ ./java -version
java version "1.6.0_33"
Java(TM) SE Runtime Environment (build 1.6.0_33-b04)
Java HotSpot(TM) 64-Bit Server VM (build 20.8-b03, mixed mode)
[oracle@11oel63 bin]$
```

8.1.2   Installation of WLS

We install WLS 10.3.6 64-bit on 11OEL63 as user oracle. We use the download from **Fehler!
Verweisquelle konnte nicht gefunden werden.**.

```
[oracle@11oel63 ~]$ JAVA_HOME=/home/oracle/java/jdk1.6.0_33
[oracle@11oel63 ~]$  $JAVA_HOME/bin/java -version
java version "1.6.0_33"
Java(TM) SE Runtime Environment (build 1.6.0_33-b04)
Java HotSpot(TM) 64-Bit Server VM (build 20.8-b03, mixed mode)
[oracle@11oel63 ~]$  $JAVA_HOME/bin/java -jar /media/sf_01SharedFolder/wls1036_generic.jar
Extracting
0%...........................................................................................100%
```

WLS is installed to /home/oracle/Oracle/Middleware01/wlserver_10.3/
We test the installation by starting the example server.

```
[oracle@11oel63 wl_server]$ pwd
/home/oracle/Oracle/Middleware01/wlserver_10.3/samples/domains/wl_server
[oracle@11oel63 wl_server]$ ./startWebLogic.sh
```

Test-URLs
http://11oel63:7001 Ok.
http://11oel63:7001/console (weblogic/welcome1) Ok.

8.1.3   Installation of SOA suite

We follow the instructions at
http://docs.oracle.com/cd/E23943_01/install.1111/e10033/before.htm#BABJJHFB

Downloading the software

The only version available for download is SOA Suite 11.1.1.6. So we hope that it works together with OIM 11.1.1.5.

We use the download from **Fehler! Verweisquelle konnte nicht gefunden werden.**.

We copy the files to 11OEL63 at /home/oracle/Downloads/soa.

```
 [oracle@11oel63 soa]$ pwd
/home/oracle/Downloads/soa
[oracle@11oel63 soa]$ cp /media/sf_01SharedFolder/ofm_soa_generic_11.1.1.6.0_disk1_1of2.zip .
[oracle@11oel63 soa]$ unzip ofm_soa_generic_11.1.1.6.0_disk1_1of2.zip
[oracle@11oel63 soa]$ rm ofm_soa_generic_11.1.1.6.0_disk1_1of2.zip

[oracle@11oel63 soa]$ cp /media/sf_01SharedFolder/ofm_soa_generic_11.1.1.6.0_disk1_2of2.zip .
[oracle@11oel63 soa]$ unzip ofm_soa_generic_11.1.1.6.0_disk1_2of2.zip
[oracle@11oel63 soa]$ rm ofm_soa_generic_11.1.1.6.0_disk1_2of2.zip

[oracle@11oel63 soa]$ ls
Disk1  Disk2  Disk3  Disk4  Disk5  readme.htm
[oracle@11oel63 soa]$
```

We assume that we do not have to run the RCU again, but that the DEV_SOAINFRA schemas will be used by the OIM installer.

Staring the SOA installer

We start the SOA installer.

```
[oracle@11oel63 soa]$ cd Disk1
[oracle@11oel63 Disk1]$ ls
doc  install  runInstaller  setup.exe  stage
[oracle@11oel63 Disk1]$ ./runInstaller
Starting Oracle Universal Installer...

Checking if CPU speed is above 300 MHz.   Actual 2293 MHz    Passed
Checking Temp space: must be greater than 150 MB.  Actual 42020 MB    Passed
Checking swap space: must be greater than 512 MB.  Actual 5968 MB    Passed
Checking monitor: must be configured to display at least 256 colors.  Actual 16777216    Passed
Preparing to launch Oracle Universal Installer from /tmp/OraInstall2012-08-08_07-28-33PM. Please wait ...
Please specify JRE/JDK location ( Ex. /home/jre ), <location>/bin/java should exist :

Please specify a valid JRE/JDK location :/home/oracle/java/jdk1.6.0_33
[oracle@11oel63 Disk1]$ Log: /home/oracle/oraInventory/logs/install2012-08-08_07-28-33PM.log
[oracle@11oel63 Disk1]$
```

The installer starts up.
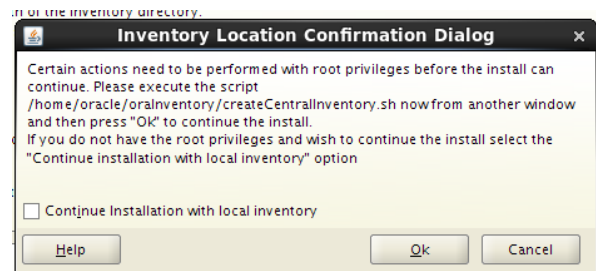
Running the root script

We run the required script as root:

```
root@11oel63 oracle]# cd oraInventory/
[root@11oel63 oraInventory]# ls
createCentralInventory#1344446941356.sh  createCentralInventory.sh  logs
[root@11oel63 oraInventory]# ./createCentralInventory.sh
Setting the inventory to /home/oracle/oraInventory
Setting the group name to oracle
Creating the Oracle inventory pointer file (/etc/oraInst.loc)
```

```
Changing permissions of /home/oracle/oraInventory to 770.
Changing groupname of /home/oracle/oraInventory to oracle.
The execution of the script is complete
[root@11oel63 oraInventory]#
```

We continue with the graphical installer.
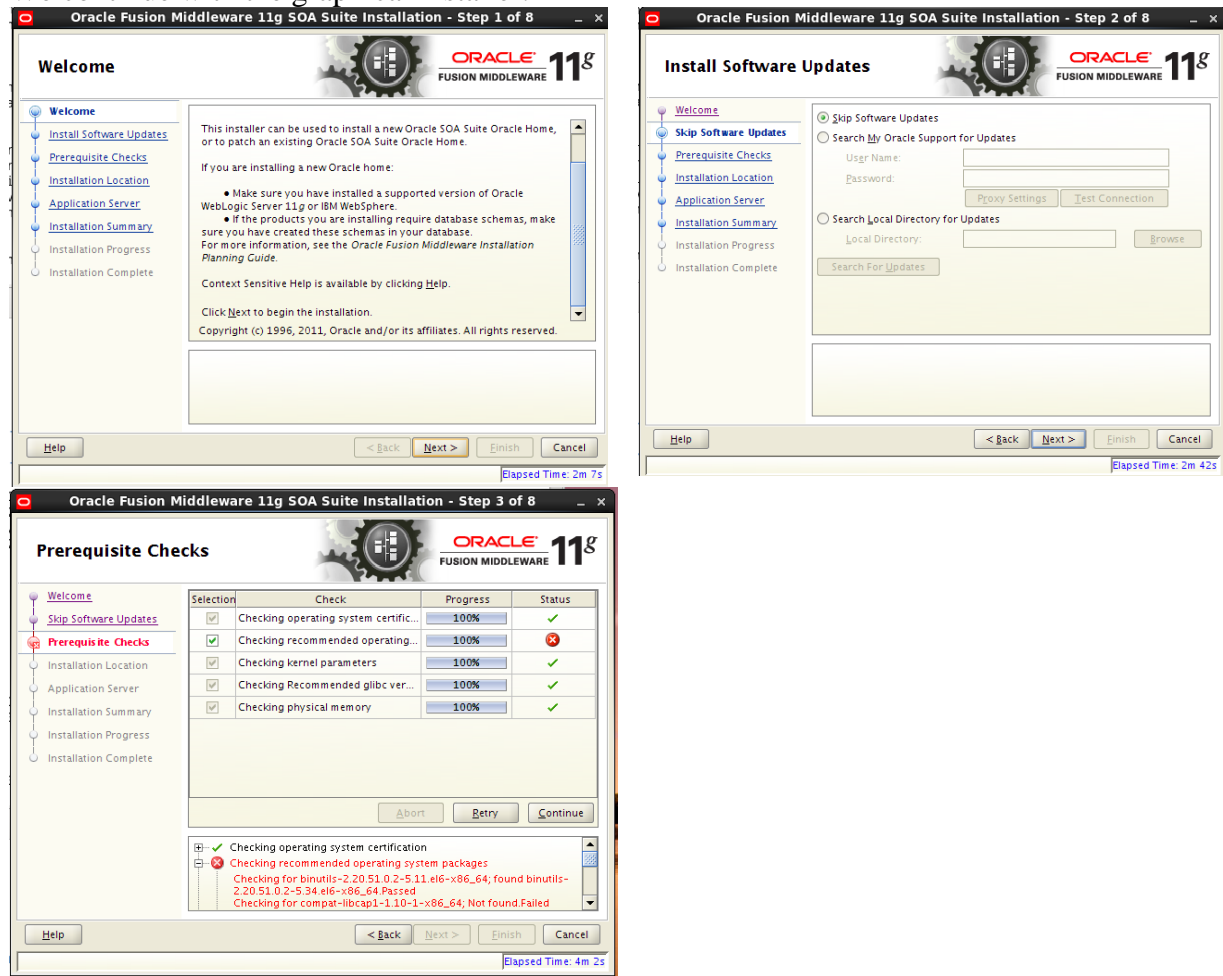
Installation of missing packages for Linux
The error message is as follows:

