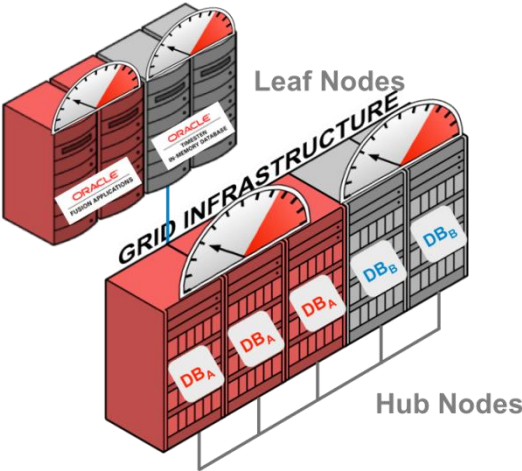


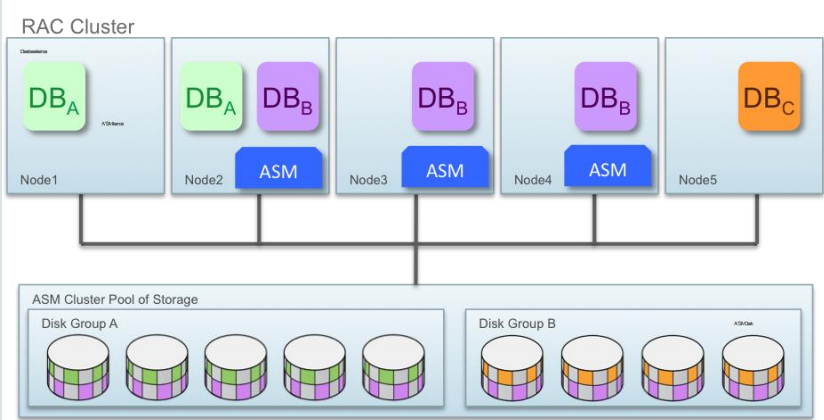
What's Next with Oracle RAC?

Sandesh Rao
Senior Director, Oracle Real Application Clusters (RAC)
Database Development

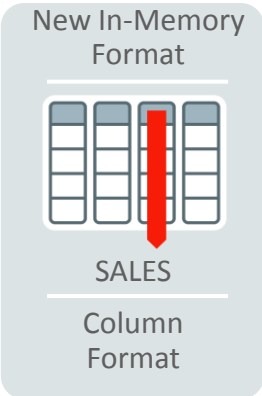
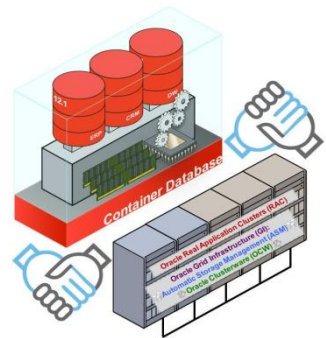
Oracle RAC 12c Rel. 1 Features – The Standard Going Forward



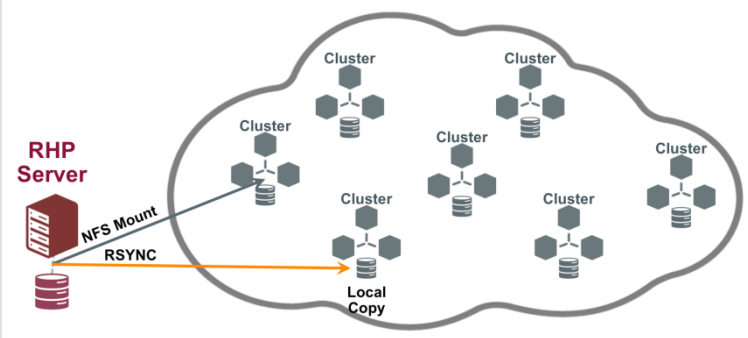
Flex Cluster



Flex ASM



Full Oracle Multitenant & In-Memory Support



Rapid Home Provisioning (RHP)

