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Verifying Database Best Practice for "rac1db"
Verifying OPTIMIZER DYNAMIC SAMPLING ...met
Verifying Invalid Java Objects ...met
Verifying SYSAUX tablespace existence ...met
Verifying JVM configuration for database ...met
Verifying Java based user in database ...met
Verifying Java Role Count ...met
Verifying Invalid SYS or SYSTEM Schema Objects ...met
Verifying INVALID objects in the application related schemas ...met
Verifying SPFILE ...met
Verifying Database word size(bits) ...met
Verifying Duplicate SYS or SYSTEM Schema Objects ...met
Verifying MAX DUMP FILE SIZE ...met
Verifying REMOTE LISTENER ...met
Verifying Database Datafiles in Backup Mode ...met
Verifying Files Needing Media Recovery ...met
Verifying In-doubt Distributed Transactions ...met
Verifying SYS-Owned Object Tables Check ...met
Verifying Invalid Objects in dba registry ...met
Verifying Materialized View Group Refresh Jobs ...met
Verifying Materialized View Manual Group Refresh ...met
Verifying Redo Log Size (MB) ...met
Verifying All tablespaces are locally managed ...met
Verifying Cluster Interconnects ...met
Verifying CORE DUMP DESTINATION ...met
Verifying database [and ASM] alert log messages indicating internal errors (ORA-00600 errors) ...met
Verifying database [and ASM] alert log messages indicating internal errors (ORA-07445 errors) ...met
Verifying Old trace files in background dump destination ...not met
Verifying Database alert log file size ...met
Verifying Automatic segment storage management ...met
Verifying Average GC CR Block Receive Time ...met
Verifying Average GC Current Block Receive Time ...not met
Verifying Automatic Undo Management ...met
Verifying FILESYSTEMIO OPTIONS ...not met
Verifying disk free space for Oracle Clusterware home "/u01/app/12.1.0/grid"...passed
      Summary of environment
Date (mm/dd/yyyy): 02/07/2016
Time (hh:mm:ss) : 05:41:27
Cluster name : cluster1
Clusterware version : 12.1.0.2.0
Grid home : /u01/app/12.1.0/grid
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Grid User : grid

Operating system : Linux3.8.13-118.2.2.el6uek.x86 64

Databasel : Database name - racldb

Database version - 12.1.0.2.0

Database home -

/u01/app/oracle/product/12.

1.0/dbhome 1

Database recommendation checks for "rac1db"

Verification Check : Old trace files in background dump destination

Verification Description : Checks the BACKGROUND DUMP DEST for old trace files

Verification Result : WARNING

Verification Summary : Check for Old trace files in background dump destination

failed

Additional Details : Old trace files from BACKGROUND DUMP DEST should regularly

be archived outside ORACLE BASE, otherwise ORACLE BASE mount point may run out of space and may not be able to collect diagnostic information when failure occurs.

Database (Instance) Status Expected Value

racldb(RAC1DB1) FAILED 0 rac1db(RAC1DB2) FAILED 0 1

Verification Check : Average GC Current Block Receive Time

Verification Description : Check Avg GC Current Block Receive Time

Verification Result : WARNING

Verification Summary : Check for Average GC Current Block Receive Time failed

Additional Details : The average global cache current block receive time should typically be less than 15 milliseconds depending on your

system configuration and volume. This is the average latency of a current request round-trip from the

requesting instance to the holding instance and back to

the requesting instance.

Database (Instance) Status Expected Value Actual Value rac1db(RAC1DB1) FAILED avg gc current block recv ti avg gc current block recv ti

me <= 15 me =

17.9057370059940754028157627

129349494388

rac1db(RAC1DB2) FAILED avg gc current block recv ti avg gc current block recv ti me <= 15

16.0099398378236986659691341

87810619932

Verification Check : FILESYSTEMIO OPTIONS

Verification Description : Checks FILESYSTEMIO OPTIONS parameter

Verification Result : WARNING

asynchronus I/O which helps to achieve optimal performance

with database data files

Database (Instance) Status Expected Value Actual Value

rac1db FAILED filesystemio options = filesystemio options = none

SETALL

Verification Check : OPTIMIZER DYNAMIC SAMPLING

Verification Description : Checks OPTIMIZER DYNAMIC SAMPLING setting

Verification Result : PASSED

Verification Summary : Check for OPTIMIZER DYNAMIC SAMPLING passed

Additional Details : Not having OPTIMIZER_DYNAMIC_SAMPLING set to the default

value of 2 can have an adverse impact on cost based

optimizer performance. This is a required setting for EBS

and PeopleSoft applications.