```
Checking recommended operating system packages
Checking for binutils-2.20.51.0.2-5.11.el6-x86_64; found binutils-2.20.51.0.2-5.34.el6-x86_64.        Passed
Checking for compat-libcap1-1.10-1-x86_64; Not found.       Failed <<<<
Checking for compat-libstdc++-33-3.2.3-69.el6-x86_64; Not found.    Failed <<<<
Checking for compat-libstdc++-33-3.2.3-69.el6-i686; Not found.      Failed <<<<
Checking for libgcc-4.4.4-13.el6-i686; Not found.  Failed <<<<
Checking for libgcc-4.4.4-13.el6-x86_64; found libgcc-4.4.6-4.el6-x86_64.   Passed
Checking for libstdc++-4.4.4-13.el6-x86_64; found libstdc++-4.4.6-4.el6-x86_64.      Passed
Checking for libstdc++-4.4.4-13.el6-i686; Not found.       Failed <<<<
Checking for libstdc++-devel-4.4.4-13.el6-x86_64; Not found.       Failed <<<<
Checking for sysstat-9.0.4-11.el6-x86_64; found sysstat-9.0.4-20.el6-x86_64.        Passed
Checking for gcc-4.4.4-13.el6-x86_64; found gcc-4.4.6-4.el6-x86_64.Passed
Checking for gcc-c++-4.4.4-13.el6-x86_64; Not found.       Failed <<<<
Checking for glibc-2.12-1.7.el6-i686; found glibc-2.12-1.80.el6_3.3-i686.   Passed
Checking for glibc-2.12-1.7.el6-x86_64; found glibc-2.12-1.80.el6 3.3-x86 64.        Passed
Checking for glibc-devel-2.12-1.7.el6-x86_64; found glibc-devel-2.12-1.80.el6 3.3-x86 64.     Passed
Checking for glibc-devel-2.12-1.7.el6; found glibc-devel-2.12-1.80.el6_3.3-x86_64.   Passed
Checking for libaio-0.3.107-10.el6-x86_64; found libaio-0.3.107-10.el6-x86_64.      Passed
Checking for libaio-devel-0.3.107-10.el6-x86_64; Not found.        Failed <<<<
Check complete. The overall result of this check is: Failed <<<<


Problem: Some recommended packages are missing (see above).
Recommendation: You may actually have installed packages which have obsoleted these, in which case you can
successfully continue with the install. If you have not, it is recommended that you do not continue. Refer
to the product release notes to find out how to get the missing packages and update the system.
Checking kernel parameters
Checking for VERSION=2.6.32-100.28.5.el6; found VERSION=2.6.39-200.29.2.el6uek.x86_64.       Passed
Checking for hardnofiles=4096; found hardnofiles=4096.     Passed
Checking for softnofiles=4096; found softnofiles=4096.     Passed
```

```
Check complete. The overall result of this check is: Passed

Checking Recommended glibc version
Expected result: ATLEAST=2.12-1.7.el6
Actual Result: 2.12-1.80.el6_3.3
Check complete. The overall result of this check is: Passed

Checking physical memory
Expected result: 1024MB
Actual Result: 5980MB
Check complete. The overall result of this check is: Passed
```

We can install one part of the missing package successful using yum, however the following packages are still missing. We check the installed versions with rpm -qa | grep packagename

```
7: Checking for compat-libstdc++-33-3.2.3-69.el6-i686; Not found.   Failed <<<<
              compat-libstdc++-33-3.2.3-69.el6.x86_64
 8: Checking for libgcc-4.4.4-13.el6-i686; Not found.        Failed <<<<
              libgcc-4.4.6-4.el6.x86_64
11: Checking for libstdc++-4.4.4-13.el6-i686; Not found.  Failed <<<<
              libstdc++-4.4.6-4.el6.x86_64
12: Checking for libstdc++-devel-4.4.4-13.el6-x86_64; Not found.  Failed <<<<
              None
15: Checking for gcc-c++-4.4.4-13.el6-x86 64; Not found.  Failed <<<<
              None
22: Check complete. The overall result of this check is: Failed <<<<
```

The packages with the –i686 extension are for 32-bit Linux. It shouldn't have asked for it anyway.
The missing package cannot be installed due to errors in dependency violations.

```
[root@11oel63 ~]# yum install libstdc++-devel-4.4.4-13.el6
Loaded plugins: refresh-packagekit, security
Setting up Install Process
Resolving Dependencies
--> Running transaction check
---> Package libstdc++-devel.x86_64 0:4.4.4-13.el6 will be installed
--> Processing Dependency: libstdc++(x86-64) = 4.4.4-13.el6 for package: libstdc++-devel-4.4.4-
13.el6.x86 64
--> Finished Dependency Resolution
Error: Package: libstdc++-devel-4.4.4-13.el6.x86_64 (ol6_latest)
           Requires: libstdc++(x86-64) = 4.4.4-13.el6
           Installed: libstdc++-4.4.6-4.el6.x86_64 (@anaconda-OracleLinuxServer-201206261930.x86_64/6.3)
               libstdc++(x86-64) = 4.4.6-4.el6
           Available: libstdc++-4.4.4-13.el6.x86 64 (ol6 latest)
               libstdc++(x86-64) = 4.4.4-13.el6
           Available: libstdc++-4.4.5-6.el6.x86_64 (ol6_latest)
               libstdc++(x86-64) = 4.4.5-6.el6
           Available: libstdc++-4.4.6-3.el6.x86_64 (ol6_latest)
               libstdc++(x86-64) = 4.4.6-3.el6
 You could try using --skip-broken to work around the problem
 You could try running: rpm -Va --nofiles –nodigest
```

Yum tries to install an old version of libstdc++-devel. We try to get the latest.

```
[root@11oel63 ~]# yum install libstdc++-devel
```

Ok.

