

Move RAC Database Management from Database Control to Grid Control

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Index

General Description	2
Deconfigure Database Control and Remove the Repository from the Database	2
Install Agent on Database Server	3
Environment Variables for the Agent	7
Displaying Agent Status	7
Troubleshooting Unavailable Databases after Agent Install	9

General Description

A RAC database that is managed through Database Control has a local Enterprise Manager repository; this lead to some overhead that can be avoided by moving the EM repository to a Grid Control environment.

This document describes the steps required to move a database to be managed remotely from the Grid Control Console.

Deconfigure Database Control and Remove the Repository from the Database

Run Enterprise Manager Configuration Assistant to deconfigure Database Control:

```
{oracle} /oradisk/app01/oracle/product/10gDB [vmractest1] > emca -deconfig dbcontrol db -repos drop -cluster
```

```
STARTED EMCA at Jul 2, 2006 11:33:51 AM  
EM Configuration Assistant, Version 10.2.0.1.0 Production  
Copyright (c) 2003, 2005, Oracle. All rights reserved.
```

Enter the following information:

```
Database unique name: racdba  
Listener port number: 1521  
Password for SYS user:  
Password for SYSMAN user:
```

```
Do you wish to continue? [yes(Y)/no(N)]: yes  
Jul 2, 2006 11:35:11 AM oracle.sysman.emcp.EMConfig perform  
INFO: This operation is being logged at /oradisk/app01/oracle/product/10gDB/cfgtoollogs/emca/racdba/emca_2006-07-02_11-33-51-AM.log.  
Jul 2, 2006 11:35:28 AM oracle.sysman.emcp.util.DBControlUtil stopOMS  
INFO: Stopping Database Control (this may take a while) ...  
Jul 2, 2006 11:37:33 AM oracle.sysman.emcp.EMReposConfig dropRepository  
INFO: Dropping the EM repository (this may take a while) ...  
Jul 2, 2006 11:48:52 AM oracle.sysman.emcp.EMReposConfig invoke  
INFO: Repository successfully dropped  
Enterprise Manager configuration completed successfully  
FINISHED EMCA at Jul 2, 2006 11:49:11 AM
```

Install Agent on Database Server

Install Grid Control Agent on the server where the database is located, if there are previous versions of the agent it is convenient to remove them before installing the 10g Agent.

Execute runInstaller from the grid control install disk, and choose Additional Management Agent



Enter the oracle base directory



Select Cluster mode and click on select all to choose install on all nodes



The Pre-Requisites check, if everything is fine click on next, else fix the problem before proceeding



Enter the Grid Control Server and Port:



Specify the password, the same as sysman on Grid Control



The summary screen



The install progress screen



The install progress screen performing the Remote Operation on nodes 2 and 3



When finished you will need to run as root the root.sh script on the agent home

```
{oracle} /devsrv/app01/oracle/product/10gDB/bin [devsrv1] > emctl stop dbconsole
```

TZ set to Israel

Oracle Enterprise Manager 10g Database Control Release 10.2.0.1.0

Copyright (c) 1996, 2005 Oracle Corporation. All rights reserved.

<http://devsrv1:1158/em/console/aboutApplication>

Stopping Oracle Enterprise Manager 10g Database Control ...

... Stopped.

Stop Database Control, deconfigure it and drop its repository from the database:

```
{oracle} /devsrv/app01/oracle/product/10gDB/bin [devsrv1] > emca -deconfig dbcontrol db -repos drop -cluster
```

STARTED EMCA at Jul 3, 2006 10:49:04 AM

EM Configuration Assistant, Version 10.2.0.1.0 Production

Copyright (c) 2003, 2005, Oracle. All rights reserved.

Enter the following information:

Database unique name: devdb

Listener port number: 1521

Password for SYS user:

Password for SYSMAN user:

Do you wish to continue? [yes(Y)/no(N)]: y

Jul 3, 2006 10:49:21 AM oracle.sysman.emcp.EMConfig perform

INFO: This operation is being logged at /devsrv/app01/oracle/product/10gDB/cfgtoollogs/emca/devdb/emca_2006-07-03_10-49-04-AM.log.

Jul 3, 2006 10:49:22 AM oracle.sysman.emcp.util.DBControlUtil stopOMS

INFO: Stopping Database Control (this may take a while) ...

Jul 3, 2006 10:49:34 AM oracle.sysman.emcp.EMReposConfig dropRepository

INFO: Dropping the EM repository (this may take a while) ...

Jul 3, 2006 10:54:28 AM oracle.sysman.emcp.EMReposConfig invoke

INFO: Repository successfully dropped

Enterprise Manager configuration completed successfully

FINISHED EMCA at Jul 3, 2006 10:54:30 AM



If the agent configuration fails with this errors:
Performing targets discovery and agent configuration

Command = oracle.sysman.emcp.agent.AgentPlugIn has failed

Exception : java.lang.Exception: OPS:Exception while processing cluster node=devsrv1. Failed to copy file /devsrv/app01/oracle/OracleHomes/agent10g/sysman/install/hosttgt.out to destination /devsrv/app01/oracle/OracleHomes/agent10g/vmractest1/sysman/emd/hosttgt.out. ExceptionMessage=scp: /devsrv/app01/oracle/OracleHomes/agent10g/sysman/install/hosttgt.out: No such file or directory :failed. Terminating...