Database (Instance) Status Expected Value Actual Value

racldb(RAC1DB1) PASSED optimizer_dynamic_sampling optimizer_dynamic_sampling

racldb(RAC1DB2) PASSED optimizer dynamic sampling optimizer dynamic sampling

= 2 = 2

Verification Check : Invalid Java Objects

Verification Description : Checks invalid java objects

Verification Result : PASSED

Verification Summary : Check for Invalid Java Objects passed

Database (Instance) Status Expected Value

PASSED invalid java obj = 0 invalid java obj = 0rac1db

Verification Check : SYSAUX tablespace existence

Verification Description : Checks existence of SYSAUX tablespace

Verification Result : PASSED

Verification Summary : Check for SYSAUX tablespace existence passed

Additional Details : The SYSAUX tablespace is required for versions 10 and

above. Refer to the Upgrade Companion for your target

version for more details.

Database(Instance) Status Expected Value Actual Value

rac1db PASSED SYSAUX TS >= 1 SYSAUX TS = 1

Verification Check : JVM configuration for database

Verification Description : Checks JVM configuration for database

Verification Result : PASSED

Verification Summary : Check for JVM configuration for database passed Additional Details : The query 'select dbms_java.longname('true') "JAVAVM

TESTING" from dual; 'should return "true" if the JVM is

working correctly

Database (Instance) Status Expected Value Actual Value

PASSED dbms java.longname('true') dbms java.longname('true')

= t.rue = t.rue

Verification Check : Java based user in database

Verification Description : Checks presence of any Java based user in database

Verification Result : PASSED

Verification Summary : Check for Java based user in database passed
Additional Details : There should not be any Java Based users for database

version 9.0.1 and above.

Database (Instance) Status Expected Value Actual Value

racldb PASSED java based users count = 0 java based users count = 0

Verification Check : Java Role Count Verification Description : Checks JVM roles

Verification Result : PASSED

Verification Summary : Check for Java Role Count passed Additional Details : A healthy JVM should contain six roles. If there are more

or less than six roles, the JVM is inconsistent.

Database(Instance) Status Expected Value Actual Value

rac1db	PASSED	java_role_count = 6	java_role_count = 6
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Verification Check : Invalid SYS or SYSTEM Schema Objects

Verification Description : Checks presence of any invalid SYS or SYSTEM schema objects

Verification Result : PASSED

Verification Summary : Check for Invalid SYS or SYSTEM Schema Objects passed

Additional Details : There should not be any invalid SYS or SYSTEM schema

objects. Investigate invalid objects in the SYS and SYSTEM

schemas.

Database(Instance) Status Expected Value Actual Value

rac1db PASSED sys invalid obj = 0 sys invalid obj = 0

Verification Check : INVALID objects in the application related schemas

Verification Description : Checks for the presence of INVALID objects in the

application related schemas (non SYS and SYSTEM)

Verification Result : PASSED

Verification Summary : Check for INVALID objects in the application related

schemas passed

Additional Details : Investigate invalid objects in the application related

schemas (non SYS and SYSTEM).

Database(Instance) Status Expected Value Actual Value

rac1db PASSED app invalid obj = 0 app invalid obj = 0

Verification Check : SPFILE

Verification Description : Checks that the instances are using SPFILE

Verification Result : PASSED

Verification Summary : Check for SPFILE passed

Additional Details : Using one and the same SPFILE for all instances in

clustered database is recommended.