```
[root@11oel63 ~]# yum install gcc-c++
```

Ok.
We check the installed packages with rpm –qa

```
[root@11oel63 ~]# rpm -qa | grep libstdc++-devel
libstdc++-devel-4.4.6-4.el6.x86 64
[root@11oel63 ~]# rpm -qa | grep gcc-c++
gcc-c++-4.4.6-4.el6.x86_64
```

We compare these to the missing packages:

```
12: Checking for libstdc++-devel-4.4.4-13.el6-x86 64; Not found.   Failed <<<<
              libstdc++-devel-4.4.6-4.el6.x86_64
15: Checking for gcc-c++-4.4.4-13.el6-x86_64; Not found.  Failed <<<<
              gcc-c++-4.4.6-4.el6.x86_64
```

Ok. Now we have installed at least a newer version of every library.
We should be able to proceed with the installation.

Completing the installation
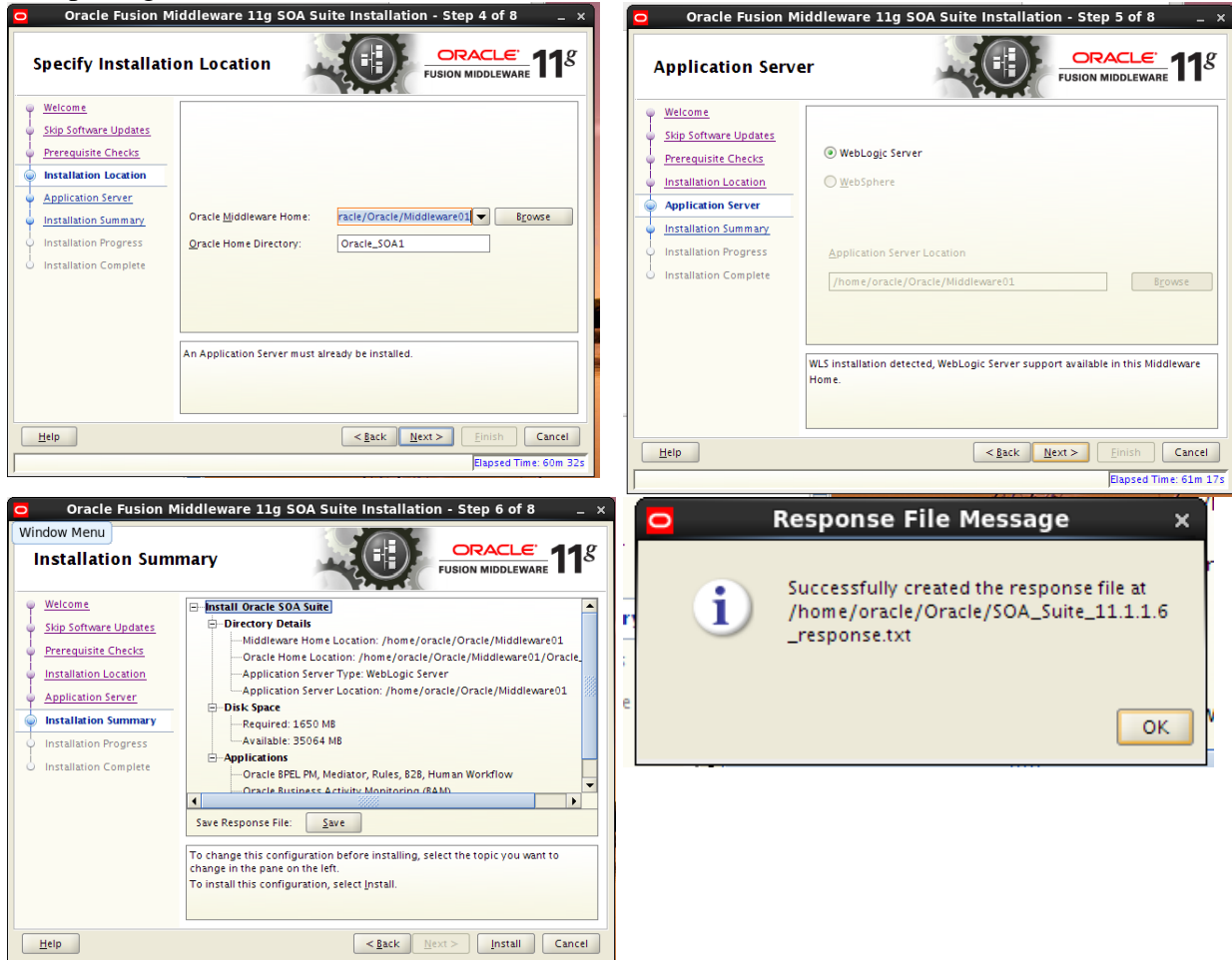
The content of the summary page was:

```
Install Oracle SOA Suite
Directory Details
Middleware Home Location: /home/oracle/Oracle/Middleware01
Oracle Home Location: /home/oracle/Oracle/Middleware01/Oracle SOA1
Application Server Type: WebLogic Server
Application Server Location: /home/oracle/Oracle/Middleware01
Disk Space
Required: 1650 MB
Available: 35064 MB
Applications
Oracle BPEL PM, Mediator, Rules, B2B, Human Workflow
Oracle Business Activity Monitoring (BAM)
Oracle Enterprise Manager
```

The installation log is written to /home/oracle/oraInventory/logs/install2012-08-08_07-28-33PM.log

Now the installation succeeds.
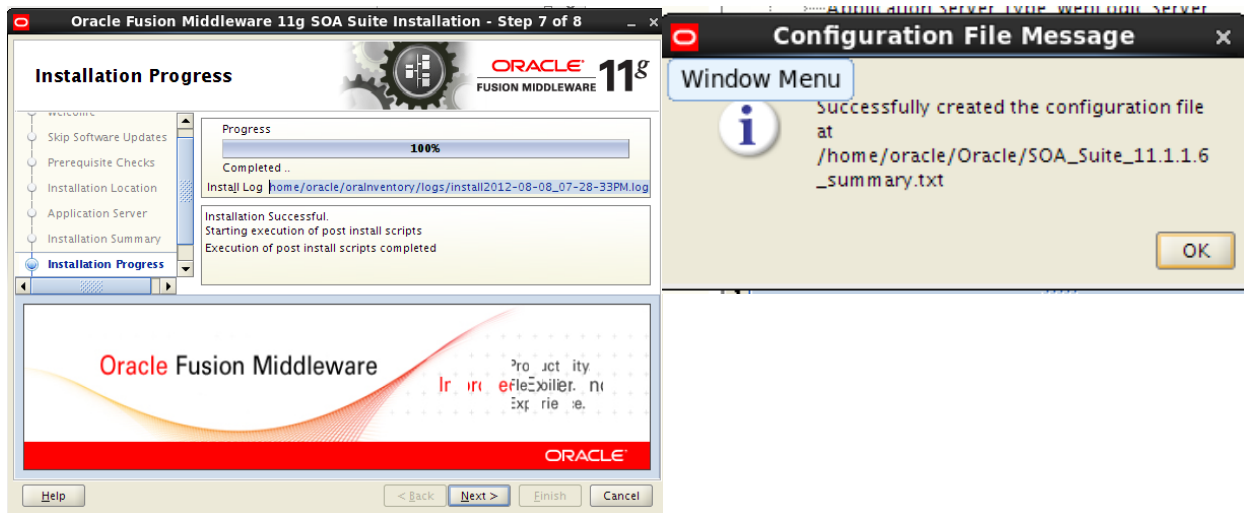
The installation of the SOA suite is now complete.

Sicherungspunkt 3
We make a Snapshot with the following comment:
Java 1.6_33 (Oracle JDK 64-bit)
WLS 10.3.6 (Generic)
SOA Suite 11.1.1.6

8.1.4   OIM Installation

We proceed with the Quick Installation Guide
http://docs.oracle.com/cd/E23943_01/install.1111/e10033/configtwo.htm#autoId3 at step 5.

We choose the download from 7.1.6.

We start the installation with the user oracle.

```
[oracle@11oel63 Disk1]$ pwd
/home/oracle/Downloads/iam 11.1.1.5/Disk1
[oracle@11oel63 Disk1]$ /home/oracle/Downloads/iam_11.1.1.5/Disk1/runInstaller -jreLoc
/home/oracle/java/jdk1.6.0_33/jre
Starting Oracle Universal Installer...

