

11g Upgrade Overview and Requirement List

Purpose: Included in this documentation is a list docs, patches, notes and files needed for the upgrade of the Database and Application Server to 11g

Documentation needed from http://www.usg.edu/georgia_best/technical/11g_workshop

1. Installation of Oracle RDBMS
2. Upgrade RDBMS 10204 to 11202 DBUA
3. Fusion Middleware Portal, Form, Reports & Discoverer(11.1.1.2.0 and 11.1.1.4.0) Installation
4. Weblogic 10.3.4 Installation
5. Configuring Domain for INB
6. Configuring Domain for SSB
7. Oracle Web Tier Components(11.1.1.2.0 and 11.1.1.4.0) Documentation
8. O/S Requirements

For Oracle Fusion Middleware 11g:

http://download.oracle.com/docs/pdf/E18558_01.pdf

Look for section 4, table 6 for your platform.

Minimum JDK : In Section 1. Follow link

<http://www.oracle.com/technetwork/middleware/ias/downloads/fusion-certification-100350.html>

Then open the xls for Oracle Fusion Middleware

<http://www.oracle.com/technetwork/middleware/downloads/fmw-11gr1certmatrix.xls>

To review these site user must have a metallink account if you do not have one please go to

<https://support.oracle.com/CSP/ui/flash.html> to create account. You will need to submit a ticket to get the system csi number in order to complete your account creation.

Note: Please review your `/etc/hosts` file. Entries in the format `<ip> shortname fullname my cause your Middleware Control to freeze when doing configuration.` The suggested format is `<ip> fullname shortname.`

9. Software to request for from ITS
Oracle Database 11g R2 (11.2.0.2) (DB, Client and Examples)

FMW 11.1.1.2 for inb

FMW 11.1.1.4 for inb

Oracle WebTier Utilities version 11.1.1.2 and 11.1.1.4 for ssb

Oracle Web Logic Server 10.3.4

10. Patches that need to be downloaded from <ftp.usg.edu>

Weblogic

For all platforms

p13108901_1034_Generic.zip in banner/prod/oracle/weblogic

p13583254_1034_Generic.zip in banner/prod/oracle/weblogic

Application Server Patches

For Solaris

banner/prod/oracle/solaris/11gAS

p965029_11107_Solaris-64.zip

p9473270_11107_Solaris-64.zip

p12434184_111140_SOLARIS64.zip

p12959536_111140_SOLARIS64.zip

p13113594_111140_Generic.zip

For Linux

banner/prod/oracle/linux/11gAS

p9965029_111070_Linux-x86-64.zip

p9473270_111070_Linux-x86-64.zip
p12434184_111140_Linux-x86-64.zip
p12959536_111140_Linux-x86-64.zip
p13113594_111140_Generic.zip

For HP Itanium

banner/prod/oracle/hpux_ia64/11gAS
p9965029_111070_HPUX-IA64.zip
p9473270_111070_HPUX-IA64.zip
p12434184_111140_HPUX-IA64.zip
p12959536_111140_HPUX-IA64.zip
p13113594_111140_Generic.zip

For HP-PARISC

banner/prod/oracle/hpux11i/11gAS
p9473270_111070_HPUX-64.zip
p9965029_111070_HPUX-64.zip
p12434184_111140_HP64.zip
p12959536_111140_HP64.zip
p13113594_111140_Generic.zip

Database Server Patches

CPU Jan 12 (13343244)

HPUX-PARISC

p13343244_112020_HP64.zip in banner/prod/oracle/hpux11i/11g

Solaris -64 bit

p13343244_112020_SOLARIS64.zip in banner/prod/oracle/solaris/11g

Linux 64 bit

p13343244_112020_Linux-x86-64.zip in banner/prod/oracle/linux/11g

HPUX-IA

p13343244_112020_HPUX-IA64.zip in banner/prod/oracle/hpux_ia64/11g

Scripts to start and shutdown weblogic (You may use these or make your own)

You may have to edit files to your environment.

banner/prod/oracle/script/weblogic

SSBstop.sh

SSBstart.sh

INBstop.sh

INBstart.sh

The Required Order to review documentation for installation from the website.