Database(Instance) Status Expected Value Actual Value

rac1db(RAC1DB1) PASSED spfile <> NULL spfile =

+DATA/RAC1DB/PARAMETERFILE/s

pfile.268.898784645

racldb(RAC1DB2) PASSED spfile <> NULL spfile =

+DATA/RAC1DB/PARAMETERFILE/s

pfile.268.898784645

Verification Check : Database word size(bits)

Verification Description : Checks that the database is created with 64-bit word size

Verification Result : PASSED

Verification Summary : Check for Database word size(bits) passed
Additional Details : When database is created with 32-bit word size and

upgrading database to 10.2.0.3.0 (64-bit) there are

known issues.

Database (Instance) Status Expected Value

PASSED db wordsize <> B023 rac1db db wordsize = B047

Verification Check : Duplicate SYS or SYSTEM Schema Objects

Verification Description : Checks for duplicate SYS or SYSTEM schema objects

Verification Result : PASSED

Verification Summary : Check for Duplicate SYS or SYSTEM Schema Objects passed
Additional Details : If any duplicate objects were found in the SYS and SYSTEM

schemas, refer to articles in the references section. Read

the exceptions carefully before taking action.

References (URLs/Notes) : https://support.oracle.com/CSP/main/article?cmd=show&type=N

OT&id=1030426.6

Database (Instance) Status Expected Value Actual Value

PASSED sys duplicate obj $\sim 0|4$ sys duplicate obj = 0rac1db

Verification Check : MAX DUMP FILE SIZE

Verification Description : Checks the setting of MAX DUMP FILE SIZE

Verification Result : PASSED

Verification Summary : Check for MAX_DUMP_FILE_SIZE passed
Additional Details : Initialization parameter MAX_DUMP_FILE_SIZE should be set

to 'unlimited' to avoid limiting the capture of failure and hang diagnostic data. See MOS note 30762.1 for more

information.

References (URLs/Notes) : https://support.oracle.com/CSP/main/article?cmd=show&type=N

OT&id=30762.1

Database (Instance) Status Expected Value ______

racldb(RAC1DB1) PASSED max dump file size = max dump file size =

UNLIMITED unlimited

rac1db(RAC1DB2) PASSED max_dump_file_size = max_dump_file_size =

UNLIMITED unlimited _____

Verification Check : REMOTE LISTENER

Verification Description : Checks that the REMOTE LISTENER parameter is set

Verification Result : PASSED

Verification Summary : Check for REMOTE_LISTENER passed

Additional Details : Setting the database REMOTE LISTENER parameter makes it

possible to use listener-based load balancing and failover

features.

Database(Instance) Status Expected Value Actual Value

racldb(RAC1DB1) PASSED remote_listener <> NULL remote_listener =

cluster1-scan.mynet.com:15

remote listener <> NULL remot

remote_listener =

cluster1-scan.mynet.com:15

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Verification Check : Database Datafiles in Backup Mode

Verification Description : Checks if there are any database datafiles in backup mode

Verification Result : PASSED

rac1db(RAC1DB2) PASSED

Verification Summary : Check for Database Datafiles in Backup Mode passed

Database (Instance) Status Expected Value Actual Value

rac1db PASSED files in backup = 0 files in backup = 0

Verification Check : Files Needing Media Recovery

Verification Description : Checks if there are any files needing media recovery

Verification Result : PASSED

Verification Summary : Check for Files Needing Media Recovery passed

Database (Instance) Status Expected Value Actual Value

rac1db PASSED media recovery files = 0 media recovery files = 0

Verification Check : In-doubt Distributed Transactions

Verification Description : Checks if there are any in-doubt distributed transactions

Verification Result : PASSED

Verification Summary : Check for In-doubt Distributed Transactions passed

Additional Details : Indoubt distributed transactions need to be investigated

before attempting any database upgrade. Refer the notes in the reference section for more details.