Checking if CPU speed is above 300 MHz.    Actual 2301 MHz    Passed
Checking Temp space: must be greater than 150 MB.    Actual 41995 MB    Passed
Checking swap space: must be greater than 512 MB.    Actual 5983 MB    Passed
Checking monitor: must be configured to display at least 256 colors.    Actual 16777216    Passed
Preparing to launch Oracle Universal Installer from /tmp/OraInstall2012-08-10_05-58-06PM. Please wait
...[oracle@11oel63 Disk1]$ Log: /home/oracle/oraInventory/logs/install2012-08-10_05-58-06PM.log
```

We provide the install screens.
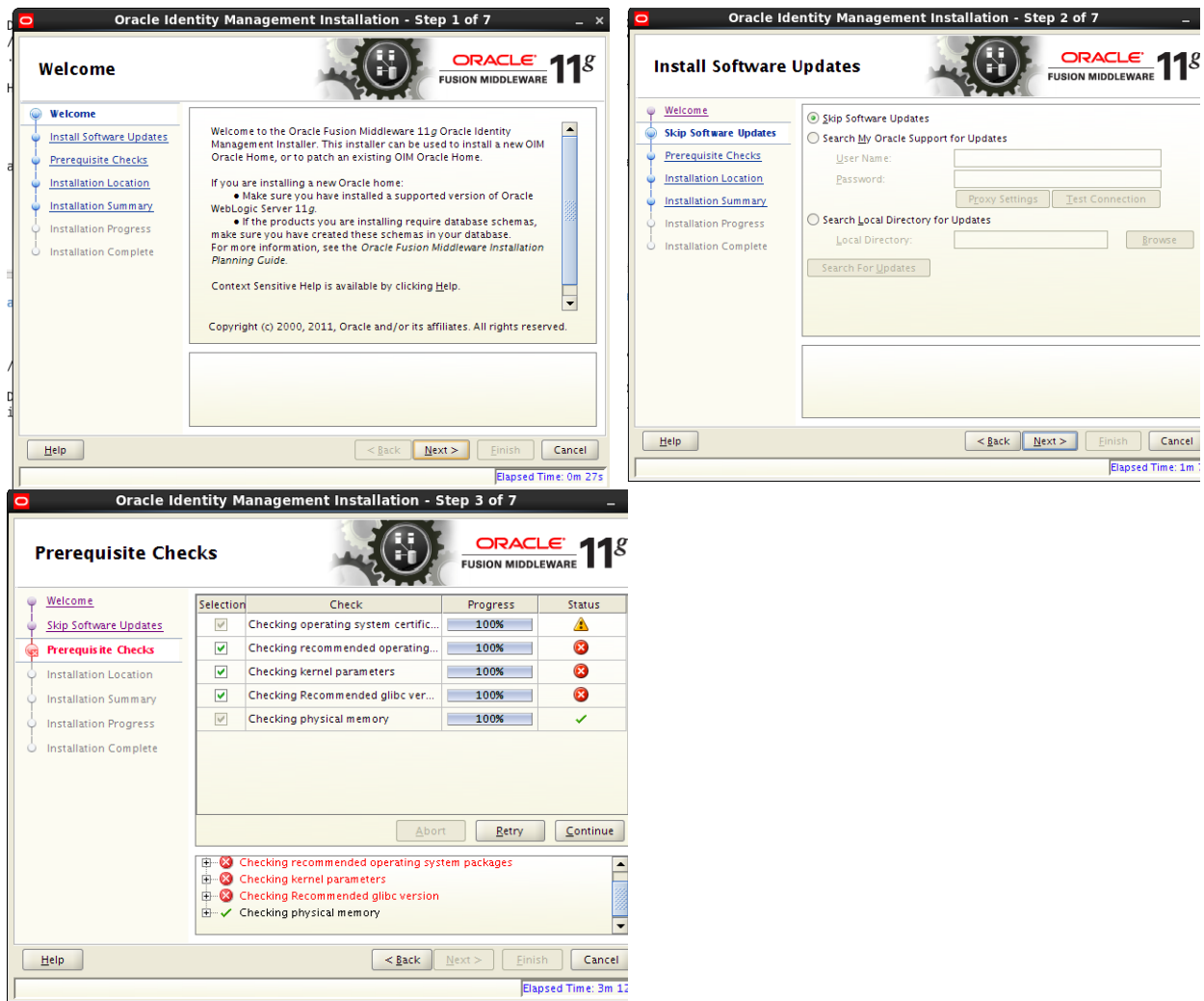
The prerequisite check fails. We are not on a supported system.

```
Root
Checking operating system certification
Expected result: One of enterprise-5.4,enterprise-4,enterprise-5,redhat-5.4,redhat-4,redhat-5,SuSE-10,SuSE-
11
Actual Result: redhat-6.3
Check complete. The overall result of this check is: Failed <<<<

Problem: This Oracle software is not certified on the current operating system.
Recommendation: Make sure you are installing the software on the correct platform.
Checking recommended operating system packages
Check complete. The overall result of this check is: Not executed <<<<
Checking kernel parameters
Check complete. The overall result of this check is: Not executed <<<<
Checking Recommended glibc version
Check complete. The overall result of this check is: Not executed <<<<
Checking physical memory
Expected result: 1024MB
Actual Result: 5980MB
Check complete. The overall result of this check is: Passed
```

At this point we decide to stop the installation on this machine because vital prerequisite checks failed.

8.1.5   Configuration of the OIM Server fails

After successful installation of the OIM on Linux 32-bit, we want to configure the OIM
server. We fail and conclude that this step requires an OIM patch. This chapter documents the
analysis.

We follow the instructions at
(http://docs.oracle.com/cd/E23943_01/install.1111/e12002/oidonly.htm#CIHCCECI).
We check if the Admin Server is running at http://192.168.178.12:7001/console.
We start the configuration wizard:

```
[oracle@12oel55_odd bin]$ pwd
/opt/oracle/Middleware01/Oracle_IDM1/bin
[oracle@12oel55 odd bin]$ ./config.sh
Starting Fusion Middleware Configuration Wizard
ORACLE_HOME set as /opt/oracle/Middleware01/Oracle_IDM1
PATH set as
/opt/oracle/Middleware01/Oracle_IDM1/bin:/usr/java/latest/bin:/home/oracle/app/oracle/product/TimesTen/tt11
21/bin:/home/oracle/app/oracle/product/TimesTen/tt1121/quickstart/sample_code/oci:/home/oracle/app/oracle/p
roduct/TimesTen/tt1121/quickstart/sample_code/odbc:/home/oracle/app/oracle/product/TimesTen/tt1121/quicksta
rt/sample code/odbc/xla:/home/oracle/app/oracle/product/TimesTen/tt1121/quickstart/sample code/jdbc:/home/o
racle/app/oracle/product/TimesTen/tt1121/quickstart/sample_code/odbc_drivermgr:/home/oracle/app/oracle/prod
uct/TimesTen/tt1121/quickstart/sample_code/proc:/home/oracle/app/oracle/product/TimesTen/tt1121/quickstart/
sample_code/ttclasses:/home/oracle/app/oracle/product/TimesTen/tt1121/quickstart/sample_code/ttclasses/xla:
/home/oracle/app/oracle/product/TimesTen/tt1121/ttoracle_home/instantclient_11_1:/home/oracle/app/oracle/pr
oduct/TimesTen/tt1121/ttoracle home/instantclient 11 1/sdk:/home/oracle/app/oracle/product/TimesTen/tt1121/
3rdparty/ant/bin:/usr/java/latest/bin:/usr/kerberos/bin:/usr/local/bin:/usr/bin:/bin:/usr/X11R6/bin:/home/o
racle/app/oracle/product/11.2.0/dbhome_2/bin:/home/oracle/bin:/home/oracle/app/oracle/product/11.2.0/dbhome
_2/bin
LD_LIBRARY_PATH set as
/opt/oracle/Middleware01/Oracle_IDM1/lib:/home/oracle/app/oracle/product/11.2.0/dbhome_2/lib
Starting Oracle Universal Installer...

