

Installing & Configuring 10g Enterprise Manager and the Grid Control

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Summary:

Purpose of this guide is to document the steps to required install and initially configure a properly working 10g Grid Control installation from which to manage Oracle services across your enterprise. As is customary, many key installation steps and pitfalls are left out of available Oracle documentation and are, therefore, made available in this document. Installation and use of the 'Database Control' are fairly simple and straight-forward, hence are not discussed herein – this document focuses on that which is Grid Control specific.

Hardware/Software Used:

Enterprise Manager Grid Control Node (Node A):

Dell Latitude D800 (Intel Pentium M 1700Mhz; 1GB RAM) was used to house the 10g Enterprise Manager Grid Control, which includes: an Oracle 9i Database (with an Oracle Management Server Repository); Oracle Application Server 10g; and an 'additional' 10g Management Agent. Software to Download: windows_10.1.0.3_EM_GC.zip from OTN.

Target Node (Node B):

Sun Ultra 60 (UltraSPARC II 450Mhz; 1GB RAM) was used to serve as the 'Target Node' to test deployment and recognition of an Oracle Service on a node separate from that of the Enterprise Manager Grid Control's Node. Software to Download: ship_rell10_sol64_db.cpio.gz (10.1.0.2.0 Database); sol32_grid_control_agentdwn_10_1_0_2.cpio.gz (Mass Deployment Agent for Solaris) from OTN. Insure that your system is patched per the Oracle documentation using the latest available 'recommended' and 'J2SE' patch clusters from Sun. Additionally, mass deployment of the management agent requires WGET on Unix/Linux target hosts – this can be downloaded from <http://www.gnu.org>.

Install the Base Software:

Unzip/uncompress the aforementioned Oracle Software on the appropriate host and install per Oracle documentation. On Node A, install using the 'Enterprise Manager 10g Grid Control Using a New Database' option. On Node B, install the 10g Database software; however, if you choose to use the DBCA to create a new database, choose the custom database option and deselect the Enterprise Manager installation option – we will deploy this from Node A later on in the instructions. As a habit, I install the base software and then create the Database and configure the Listener by hand.

Configure for Mass Agent Deployment:

To fix an Oracle bug, we must configure the Apache Server to recognize a virtual directory for the Mass Agent deployment. Target hosts 'pull' the Management Agent software from this virtual directory on Node A. On Node A, edit the %ORACLE_HOME%/sysman/config/agent_download.conf.template file to reflect the following (substitute your %ORACLE_HOME% value as appropriate):

```

<IfModule mod_alias.c>
#
# Note that if you include a trailing / on fakename then the server will
# require it to be present in the URL.  So "/icons" isn't aliased in this
# example, only "/icons/"..
#
Alias /agent_download/ "c:\apps\oracle\product\10gGC\sysman\agent_download/"

# Modify this directive to restrict hosts on which agent downloads and
# installs can be performed.
<Directory c:\apps\oracle\product\10gGC\sysman\agent_download>
    Options Indexes MultiViews
    Order deny,allow
    Deny from none
    Allow from all
</Directory>

</IfModule>

```

Save this file as agent_download.conf and add the following line to

%ORACLE_HOME%\Apache\Apache\conf\oracle_apache.conf (substitute your %ORACLE_HOME% value as appropriate):

```
include "C:\apps\oracle\product\10gGC\sysman\config\agent_download.conf"
```

Bounce the HTTP Server portion of 10G OAS and test your Enterprise Manager agent download URL to verify that a pull operation will be possible (Try to download a file; example:

```
http://jlc.colestock.com:4889/agent_download/agentInstallJob.tcl).
```

Unpack and uncompress the sol32_grid_control_agentdwn_10_1_0_2.cpio.gz file on Node B using the appropriate OS commands. Copy the resulting directory structure and its contents (i.e. solaris) back to Node A, placing them in the directory %ORACLE_HOME%\sysman\agent_download (i.e. the virtual directory we just configured). Remove these files from Node B, leaving only the agentDownload.solaris file.

On the Target Node (Node B), rename the script agentDownload.solaris to agentDownload.

On Node B, edit the agentDownload script, changing the values of the Oracle Management Server (OMS) and OMS Port variables as appropriate:

```

# Machine hosting the OMS
OMSHost=jlc.colestock.com
# Default HTTP port for EM console
httpPort=4889

```

On Node A, copy the %ORACLE_HOME%\sysman\agent_download\solaris\response\agent.rsp file to %ORACLE_HOME%\sysman\agent_download\ and rename it agent_download.rsp.

Edit agent_download.rsp as follows:

```
# Change this to your Oracle Software Owner
UNIX_GROUP_NAME=oinstall

# Comment out the Disk Label Option - only used for Multi-Disk Installations
# FROM_LOCATION_CD_LABEL="EM10g"

# Modify the below to reflect hostname and port of your OMS
s_OMSHost=jlc.colestock.com
s_OMSPort=4889
```

Install the Management Agent on the Target Node (Node B):

Set the \$ORACLE_HOME environment variable to the desired install location of the Management Agent software (this should be different than the existing \$ORACLE_HOME on the host):

```
ORACLE_HOME=$ORACLE_BASE/product/agent; export $ORACLE_HOME
```

Change to the directory where you placed the agentDownload script and execute the script:

```
cd $ORACLE_BASE/software/10g1em
./agentDownload
```

The script downloads and install as the software. After successful running of the script, execute the root.sh script from the agent's \$ORACLE_HOME.

```
su - root -c '$ORACLE_HOME/root.sh'
exit
```

Before starting the Management Agent on Node B, examine the \$ORACLE_HOME/sysman/config/emd.properties file for accuracy, paying particular attention to these listed directives (Insure these are set in accordance with your environment):

```
REPOSITORY_URL=http://jlc.colestock.com:4889/em/upload/
emdWalletSrcUrl=http://jlc.colestock.com:4889/em/wallets/emd
emdWalletDest=/opt/apps/oracle/product/v10g1/agent/sysman/config/server
```

Start the Management Agent:

```
$ORACLE_HOME/bin/emctl start agent
```

Verify the Management Agent via:

```
$ORACLE_HOME/bin/emctl status agent
```

View Node B Oracle Services from OMS on Node A:

Once the Management Agent is operational on Node B, the Oracle Management Server on Node A will automatically detect it and all of its 'targets'. You can also add 'targets' from the Oracle Enterprise Manager Grid Control Console (Oracle has made this extremely intuitive, so I won't cover it here). If for some reason, you can't get a target recognized, then you can edit the \$ORACLE_HOME/sysman/emd/targets.xml file on the target host in question and bounce the Management Agent.