Database(Instance)	Status	Expected Value	Actual Value
rac1db	PASSED	<pre>indoubt_dist_trans = 0</pre>	<pre>indoubt_dist_trans = 0</pre>
Verification Check Verification Descri Verification Result Verification Summar Additional Details References (URLs/No	ption :	SYS-Owned Object Tables Check Checks for the presence of an PASSED Check for SYS-Owned Object Tal Refer the reference section be upgrade. https://support.oracle.com/CS OT&id=579523.1	y SYS-owned object tables bles Check passed efore proceeding with any
Database(Instance)	Status	Expected Value	Actual Value
rac1db	PASSED	sys_obj_tables = 0	sys_obj_tables = 0
Verification Result : Verification Summary : Additional Details :		Invalid Objects in dba_registry Checks for the presence of any invalid objects in dba_registry PASSED Check for Invalid Objects in dba_registry passed Checking for invalid components and objects before upgrade. There should not be any invalid objects in the database before upgrade. Prior to upgrade, resolving invalid objects under SYS and SYSTEM is mandatory. Run \$ORACLE_HOME/rdbms/admin/utlrp.sql to validate the invalid objects in the database and then re-execute multiple times, until there is no change in the number of invalid objects. https://support.oracle.com/CSP/main/article?cmd=show&type=N OT&id=556477.1	
Database (Instance)		Expected Value	Actual Value
rac1db	PASSED	<pre>invalid_registry_comp_count = 0</pre>	<pre>invalid_registry_comp_count = 0</pre>

Verification Check : Materialized View Group Refresh Jobs
Verification Description : Checks if there are any materialized view group refresh in

progress

Verification Result : PASSED

Verification Summary : Check for Materialized View Group Refresh Jobs passed

Additional Details : Before proceeding with an upgrade ensure that all snapshot

refreshes are successfully completed, and that replication

is stopped.

References (URLs/Notes) : https://support.oracle.com/CSP/main/article?cmd=show&type=N

OT&id=258021.1

Database (Instance) Status Expected Value Actual Value

rac1db PASSED mv group refresh jobs = 0 mv group refresh jobs = 0

Verification Check : Materialized View Manual Group Refresh

Verification Description : Checks if there are any materialized view group refresh in

progress

Verification Result : PASSED

Verification Summary : Check for Materialized View Manual Group Refresh passed
Additional Details : Before proceeding with an upgrade ensure that all snapshot

refreshes are successfully completed, and that replication

References (URLs/Notes) : https://support.oracle.com/CSP/main/article?cmd=show&type=N

OT&id=258021.1

Database(Instance) Status Expected Value Actual Value

PASSED mv group manual refresh = 0 mv_group_manual_refresh = 0 rac1db

Verification Check : Redo Log Size (MB)

Verification Description : Checks if the redo log size is sufficient

Verification Result : PASSED

Verification Summary : Check for Redo Log Size (MB) passed
Additional Details : Ensure that the redo logfile size is greater than 4MB when

upgrading to 11g

References (URLs/Notes) : https://support.oracle.com/CSP/main/article?cmd=show&type=N

OT&id=601807.1

Database (Instance) Status Expected Value Actual Value

rac1db PASSED redo log file less than 4mb redo log file less than 4mb

= 0 = 0

Verification Check : All tablespaces are locally managed

Verification Description : Checks that all tablespaces are locally managed Verification Result : PASSED Verification Summary : Check for All tablespaces are locally managed passed Additional Details : In order to reduce contention to the data dictionary, rollback data, and reduce the amount of generated redo, locally managed tablespaces should be used rather than dictionary managed tablespaces. References (URLs/Notes) : https://support.oracle.com/CSP/main/article?cmd=show&type=N OT&id=175434.1 https://support.oracle.com/CSP/main/article?cmd=show&type=N OT&id=105120.1 Database (Instance) Status Expected Value Actual Value PASSED no of dictionary managed ts no of dictionary managed ts Verification Check : Cluster Interconnects Verification Description : Check Cluster Interconnects Verification Result : PASSED Verification Summary : Check for Cluster Interconnects passed Database (Instance) Status Expected Value Actual Value ______ rac1db(RAC1DB1) PASSED cluster interconnects >= 1 cluster interconnects = 1 racldb(RAC1DB2) PASSED cluster interconnects >= 1 cluster interconnects = 1

Verification Check : CORE DUMP DESTINATION Verification Description : Checks CORE DUMP DEST

Verification Result : PASSED

Verification Summary : Check for CORE_DUMP_DESTINATION passed
Additional Details : Old trace files from CORE_DUMP_DEST should be archived

regularly outside of ORACLE BASE otherwise one may run out of space on ORACLE BASE mount point and may not be able to

collect diagnostic information when failure occurs.