Checking Temp space: must be greater than 150 MB.   Actual 6808 MB    Passed
Checking swap space: must be greater than 500 MB.   Actual 1694 MB    Passed
Checking monitor: must be configured to display at least 256 colors.   Actual 16777216    Passed
Preparing to launch Oracle Universal Installer from /tmp/OraInstall2012-08-12_04-36-11PM. Please wait
...[oracle@12oel55_odd bin]$ Log: /home/oracle/app/oraInventory/logs/install2012-08-12_04-36-11PM.log
```

We provide the configuration dialog screens:

OIMInstallationTutorial.docx
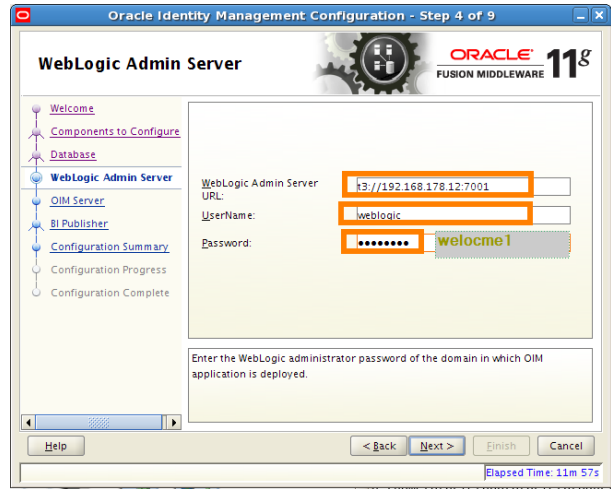
12oel55_odd.vboxnet:1521:orcl   192.168.56.12:7001
DEV_OIM   welcome1
DEV_MDS   welcome1

welcome1X
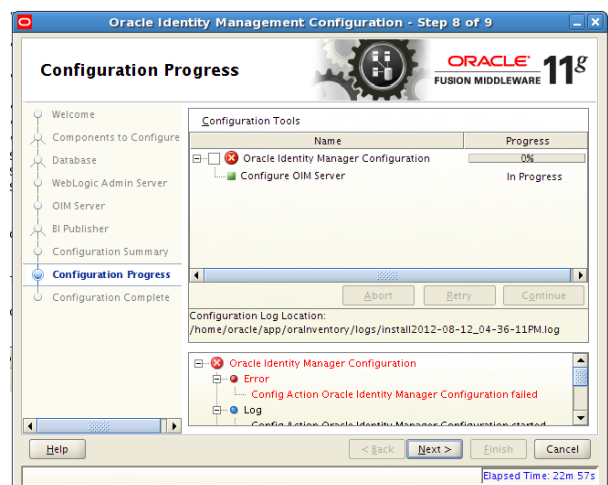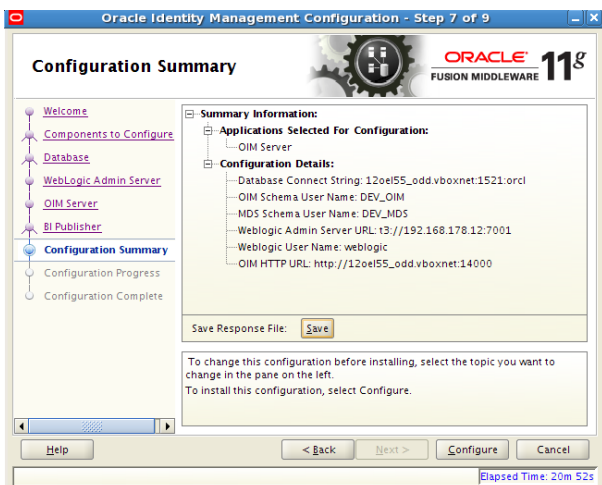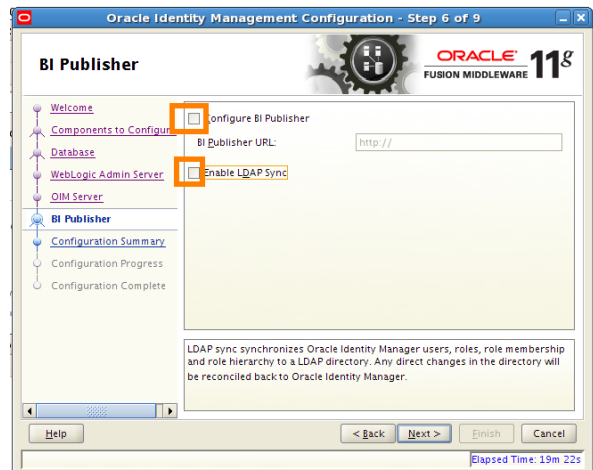
We save the response file to /opt/oracle/FMW_OIM_11.1.1.5_configuration_response.txt
The configuration process fails. We consult the logfile at
/home/oracle/app/oraInventory/logs/install2012-08-12_04-36-11PM.log

There is no indication in the logfile while this step failed. The Admin Server needed reboot, so we reboot it. But we don't have the option to retry this step.

Next steps:

Go back to Sicherheitspunkt 3, Reboot the Admin Server and try again.
Fails with the same Error.

Go back to Sicherheitspunkt 3, Reboot Admin Server and make sure that the Nodemanager is Running.
We follow the instructions at
http://docs.oracle.com/cd/E23943_01/install.1111/e12002/start_stop.htm#CHDDIFCD

We start the nodemanager in a separate shell:

```
[oracle@12oel55_odd bin]$ pwd
/opt/oracle/Middleware01/wlserver_10.3/server/bin
[oracle@12oel55_odd bin]$ ./startNodeManager.sh
```

We start WLS in a separate shell. First we create a boot.properties file to circumvent the password challenge.

```
[oracle@12oel55_odd security]$ pwd
/opt/oracle/Middleware01/user_projects/domains/base_domain/servers/AdminServer/security
[oracle@12oel55_odd security]$ cat boot.properties
# Generated by Configuration Wizard on Fri Aug 10 19:42:40 CEST 2012
username=weblogic
password=welcome1
```

We start WLS as before, but this time we don't have to provide a user/password combination.

```
[oracle@12oel55_odd base_domain]$ pwd
/opt/oracle/Middleware01/user_projects/domains/base_domain
[oracle@12oel55_odd base_domain]$ ./startWebLogic.sh
```

We also verify that the Admin Server can see the the nodemanager.
Changes required:
-Enable SSL-Port in the Admin Server
-Disable Host-Name-Verification in the Admin Server
-Restart the Admin Server.

We start the installer again.

In Step 4 we choose 192.168.56.12:7001 for the Admin Server address.
The configuration fails again. We look into the logfile of the Admin Server:

```
####<Aug 13, 2012 5:04:13 PM CEST> <Warning> <Management> <localhost.localdomain> <AdminServer> <[ACTIVE]
ExecuteThread: '0' for queue: 'weblogic.kernel.Default (self-tuning)'> <weblogic> <>
<11d1def534ea1be0:5b3e03e5:139207d9af6:-8000-000000000000001c> <1344870253613> <BEA-141239> <The non-
dynamic attribute DBPasswordEncrypted on
oracle.iam.platform.auth.providers.wls.OIMAuthenticationProviderMBeanImpl@525b85e0([base_domain]/SecurityCo
nfiguration[base_domain]/Realms[myrealm]/AuthenticationProviders[OIMAuthenticationProvider]) has been
changed. This may require redeploying or rebooting configured entities>
####<Aug 13, 2012 5:04:13 PM CEST> <Warning> <Management> <localhost.localdomain> <AdminServer> <[ACTIVE]
ExecuteThread: '0' for queue: 'weblogic.kernel.Default (self-tuning)'> <weblogic> <>
<11d1def534ea1be0:5b3e03e5:139207d9af6:-8000-000000000000001c> <1344870253617> <BEA-141238> <A non-dynamic
change has been made which affects the server AdminServer. This server must be rebooted in order to consume
this change.>
####<Aug 13, 2012 5:04:13 PM CEST> <Info> <Deployer> <localhost.localdomain> <AdminServer> <[ACTIVE]
ExecuteThread: '0' for queue: 'weblogic.kernel.Default (self-tuning)'> <weblogic> <>
<11d1def534ea1be0:5b3e03e5:139207d9af6:-8000-000000000000001c> <1344870253819> <BEA-149038> <Initiating
Task for Module-FMWDFW : [Deployer:149026]redeploy application Module-FMWDFW on
oim_server1,AdminServer,soa_server1.>
####<Aug 13, 2012 5:04:14 PM CEST> <Info> <Deployer> <localhost.localdomain> <AdminServer> <[ACTIVE]
ExecuteThread: '2' for queue: 'weblogic.kernel.Default (self-tuning)'> <<WLS Kernel>> <>
<11d1def534ea1be0:5b3e03e5:139207d9af6:-8000-000000000000001d> <1344870254181> <BEA-149171> <Deferred
deployment task: [Deployer:149026]redeploy application Module-FMWDFW on
oim_server1,AdminServer,soa_server1.>
```