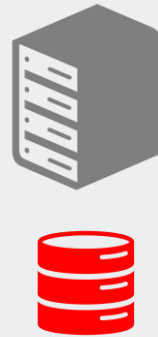
<http://www.slideshare.net/MarkusMichalewicz/oracle-database-inmemory-meets-oracle-rac>



Gold Images and their working copies

Working copies maintain lineage with gold image

RHP Server



Apps

WLS 12.2.1

WLS 12.1.3

CRM 8.1.1

Generic DB

11.2.0.4 PSU1

11.2.0.4 PSU2

11.2.0.4 PSU3

SAP DB

11.2.0.4 SAP-1

11.2.0.4 SAP-2

Generic DB

12.1.0.2

12.1.0.2 PSU1

12.1.0.2 PSU2

RHP Targets



Provision New Database

1. Working copy is created
2. Database files are instantiated

12102 PSU1 WCPY



Provision New Home

1. Working copy is created

12102 PSU2 WCPY

Expanded Oracle Stack Coverage by EXAchk/ORAchk



- **Engineered Systems**
 - Oracle Exadata Database Machine
 - Oracle SuperCluster
 - Oracle Private Cloud Appliance
 - Oracle Database Appliance
 - Oracle Big Data Appliance
 - Oracle Exalogic Elastic Cloud
 - Oracle Exalytics In-Memory Machine
 - Oracle Zero Data Loss Recovery Appliance
 - Oracle ZFS Storage Appliance
- **ASR**
- **Systems**
 - Oracle Solaris
 - Solaris Cluster
 - Oracle Virtual Networking(OVN)
- **Oracle Database**
 - Standalone Database
 - Grid Infrastructure & RAC
 - Maximum Availability Architecture (MAA) Scorecard
 - Upgrade Readiness Validation
 - Golden Gate
- **Enterprise Manager Cloud Control**
 - Repository
 - Agent
 - OMS
- **Middleware**
 - Application Continuity
 - Oracle Identify and Access Management Suite (Oracle IAM)
- **E-Business Suite**
 - Oracle Payables
 - Oracle Workflow
 - Oracle Purchasing
 - Oracle Order Management
 - Oracle Process Manufacturing
 - Oracle Receivables
 - Oracle Fixed Assets
 - Oracle HCM
 - Oracle CRM
 - Oracle Project Billing
- **Siebel**
 - Database best practices
- **PeopleSoft**
 - Database best practices
- **SAP**
 - EXAdata best practices

Oracle 12c ORAchK/Exachk

Baseline and Maintain Entire Oracle Stack

- **Proactively scan** for the most impactful known problems
- Receive built-in email notifications and diff reporting via new Daemon Mode
- Investigate and analyzes known issues
- See your system health risks in reports
- Drill down into specific problems and understand their resolutions
- Use **ORAchK Collection Manager** dashboard for managing multiple systems

Oracle Exadata Assessment Report

System Health Score is 89 out of 100 (detail)

Cluster Summary

Cluster Name	cluster-clu1
OS/Kernel Version	LINUX X86-64 OELRHHEL 5 2.6.39-400.124.1.el5uek
CRS Home - Version	/u01/app/11.2.0.4/grid - 11.2.0.4.1
DB Home - Version - Names	/u01/app/oracle/product/11.2.0.4/dbhome_1 - 11.2.0.4.1 - dbm
EM Agent Home	/u01/app/oracle/em/agent_haem/core/12.1.0.5.0
Exadata Version	11.2.3.3.0
Number of nodes	9
Database Servers	2
Storage Servers	3
IB Switches	4
exachk Version	12.1.0.2.6(BETA)_20160125
Collection	exachk_randomadm07_dbm_012516_141503.zip
Duration	10 mins, 49 seconds
Executed by	root
Collection Date	25-Jan-2016 14:15:39

Note! This version of exachk is considered valid for 120 days from today or until a new version is available

NOTE : exachk is only one part of the MAA Best Practices recommendation methodology. My Oracle Support "Oracle Exadata Best Practices (Doc ID757552.1)" should be reviewed thoroughly as it is the driver for exachk and contains additional operational and diagnostic guidance that is not programmed within exachk.