Review O/S requirements before you do the install

Database Order

1. Installation of Oracle RDBMS
2. Upgrade RDBMS 10204 to 11202 DBUA
3. Download scripts from banner/prod/oracle/script/11g on <ftp.usg.edu> and review FAQ 1-H4TMPD from www.sungardhe.com

Application Server Order

1. Weblogic 10.3.4 Installation
2. Fusion Middleware, Portal, Form, Reports & Discoverer(11.1.1.2.0 and 11.1.1.4.0) Installation(Use for INB)
3. Oracle Web Tier Components(11.1.1.2.0 and 11.1.1.4.0) Installation(Use for SSB)
4. Configuring Domain for INB
5. Configuring Domain for SSB

Problem Encountered

Web Tier Utilities Configuration Failure

1. Attempt to configure Web Tier, but kept running into a failed configuration because Web Cache won't start. He modified webcache.xml by inserting **<IPV6 ENABLED="NO"/>** . and was able to finish the configuration successfully.

Oracle ID: **Webcache Fails to Start with "Failed to assign port xxxx: Address family not supported by protocol" After FMW 11g Installation. [ID 1113163.1]**



Configuration Progress



ORACLE 11^g
FUSION MIDDLEWARE

- Welcome
- Configure Components
- Specify WebLogic Domain
- Specify Component Details
- Web Cache Administrator
- Configure Ports
- Specify Security Updates
- Installation Summary
- Configuration Progress**
- Installation Complete

Configuration Tools

Name	Progress
<input type="checkbox"/> Web Tier Configuration	99%
<input type="checkbox"/> Create and Start AS Instance (ssb_inst)	✓ Success
<input type="checkbox"/> Create and Start OHS Component (ohs1)	✓ Success
<input checked="" type="checkbox"/> Create and Start Web Cache Component (webc	✗ Failed

Configuration Log Location:
/oracle/orainventory/logs/install2012-03-19_04-58-55PM.log

✗ Create and Start Web Cache Component (webcache1)
 ✗ Error
 Failed to Start Web Cache Component
 Step Create and Start Web Cache Component (webcache1)

Elapsed Time: 8m 59s

2. Tried to startup component processes for SSB, received the following error:

"failed to restart a managed process after the maximum retry limit"

```
[oraown@dakota ssb_inst]$ opmnctl startall
opmnctl startall: starting opmn and all managed processes...
=====
opmn id=dakota.mgc.edu:6701
  2 of 3 processes started.

ias-instance id=ssb_inst
+++++
ias-component/process-type/process-set:
  webcachel/WebCache/WebCache/

Error
--> Process (index=1,uid=516559928,pid=21946)
  failed to start a managed process after the maximum retry limit
  Log:
  /oracle/product/Middleware11g/WebTier11g/ssb_inst/diagnostics/logs/WebCache/webcachel/console-WebCache-1.log

[oraown@dakota ssb_inst]$
```