```
####<Aug 13, 2012 5:04:14 PM CEST> <Info> <DeploymentService> <localhost.localdomain> <AdminServer>
<[ACTIVE] ExecuteThread: '2' for queue: 'weblogic.kernel.Default (self-tuning)'> <<WLS Kernel>> <>
<11d1def534ea1be0:5b3e03e5:139207d9af6:-8000-000000000000001e> <1344870254197> <BEA-290063> <commit for
request '1,344,870,253,169' will not proceed further since its requires restart flag is set.>
```

It seems that the configuration process fails because a restart is required and the wizard does not initiate a restart. However it was initiating redeployment previously. Maybe WLS displays a different behavior here, compared to the previous version 10.3.5, i.e. previously redeployment could have been sufficient.

Next steps:
-Try to install WLS 10.3.5 and let the domain run with this version by changing the WL_HOME variable in
/opt/oracle/Middleware01/user_projects/domains/base_domain/bin/setDomainEnv.sh

```
WL_HOME="/opt/oracle/Middleware01/wlserver_10.3"
export WL_HOME
```

We try to start WLS but it fails.

```
<Aug 14, 2012 9:16:02 PM CEST> <Info> <Management> <BEA-141107> <Version: WebLogic Server 10.3.5.0  Fri Apr
1 20:20:06 PDT 2011 1398638 >
<Aug 14, 2012 9:16:04 PM CEST> <Error> <Management> <BEA-141244> <Schema validation errors while parsing
/opt/oracle/Middleware01/user_projects/domains/base_domain/config/config.xml - Expected elements 'auto-
jdbc-connection-close@http://xmlns.oracle.com/weblogic/domain supported-
protocol@http://xmlns.oracle.com/weblogic/domain federation-
services@http://xmlns.oracle.com/weblogic/domain single-sign-on-
services@http://xmlns.oracle.com/weblogic/domain web-service@http://xmlns.oracle.com/weblogic/domain nm-
socket-create-timeout-in-millis@http://xmlns.oracle.com/weblogic/domain coherence-cluster-system-
resource@http://xmlns.oracle.com/weblogic/domain virtual-machine-
name@http://xmlns.oracle.com/weblogic/domain replication-ports@http://xmlns.oracle.com/weblogic/domain'
instead of 'data-source@http://xmlns.oracle.com/weblogic/domain' here in element
server@http://xmlns.oracle.com/weblogic/domain>
<Aug 14, 2012 9:16:04 PM CEST> <Critical> <WebLogicServer> <BEA-000362> <Server failed. Reason:
[Management:141245]Schema Validation Error in
/opt/oracle/Middleware01/user_projects/domains/base_domain/config/config.xml see log for details. Schema
validation can be disabled by starting the server with the command line option: -
Dweblogic.configuration.schemaValidationEnabled=false>
<Aug 14, 2012 9:16:04 PM CEST> <Notice> <WebLogicServer> <BEA-000365> <Server state changed to FAILED>
<Aug 14, 2012 9:16:04 PM CEST> <Error> <WebLogicServer> <BEA-000383> <A critical service failed. The server
will shut itself down>
<Aug 14, 2012 9:16:04 PM CEST> <Notice> <WebLogicServer> <BEA-000365> <Server state changed to
FORCE_SHUTTING_DOWN>
```

WLS 10.3.6 config.xml schema is not compatible with WLS 10.3.5
We try to boot WLS without schemaValidation by edititing setDomainEnv.sh.
We add the line:

```
# For additional information, refer to "Managing Server Startup and Shutdown for Oracle WebLogic Server"
# (http://download.oracle.com/docs/cd/E23943_01/web.1111/e13708/overview.htm).
# ****************************************************************************
JAVA_OPTIONS="-Dweblogic.configuration.schemaValidationEnabled=false"
```

The server boots. We shutdown, remove the line and boot again.
The server fails again with the same failure.
We try the configuration with schema validation disabled.
The configuration fails with the same error as before.

Conclusion: Switching the domain, which was previously installed as WLS 10.3.6 to WLS 10.3.5 via the environment, does not solve the problem.

Next steps:

We have to go back to Sicherungspunkt 1.

- uninstall WLS 10.3.6

- rename Middleware01
- create new Middleware01
- install JDK
- install WLS 10.3.5
- Follow the steps form Chapter 3.5 on

After the configuration we run into the same error.

```
<Aug 17, 2012 2:49:00 PM CEST> <Warning> <Management> <BEA-141239> <The non-dynamic attribute
AuthenticationProviders on
weblogic.management.security.RealmMBeanImpl@5abccdbc([base domain]/SecurityConfiguration[base domain]/Realm
s[myrealm]) has been changed. This may require redeploying or rebooting configured entities>
<Aug 17, 2012 2:49:00 PM CEST> <Warning> <Management> <BEA-141238> <A non-dynamic change has been made
which affects the server AdminServer. This server must be rebooted in order to consume this change.>
<Aug 17, 2012 2:49:00 PM CEST> <Warning> <Management> <BEA-141239> <The non-dynamic attribute ControlFlag
on
weblogic.security.providers.authentication.DefaultAuthenticatorMBeanImpl@82d32223([base domain]/SecurityCon
figuration[base domain]/Realms[myrealm]/AuthenticationProviders[DefaultAuthenticator]) has been changed.
This may require redeploying or rebooting configured entities>
<Aug 17, 2012 2:49:00 PM CEST> <Warning> <Management> <BEA-141238> <A non-dynamic change has been made
which affects the server AdminServer. This server must be rebooted in order to consume this change.>
```

We reboot the server and try the configuration again with the same values.

We run into the same problem again.
Conclusion: The version of number 10.3.6 of WLS is not the source of this problem.

Next step:
.
Instead of just starting the AdminServer and NodeManager, we start the whole stack as described in
http://docs.oracle.com/cd/E23943_01/install.1111/e12002/start_stop.htm#CHDDIFCD .

We Go back to Sicherheitspunkt 3, Reboot the AdminServer and follow the steps to boot the whole OIM Stack. (This step diverts from the instructions).
This also does not solve the problem.

Further analysis:
What is the command line of the installer:

```
/opt/oracle/Middleware01/Oracle_IDM1/bin/../oui/bin/runInstaller -weblogicConfig
ORACLE_HOME=/opt/oracle/Middleware01/Oracle_IDM1 -invPtrLoc
/opt/oracle/Middleware01/Oracle_IDM1/oraInst.loc -oneclick -Doracle.config.mode=true
```

The installer is a binary file. We assume that it calls wlst scripts during installation.
Which of these scripts is it calling?
Can the installer be called in verbose mode?
The usage message of the installer:

```
[oracle@12oel55_odd bin]$ ./runInstaller
Starting Oracle Universal Installer...

Checking Temp space: must be greater than 150 MB.   Actual 6809 MB    Passed
Checking swap space: must be greater than 500 MB.   Actual 1694 MB    Passed
Checking monitor: must be configured to display at least 256 colors.   Actual 16777216    Passed
Preparing to launch Oracle Universal Installer from /tmp/OraInstall2012-08-17_05-00-49PM. Please wait
...[oracle@12oel55_odd bin]$ Log: /home/oracle/app/oraInventory/logs/install2012-08-17_05-00-49PM.log
The command line argument or the install mode specified is not valid.
Copyright (c) 2000, 2011, Oracle and/or its affiliates. All rights reserved.

Usage:
runInstaller [-mode] [-options] [(<CommandLineVariable=Value>)*]

Where mode include:
[Mode is a mandatory parameter. Only one mode can be specified.]
     -d, -deinstall
```

```
                   Launches the installer in deinstall mode.
     -deinstall -silent
                   For silent mode deinstall operations, the inputs can be a response file or
                   a list of command line variable value pairs.