Database (Instance) Status Expected Value rac1db(RAC1DB1) PASSED 0 rac1db(RAC1DB2) PASSED 0 0

Verification Check : database [and ASM] alert log messages indicating internal

errors (ORA-00600 errors)

Verification Result :	Checks for ORA-00600 errors in PASSED Check for database [and ASM] a internal errors (ORA-00600 errors may corruption or some serious issfile for more information next log. If you are not able to reopen service request with Orac	alert log messages indicating rors) passed y lead to database block sue. Please see the trace to ORA-00600 error in alert esolve the problem, please
Database(Instance) Status	Expected Value	Actual Value
racldb(RAC1DB1) PASSED racldb(RAC1DB2) PASSED	ORA-00600_COUNT=0 ORA-00600_COUNT=0	ORA-00600_COUNT=0 ORA-00600_COUNT=0
Verification Description : Verification Result :	database [and ASM] alert log merrors (ORA-07445 errors) Checks for ORA-07445 errors in PASSED Check for database [and ASM] a internal errors (ORA-07445 errors may corruption or some serious issifile for more information next log.If you are not able to resservice request with Oracle su	n alert log alert log messages indicating rors) passed y lead to database block sue. Please see the trace t to ORA-07445 error in alert solve the problem, Please open
Database(Instance) Status	Expected Value	Actual Value
racldb(RAC1DB1) PASSED racldb(RAC1DB2) PASSED	ORA-07445_ERR_COUNT=0 ORA-07445_ERR_COUNT=0	ORA-07445_ERR_COUNT=0 ORA-07445_ERR_COUNT=0
Verification Description : Verification Result :	Database alert log file size Checks for the size of database alert log file PASSED Check for Database alert log file size passed If alert log file is larger than 50 MB, it should be rolled over to new file and old file should be backed up.	
Database(Instance) Status	Expected Value	Actual Value
rac1db(RAC1DB1) PASSED rac1db(RAC1DB2) PASSED	0 0	0 0

Verification Check : Automatic segment storage management

Verification Description : Checks all tablespaces are using automatic segment storage

management

Verification Result : PASSED

Verification Summary : Check for Automatic segment storage management passed

Database (Instance) Status Expected Value Actual Value

rac1db PASSED auto segment space managemen auto segment space managemen

t <= 0 t = 0

Verification Check : Average GC CR Block Receive Time

Verification Description : Check Avg GC CR Block Receive Time

Verification Result : PASSED

Verification Summary : Check for Average GC CR Block Receive Time passed

Additional Details : The average gc cr block receive time should typically be

less than 15 milliseconds depending on your system

configuration and volume. This is the average latency of a consistent-read request round-trip from the requesting

instance to the holding instance and back to the

requesting instance.

Database (Instance) Status Expected Value Actual Value racldb(RAC1DB1) PASSED avg gc cr block receive time avg gc cr block receive time

<= 15

8.39689179952785601062566349

803434920235

rac1db(RAC1DB2) PASSED avg gc cr block receive time avg gc cr block receive time <= 15

11.4586954003012397172981114

586954003012

Verification Check : Automatic Undo Management

Verification Description : Check automatic undo management

Verification Result : PASSED

Verification Summary : Check for Automatic Undo Management passed

Additional Details : Oracle provides a fully automated mechanism, referred to

as automatic undo management, for managing undo

information and space. In this management mode, you create an undo tablespace, and the server automatically manages

undo segments and space among the various active

sessions. You should set the UNDO MANAGEMENT initialization

parameter to AUTO to enable automatic undo management.

Database(Instance)	Status	Expected Value	Actual Value
rac1db(RAC1DB1)	PASSED	undo_management = AUTO	undo_management = AUTO
rac1db(RAC1DB2)	PASSED	undo_management = AUTO	undo_management = AUTO