Connected to dakota.mgc.edu

3. Reviewed the logs.

WebCache fails to restart and the following entry is observed in
ORACLE_HOME/webcachlogs/event_log: and
ORACLE_HOME/diagnostics/logs/WebCache/webcache1/console-Webcache-1.log

```
[webcache] [NOTIFICATION:1] [WXE-09002] [logging] [ecid: ] Generated by Oracle Web Cache on Mon Mar 19 17:02:25 2012 - Build 11.1.1.4.0 101216.1817
[webcache] [NOTIFICATION:1] [WXE-08513] [logging] [ecid: ] Cache server process ID 5428 is starting up.
[webcache] [NOTIFICATION:1] [WXE-09612] [main] [ecid: ] Oracle Web Cache 11g (11.1.1.4), Build 11.1.1.4.0 101216.1817
[webcache] [NOTIFICATION:1] [WXE-09604] [main] [ecid: ] Could not increase the number of file/socket descriptors to 1545.
[webcache] [WARNING:1] [WXE-11057] [main] [ecid: ] Dynamic origin server capacity is reduced to 20.
[webcache] [NOTIFICATION:1] [WXE-09403] [main] [ecid: ] Maximum number of file/socket descriptors set to 850.
[webcache] [NOTIFICATION:1] [WXE-13002] [config] [ecid: ] Maximum allowed incoming connections are 500
[webcache] [NOTIFICATION:1] [WXE-09441] [stats] [ecid: ] DMS enabled
[webcache] [ERROR:1] [WXE-13305] [frontend] [ecid: ] Failed to assign port 7785: Address family not supported by protocol
[webcache] [ERROR:1] [WXE-09707] [main] [ecid: ] Failed to start the server.
[webcache] [NOTIFICATION:1] [WXE-08513] [logging] [ecid: ] Cache server process ID 5474 is starting up.
[webcache] [NOTIFICATION:1] [WXE-09612] [main] [ecid: ] Oracle Web Cache 11g (11.1.1.4), Build 11.1.1.4.0 101216.1817
[webcache] [NOTIFICATION:1] [WXE-09604] [main] [ecid: ] Could not increase the number of file/socket descriptors to 1545.
[webcache] [WARNING:1] [WXE-11057] [main] [ecid: ] Dynamic origin server capacity is reduced to 20.
[webcache] [NOTIFICATION:1] [WXE-09403] [main] [ecid: ] Maximum number of file/socket descriptors set to 850.
[webcache] [NOTIFICATION:1] [WXE-13002] [config] [ecid: ] Maximum allowed incoming connections are 500
[webcache] [NOTIFICATION:1] [WXE-09441] [stats] [ecid: ] DMS enabled
[webcache] [ERROR:1] [WXE-13305] [frontend] [ecid: ] Failed to assign port 7785: Address family not supported by protocol
[webcache] [ERROR:1] [WXE-09707] [main] [ecid: ] Failed to start the server.
[webcache] [NOTIFICATION:1] [WXE-08513] [logging] [ecid: ] Cache server process ID 5573 is starting up.
[webcache] [NOTIFICATION:1] [WXE-09612] [main] [ecid: ] Oracle Web Cache 11g (11.1.1.4), Build 11.1.1.4.0 101216.1817
[webcache] [NOTIFICATION:1] [WXE-09604] [main] [ecid: ] Could not increase the number of file/socket descriptors to 1545.
[webcache] [WARNING:1] [WXE-11057] [main] [ecid: ] Dynamic origin server capacity is reduced to 20.
[webcache] [NOTIFICATION:1] [WXE-09403] [main] [ecid: ] Maximum number of file/socket descriptors set to 850.
[webcache] [NOTIFICATION:1] [WXE-13002] [config] [ecid: ] Maximum allowed incoming connections are 500
[webcache] [NOTIFICATION:1] [WXE-09438] [stats] [ecid: ] The statistics persistent repository is being reset by new configuration
[webcache] [NOTIFICATION:1] [WXE-09441] [stats] [ecid: ] DMS enabled
[webcache] [NOTIFICATION:1] [WXE-12209] [cluster] [ecid: ] A 1 node cluster successfully initialized
[webcache] [NOTIFICATION:1] [WXE-09614] [main] [ecid: ] The following Oracle Web Cache internal files are pre-populated to the cache: [[
```

```
[webcache] [NOTIFICATION:1] [WXE-09604] [main] [ecid: ]
Could not increase the number of file/socket descriptors to 1545
```


WebCache Fails to Start: "Could not increase the number of file/socket descriptors to X" [ID 785465.1]

Cause

The nofile kernel parameter value in (/etc/security/limits.conf) file is less than 65536.

This problem can also be caused by not having the ulimits set generally within the shell.

See the documentation for details:

Oracle Application Server Installation Guide 10g Release 2 (10.1.2) for Linux x86
http://download.oracle.com/docs/cd/B14099_19/linux.1012/install.1012/install/regs.htm#sthref92

4.4.1 Kernel Parameter Settings for OracleAS Web Cache

4.5 Set Shell Limits for the oracle User

Solution

1. Run the following command to check that the nofile kernel parameter is set to at least 65536:

```
prompt> ulimit -Hn
```

2. If the command returns a value less than 65536, as root, add the following line to the

/etc/security/limits.conf file (use a text editor to edit the file):

```
* hard nofile 65536
```

3. Make sure that the shell limits for the oracle user are set correctly as per the following documentation

http://download.oracle.com/docs/cd/B14099_19/linux.1012

4. Sent institution command to run:

```
ulimit -Hn
```

Results: 1024

Modify the limits.conf file in /etc/security previously to have oracle with hard and soft limits of 4096. Our Oracle owner however is oraown and not oracle so this did nothing to our system. Once the change to limits.conf was made to reflect oraown instead of oracle, He brought everything (Weblogic and opmn) down and restarted them. It appears they are now functioning. I will let you know if I have any more issues with the configuration.

Portal, Forms, and Reports Utilities Configuration Failure

This error below may occur while installing Oracle Reports 11.1.1.4.0 for INB. So far, Linux platform is the only platform that we have encountered this problem with Ipv6 networking.

FRM-92120 error

This error is fixed by clearing JAVA cache and browser cache.