Where options include:
     -help, --help, --usage
                   Displays above usage.
     -invPtrLoc <inventory pointer file>
                   Launches the installer with a custom inventory location. The invPtrLoc
                   should point to a file which contains the following information.
                   inventory_loc=<inventory_location>
                   inst_group=<group_name>
     -response, -responseFile <response file>
                   Specifies the response file and path to use.
     -jreLoc <location>
                   Path where Java Runtime Environment is installed. OUI cannot be run without
                   it.
     -logLevel <level>
                   To filter log messages that have a lesser priority level than <level>.
                   Valid options are: severe, warning, info, config, fine, finer, finest,
                   basic, general, detailed, trace. The use of basic, general, detailed, trace
                   is deprecated.
     -debug  For getting the debug information from OUI.
     -force  Allowing silent mode installation into a non-empty directory.
     -printdiskusage
                   Log debug information for disk usage.
     -printmemory
                   Path where Java Runtime Environment is installed. OUI cannot be run without
                   it.
     -printtime
                   Log debug information for time usage.
     -waitforcompletion
                   For windows. setup.exe will wait for completion instead of spawning the
                   java engine and exiting.
     -noconsole
                   For suppressing display of messages to console. Console is not allocated.
     -ignoreSysPrereqs
                   For ignoring the results of the system pre-requisite checks.
     -executeSysPrereqs
                   Execute system pre-requisite checks and exit.
     -paramFile <location of file>
                   Specify location of oraparam.ini file to be used by OUI.
     -novalidation
                   Disables the validations, can be invoked along with GUI or silent mode.
     -nodefaultinput
                   Disables the default computation of values (pre-populating of values when
                   screen is loaded) in GUI install.
     -nocheckForUpdates
                   To disable all updates checking
     -updatesDir
                   To specify the directory where latest updates are downloaded. This could be
                   used in disconnected mode.


Command Line Variables Usage:
            Command line variables are specified using <name=value>; for example:
                 [ session: | session:compName: | session:compName:version: ]variableName=" valueOfVariable"]
            Installer variables are specified using:
                 varName=value
                 Ex: ORACLE HOME=<value>
            OUI Session variables are specified using:
                 session:varName=value
                 Ex: session:VARIABLE_NAME=<value>
            OUI Component variables are specified using:
                 session:compInternalName:[Version:]varName
                 Ex 1: session:oracle.comp1:1.0.1:varName=<value>
                 Ex 2: session:oracle.comp1:varName=<value>
                 The lookup order is compInternalName:Version:varName, then compInternalName:varName
```

We try to call the installer with debug settings and response file in silent mode.

```
[oracle@12oel55 odd bin]$ pwd
/opt/oracle/Middleware01/Oracle_IDM1/bin

./config.sh -debug -silent -response /opt/oracle/Middleware01/Oracle_IDM1/bin/OIM_response.txt
```

Calling the installer in debug mode:

```
[oracle@12oel55_odd bin]$ ./config.sh -debug  -response
/opt/oracle/Middleware01/Oracle_IDM1/bin/OIM_response.txt
Starting Fusion Middleware Configuration Wizard
ORACLE_HOME set as /opt/oracle/Middleware01/Oracle_IDM1
```

```
PATH set as
/opt/oracle/Middleware01/Oracle_IDM1/bin:/usr/java/latest/bin:/home/oracle/app/oracle/product/TimesTen/tt11
21/bin:/home/oracle/app/oracle/product/TimesTen/tt1121/quickstart/sample_code/oci:/home/oracle/app/oracle/p
roduct/TimesTen/tt1121/quickstart/sample code/odbc:/home/oracle/app/oracle/product/TimesTen/tt1121/quicksta
rt/sample_code/odbc/xla:/home/oracle/app/oracle/product/TimesTen/tt1121/quickstart/sample_code/jdbc:/home/o
racle/app/oracle/product/TimesTen/tt1121/quickstart/sample_code/odbc_drivermgr:/home/oracle/app/oracle/prod
uct/TimesTen/tt1121/quickstart/sample_code/proc:/home/oracle/app/oracle/product/TimesTen/tt1121/quickstart/
sample_code/ttclasses:/home/oracle/app/oracle/product/TimesTen/tt1121/quickstart/sample_code/ttclasses/xla:
/home/oracle/app/oracle/product/TimesTen/tt1121/ttoracle home/instantclient_11_1:/home/oracle/app/oracle/pr
oduct/TimesTen/tt1121/ttoracle home/instantclient 11 1/sdk:/home/oracle/app/oracle/product/TimesTen/tt1121/
3rdparty/ant/bin:/usr/java/latest/bin:/usr/kerberos/bin:/usr/local/bin:/usr/bin:/bin:/usr/X11R6/bin:/home/o
racle/app/oracle/product/11.2.0/dbhome_2/bin:/home/oracle/bin:/home/oracle/app/oracle/product/11.2.0/dbhome
_2/bin
LD_LIBRARY_PATH set as
/opt/oracle/Middleware01/Oracle_IDM1/lib:/home/oracle/app/oracle/product/11.2.0/dbhome_2/lib
Starting Oracle Universal Installer...