Described on Note 353836.1 as

Cause

SSH latency is not allowing the push of the agent configuration to the other nodes in this rac cluster. We are relying on transport layer ssh to carry out commands, if there is a lag or a timeout occurring between the nodes of the RAC cluster, the copy will fail.

The node we are trying to execute remote command on may be busy, or some core utilities timeout, resulting in termination of connection.

You can check into ssh latency issues using os commands such as traceroute. Please consult with the operating system administrator, to see if there are ssh latency problems on the cluster your installing on.

Problem was discussed in the internal bug:
Bug 4501798 10.2 INSTALL 10.2 PRODIG-1370 PORTID-46
Abstract: MM3 AGENTCA FAILS

Closed as not a bug.

Solution

To implement the solution, please execute the following steps:

1. Install 10.2 Grid control Agents on local storage - shared Agent installations on SAN devices

are not currently supported.

2. Install on a cluster that is not experiencing any ssh latency problems. Consider using a faster, more robust cluster hardware environment.

Consult with your system administrator on how to check for ssh latency problems.

Please also check the following note, for other causes related to this error:

[Note 352140.1](#) - 10.2.0.1 Agent install for RAC fails with: Failed to copy file hosttgt.out

Note 352140.1 - 10.2.0.1 Agent install for RAC fails with: Failed to copy file hosttgt.out

End of installation screen

Environment Variables for the Agent

In order to execute maintenance operations it is convenient to have set the AGENT_HOME environment variable on the .profile or .cshrc files. Agent_home points to the directory where the agent is installed:

```
setenv AGENT_HOME /svrdb/app01/oracle/product/agent10g
```

Alternatively you can set an alias to point the oracle_home environment variable to the agent_home, this permit to execute commands directly without needing to go to the agent_home/bin directory first:

```
alias 10agt 'setenv ORACLE_HOME $AGENT_HOME; setenv PATH $ORACLE_HOME/bin:$PATH'
```

The main command you will need to execute is 'emctl' so aliases can be created for this purpose as well:

```
alias cda 'cd $AGENT_HOME'
alias agstat 'cd $AGENT_HOME/bin; ./emctl status agent'
alias agstop 'cd $AGENT_HOME/bin; ./emctl stop agent'
alias agstrt 'cd $AGENT_HOME/bin; ./emctl start agent'
```

Displaying Agent Status

Set the

```
<oracle> /svrdb/app01/oracle/product > emctl status agent
Oracle Enterprise Manager 10g Release 10.2.0.1.0.
Copyright (c) 1996, 2005 Oracle Corporation. All rights reserved.
```

```
-----
Agent Version      : 10.2.0.1.0
OMS Version       : 10.2.0.1.0
Protocol Version  : 10.2.0.0.0
Agent Home        : /svrdb/app01/oracle/product/agent10g
Agent binaries    : /svrdb/app01/oracle/product/agent10g
Agent Process ID  : 5198
Parent Process ID : 5173
Agent URL         : https://svrdb:3872/emd/main/
Repository URL    : https://gridsrv:1159/em/upload
Started at       : 2006-06-28 16:34:45
Started by user  : oracle
Last Reload      : 2006-06-28 17:49:32
Last successful upload      : 2006-06-29 09:09:14
Total Megabytes of XML files uploaded so far : 88.61
Number of XML files pending upload      : 0 ← *
Size of XML files pending upload(MB)    : 0.00 ← **
Available disk space on upload filesystem : 8.24% ← ***
Last successful heartbeat to OMS        : 2006-06-29 09:09:24
```

```
-----
Agent is Running and Ready ← ****
```

COMMENTS:

- * The information from the database is transferred to Grid Control as XML files, is important that this is flowing without interruption.
- ** Size of the queue, if >0 should be decreasing along time
- *** Available space for staging XML files, should be always available
- **** This line show the status of the agent, should be running and ready.

The URL's shown on the status display also can be accessed to display status, use internet explorer for that, other browsers don't work fine.

Troubleshooting Unavailable Databases after Agent Install

Some databases are not recognized as available, one reason is that Grid Control do not know the passwords to connect to the databases.

On the snapshot we see that databases are not available:



Database Name	Instance Name	Status
ORCL	ORCL	Unavailable
ORCL	ORCL	Unavailable
ORCL	ORCL	Unavailable
ORCL	ORCL	Unavailable
ORCL	ORCL	Unavailable
ORCL	ORCL	Unavailable
ORCL	ORCL	Unavailable
ORCL	ORCL	Unavailable

On the main screen we can choose Targets



On Target, click on All Targets



Choose the database and select configure



Enter the db snmp password



And submit the Job, Now the database is available again

End of the Procedure