Oracle Portal, Forms, Reports and Discoverer 11g - Step 13 of 14

Configuration Progress

ORACLE 11g FUSION MIDDLEWARE

- Welcome
- Install and Configure
- Prerequisite Checks
- Create Domain
- Specify Security Updates
- Specify Installation Location
- Configure Components
- Configure Ports
- Specify Proxy Details
- Specify Application OID
- Installation Summary
- Installation Progress
- Configuration Progress**
- Installation Complete

Name	Progress
Creating Reports Tools Components	Success
Creating Reports Server Components	Success
Executing: opmnctl startproc ias-component=	Failed
Creating EM Agent	Recommended
Reloading OPMN	Recommended
Executing: opmnctl restartproc ias-componer	Recommended
Restarting Managed Server: WLS_REPORTS	Recommended

Configuration Log Location:
/u00/app/oracle/orainventory/logs/install2011-02-19_09-02-19PM.log

```

Executing: opmnctl startproc ias-
component=ReportsServer_fusionreports_asinst_1
Error
Step Executing: opmnctl startproc ias-
component=ReportsServer_fusionreports_asinst_1 failed
  
```

Help < Back Next > Finish Cancel

Elapsed Time: 32m 22s

To determine the cause of this error, we reviewed the Reports Logfile. The Reports Logfile you can find under

\$MW_HOME/<instance>/diagnostics/logs/ReportsServerComponent/ReportsServer_<servername>_<instance>/rwserver_diagnostic.log.

Below you can see the error message REP-50600, that Broadcasting is disabled. This error message points to a problem with the network, as Oracle Reports is using a multicast mechanism to publish the Reports Servicename into the network.

```
]
2012-03-22T15:27:06.259-04:00] [reports] [INCIDENT_ERROR] [REP-50600] [oracle.reports.server] [tid: 10]
[ecid: 0000J0vs5TqFw000jzwnolFQro3000001,0] REP-50600 : Broadcasting is disabled. Please enable cosnaming for Reports discovery. [[
racle.reports.RWException: IDL:oracle/reports/RWException:1.0
    at oracle.reports.utility.Utility.newRWException(Utility.java:1053)
    at oracle.reports.server.RWServer.startServer(RWServer.java:1116)
    at oracle.reports.server.RWServer.jniMain(RWServer.java:305)
]
```

Oracle.Reports.Engine.Rwengine Keeps Spawning when multicast is enabled in LINUX [ID 1272362.1]

When the reports server starts up it looks up for the multicast channel address through the port documented in the rwnetwork.conf file located in \$O_H/reports/conf directory.

If for some network reasons or other reasons the channel address is not reachable from that machine due to firewall or a case where the multicast is intermittently working, the reports server fails to start up or starts up the engine which does not shutdown properly causing the java processes to spawn.

Solution

Sungard

FAQ 1-OVLV9I: Oracle Doc ID 577958.1 REP-50600 or REP-51002: Bind To Reports Server Failed and Exception 50125

FAQ 1-OVLV9F: Oracle Doc ID 881712.1 **How to Enable Namingservice Discovery Mechanism for all Reports Server in Reports 11g?**

There are two ways to go about this issue.

1. Enable COS Naming Service in rwnetwork.conf file by following [NOTE:413478.1](#) Rep-51002: Bind To Reports Server Failed On New App Server Install

or

[NOTE:577958.1](#) REP-50600 or REP-51002: Bind To Reports Server Failed and Exception 50125: "Network is unreachable" With Multicasting

or

2. Configure the Firewall to use it with the existing Multicast Mechanism.

Network security is a primary consideration. As this case, the most popular firewall that Linux uses is iptables. This has to be done as a root user.

Note: If you configure and use iptables, you will have to come up with rules for the allowed ports 7001 and 7002 to be open on your firewall.

Ensure that the firewall rule created to address this Multicast channel address can transmit and receive the packets. Enable the firewall so that it accepts the packets from this address. If it is enabled the packet is handed over to the end application or the operating system for processing.

a. Log in as a root user and append the existing rule to end of a chain in iptables to accept this address. The general syntax is

```
iptables -A INPUT -d <Multicast channel Address> -j ACCEPT
```

For example

```
iptables -A INPUT -d 228.5.6.7 -j ACCEPT
```

This example means that the ip tables are being configured to allow the firewall to accept the packets coming in from the Reports Services which is destined for the Multicast's Channel Address of 228.5.6.7.

Note: The above mentioned example may not work for all environments. Kindly check with the System Administrators and ensure that you are following the right syntax to

configure the iptables.

b. Login as ORACLE user.

c. Restart the PFR domain configuration.