Checking Temp space: must be greater than 150 MB.   Actual 6444 MB     Passed
Checking swap space: must be greater than 500 MB.   Actual 1694 MB     Passed
Checking monitor: must be configured to display at least 256 colors.    Actual 16777216     Passed
Preparing to launch Oracle Universal Installer from /tmp/OraInstall2012-08-17_06-26-20PM. Please wait ...
LD_LIBRARY_PATH environment variable :
--------------------------------------------------------
Total args: 32
Command line argument array elements ...
Arg:0:/tmp/OraInstall2012-08-17_06-26-20PM/jre/bin/java:
Arg:1:-Doracle.installer.library_loc=/tmp/OraInstall2012-08-17_06-26-20PM/oui/lib/linux:
Arg:2:-Doracle.installer.oui loc=/tmp/OraInstall2012-08-17 06-26-20PM/oui:
Arg:3:-Doracle.installer.bootstrap=TRUE:
Arg:4:-Doracle.installer.startup_location=/opt/oracle/Middleware01/Oracle_IDM1/oui/bin:
Arg:5:-Doracle.installer.jre_loc=../../jre:
Arg:6:-Doracle.installer.nlsEnabled="TRUE":
Arg:7:-Doracle.installer.prereqConfigLoc=/tmp/OraInstall2012-08-17_06-26-20PM/prereq :
Arg:8:-Doracle.installer.unixVersion=2.6.32-300.21.1.el5uek:
Arg:9:-mx512m:
Arg:10:-XX:MaxPermSize=256m:
Arg:11:-cp:
Arg:12:/tmp/OraInstall2012-08-17_06-26-20PM::/tmp/OraInstall2012-08-17_06-26-
20PM/ext/jlib/glassfish.jaxb_1.0.0.0_2-1-12.jar:/tmp/OraInstall2012-08-17_06-26-
20PM/ext/jlib/message.jar:/tmp/OraInstall2012-08-17_06-26-
20PM/ext/jlib/xmlparserv2.jar:/tmp/OraInstall2012-08-17 06-26-
20PM/ext/jlib/enginehelp.jar:/tmp/OraInstall2012-08-17_06-26-
20PM/ext/jlib/install.properties:/tmp/OraInstall2012-08-17_06-26-20PM/ext/jlib/dms.jar:/tmp/OraInstall2012-
08-17_06-26-20PM/ext/jlib/ojdl2.jar:/tmp/OraInstall2012-08-17_06-26-
20PM/ext/jlib/oneclick.jar:/tmp/OraInstall2012-08-17_06-26-20PM/ext/jlib/glassfish.jaxb.xjc_1.0.0.0_2-1-
12.jar:/tmp/OraInstall2012-08-17_06-26-20PM/ext/jlib/commonutils.jar:/tmp/OraInstall2012-08-17_06-26-
20PM/ext/jlib/ojdl-log4j.jar:/tmp/OraInstall2012-08-17_06-26-20PM/ext/jlib/ojdl.jar:/tmp/OraInstall2012-08-
17_06-26-20PM/ext/jlib/engine.jar:/tmp/OraInstall2012-08-17_06-26-
20PM/ext/jlib/oneofftool.jar:/tmp/OraInstall2012-08-17 06-26-
20PM/ext/jlib/GetVolumeInfo.dll:/tmp/OraInstall2012-08-17 06-26-
20PM/ext/jlib/ojdbc6dms.jar:/tmp/OraInstall2012-08-17_06-26-20PM/ext/jlib/log-
config.xml:/tmp/OraInstall2012-08-17_06-26-20PM/ext/jlib/SysInfo.dll:/tmp/OraInstall2012-08-17_06-26-
20PM/ext/jlib/osdt_core.jar:/tmp/OraInstall2012-08-17_06-26-
20PM/ext/jlib/WindowsFolders.jar:/tmp/OraInstall2012-08-17 06-26-
20PM/ext/jlib/idminstallhelp.jar:/tmp/OraInstall2012-08-17_06-26-
20PM/oui/jlib/OraInstaller.jar:/tmp/OraInstall2012-08-17_06-26-
20PM/oui/jlib/oneclick.jar:/tmp/OraInstall2012-08-17_06-26-
20PM/oui/jlib/xmlparserv2.jar:/tmp/OraInstall2012-08-17_06-26-20PM/oui/jlib/share.jar:/tmp/OraInstall2012-
08-17_06-26-20PM/oui/jlib/OraInstallerNet.jar:/tmp/OraInstall2012-08-17_06-26-
20PM/oui/jlib/emocmutl.jar:/tmp/OraInstall2012-08-17_06-26-20PM/oui/jlib/emCfg.jar:/tmp/OraInstall2012-08-
17 06-26-20PM/oui/jlib/OraPrereq.jar:/tmp/OraInstall2012-08-17 06-26-
20PM/oui/jlib/jsch.jar:/tmp/OraInstall2012-08-17 06-26-20PM/oui/jlib/ssh.jar:/tmp/OraInstall2012-08-17 06-
26-20PM/oui/jlib/remoteinterfaces.jar:/tmp/OraInstall2012-08-17 06-26-
20PM/oui/jlib/http_client.jar:/tmp/OraInstall2012-08-17_06-26-
20PM/oui/jlib/OraSuiteInstaller.jar:/tmp/OraInstall2012-08-17_06-26-
20PM/OPatch/jlib/opatch.jar:/tmp/OraInstall2012-08-17_06-26-
20PM/OPatch/jlib/opatchactions.jar:/tmp/OraInstall2012-08-17 06-26-
20PM/OPatch/jlib/opatchprereq.jar:/tmp/OraInstall2012-08-17 06-26-
20PM/OPatch/jlib/opatchutil.jar:/tmp/OraInstall2012-08-17_06-26-
20PM/oui/jlib/InstImages.jar:/tmp/OraInstall2012-08-17_06-26-
20PM/oui/jlib/InstHelp.jar:/tmp/OraInstall2012-08-17_06-26-
20PM/oui/jlib/InstHelp_de.jar:/tmp/OraInstall2012-08-17_06-26-
20PM/oui/jlib/InstHelp_es.jar:/tmp/OraInstall2012-08-17_06-26-
20PM/oui/jlib/InstHelp fr.jar:/tmp/OraInstall2012-08-17 06-26-
20PM/oui/jlib/InstHelp it.jar:/tmp/OraInstall2012-08-17 06-26-
20PM/oui/jlib/InstHelp ja.jar:/tmp/OraInstall2012-08-17_06-26-
20PM/oui/jlib/InstHelp_ko.jar:/tmp/OraInstall2012-08-17_06-26-
20PM/oui/jlib/InstHelp_pt_BR.jar:/tmp/OraInstall2012-08-17_06-26-
20PM/oui/jlib/InstHelp zh CN.jar:/tmp/OraInstall2012-08-17 06-26-
20PM/oui/jlib/InstHelp zh TW.jar:/tmp/OraInstall2012-08-17 06-26-
20PM/oui/jlib/oracle ice.jar:/tmp/OraInstall2012-08-17 06-26-20PM/oui/jlib/help4.jar:/tmp/OraInstall2012-
08-17_06-26-20PM/oui/jlib/help4-nls.jar:/tmp/OraInstall2012-08-17_06-26-
20PM/oui/jlib/ewt3.jar:/tmp/OraInstall2012-08-17_06-26-20PM/oui/jlib/ewt3-
swingaccess.jar:/tmp/OraInstall2012-08-17_06-26-20PM/oui/jlib/ewt3-nls.jar:/tmp/OraInstall2012-08-17_06-26-
20PM/oui/jlib/swingaccess.jar::/tmp/OraInstall2012-08-17_06-26-20PM/oui/jlib/jewt4.jar:/tmp/OraInstall2012-
08-17_06-26-20PM/oui/jlib/jewt4-nls.jar:/tmp/OraInstall2012-08-17_06-26-20PM/oui/jlib/orai18n-
collation.jar:/tmp/OraInstall2012-08-17 06-26-20PM/oui/jlib/orai18n-mapping.jar:/tmp/OraInstall2012-08-
17_06-26-20PM/oui/jlib/ojmisc.jar:/tmp/OraInstall2012-08-17_06-26-
```

```
20PM/oui/jlib/xml.jar:/tmp/OraInstall2012-08-17_06-26-20PM/oui/jlib/srvm.jar:/tmp/OraInstall2012-08-17_06-
26-20PM/oui/jlib/classes12.jar:
Arg:13:oracle.sysman.oio.oioc.OiocOneClickInstaller:
Arg:14:UnixGroups="{oracle,davfs2,vboxsf,}":
Arg:15:-scratchPath:
Arg:16:/tmp/OraInstall2012-08-17_06-26-20PM:
Arg:17:-sourceType:
Arg:18:network:
Arg:19:-timestamp:
Arg:20:2012-08-17 06-26-20PM:
Arg:21:-loglevel:
Arg:22:finest:
Arg:23:-weblogicConfig:
Arg:24:ORACLE_HOME=/opt/oracle/Middleware01/Oracle_IDM1:
Arg:25:-invPtrLoc:
Arg:26:/opt/oracle/Middleware01/Oracle_IDM1/oraInst.loc:
Arg:27:-oneclick:
Arg:28:-debug:
Arg:29:-response:
Arg:30:/opt/oracle/Middleware01/Oracle_IDM1/bin/OIM_response.txt:
Arg:31:-Doracle.config.mode=true:
----------------------------------------------------
Initializing Java Virtual Machine from /tmp/OraInstall2012-08-17_06-26-20PM/jre/bin/java. Please wait...
[oracle@12oel55_odd bin]$ Log: /home/oracle/app/oraInventory/logs/install2012-08-17_06-26-20PM.log
```

During installation, the installer creates a temporary directory with a lot of configuration files, scripts, jars ini-files etc.
Presumably these are used during the process and control the installation. When we terminate the installer, these files get deleted.

Is it possible to manipulate the behavior of the installation here?
We could try the following.

- Start the installer in GUI Mode with debug flag
- Make a copy of the temp directory
- Stop the installer

Further analysis reveals that these steps are not very promising since the installer fails already in the very first step and does not report any errors in the logfile, not even if the debug mode is enabled.
Instead we turn to the Oracle support page and find a patch, which we could apply and test.

9   Conclusion

In this tutorial we went through the full installation of OIM on a Virtual Box appliance. We also installed the tools Design Console and JDeveloper. As it becomes obvious from studying the installation guides, the whole installation process is large, complex and time consuming. Although the documentation is detailed, a good understanding of the products involved is required to successfully complete this task. This may be due to the fact that we ran into several problems, despite following the installation instructions rigidly and sticking tightly to the certification matrix. As it turned out, the installation could not be completed without the application of patches that are only available through Oracle support. This can be called bad luck because the OIM 11gR2 release installs much easier without the requirement for patching, as a friend of mine reports. However after the successful installation, the system ran stable during initial testing. We excluded the setup of SSL and high availability configurations, which is an area for further study. It will be required in many real world scenarios. Another important point left open in this work, is an automatic boot configuration and we might have a look at it in a future blog post.