WARNING! The data collection activity appears to be incomplete for this exachk run. Please review the "Killed Processes" and / or "Skipped Checks" section and refer to "Appendix A - Troubleshooting Scenarios" of the "Exachk User Guide" for corrective actions.

View OraChk/EXAchk Report

- Table of content
- Controls for report features
 - Checks which passed are not shown by default
 - Quickly show or hide checks based on their status
 - Show or hide major sections of the report
 - Collapse or expand check findings
 - Show check Ids
 - Remove the findings from the report – This doesn't change the report but optionally hides findings on a check by check basis
 - Display a printable view

Table of Contents

- [Database Server](#)
- [Storage Server](#)
- [InfiniBand Switch](#)
- [Cluster Wide](#)
- [Maximum Availability Architecture \(MAA\) Scorecard](#)
- [Infrastructure Software and Configuration Summary](#)
- [Findings needing further review](#)
- [Platinum Certification](#)
- [Systemwide Automatic Service Request \(ASR\) healthcheck](#)
- [Skipped Checks](#)
- [Top 10 Time Consuming Checks](#)

Report Feature

- ☐ Show Failed checks only
- Show checks with the following status:
 - ☒ Fail ☒ Warning ☒ Info ☐ Pass
- Show details of the following regions:
 - ☒ Maximum Availability Architecture (MAA) Scorecard
 - ☒ Infrastructure Software and Configuration Summary
 - ☒ Platinum Certification
 - ☒ Findings needing further review
 - ☒ Systemwide Automatic Service Request (ASR) healthcheck
 - ☒ Skipped Checks
 - ☒ Top 10 Time Consuming Checks
- Show details of the checks:
 - ☐ Expand All ☒ Collapse All
- [Show Check Ids](#)
- [Remove finding from report](#)
- [Printable View](#)

View Orachk/EXAchk Findings

- Check status
- Type of Check
- Check Message
- Where the check was run
- Link to expand details

Database Server

Status	Type	Message	Status On	Details
FAIL	SQL Parameter Check	ASM parameter SGA_TARGET is NOT set according to recommended value.	All Instances	View
WARNING	Patch Check	Patch 16618055 not is applied on RDBMS_HOME	All Homes	View
WARNING	OS Check	Database parameter _enable_NUMA_support should be set to recommended value	All Database Servers	View
INFO	SQL Check	Direct NFS Client is NOT enabled	All Databases	View

Storage Server

Status	Type	Message	Status On	Details
FAIL	Storage Server Check	Active system values should match those defined in configuration file "cell.conf"	All Storage Servers	View

InfiniBand Switch

Status	Type	Message	Status On	Details
WARNING	Switch Check	Subnet manager daemon is not running	randomsw-iba0	View
WARNING	Switch Check	sm_priority is not set to recommended value	randomsw-ib01, randomsw-ibs0	View

Cluster Wide

Status	Type	Message	Status On	Details
FAIL	Cluster Wide Check	Firmware version does not match on all Infiniband switches	Cluster Wide	View
FAIL	Cluster Wide Check	Localtime configuration does not match on all Infiniband switches	Cluster Wide	View

View Recommendations

- What to do to solve the problem
- Links to relevant Knowledge docs
- Where recommendation applies
- Where problem doesn't apply
- Example of data the recommendation is based on

Database Server

Status	Type	Message	Status On	Details
FAIL	SQL Parameter Check	ASM parameter SGA_TARGET is NOT set according to recommended value.	All Instances	View
WARNING	Patch Check	Patch 16618055 not is applied on RDBMS_HOME	All Homes	View
WARNING	OS Check	Database parameter _enable_NUMA_support should be set to recommended value	All Database Servers	Hide

Verify database parameter _enable_NUMA_support

Recommendation	NUMA enabled in the database on all Exadata 8 socket servers boosts overall application performance. NUMA enabled in the database on Exadata generation X5 2 socket servers boosts performance of memory scan intensive workloads, for example IMDB. As of Oracle RDBMS release 12.1.0.2.6 and above, the enabling of NUMA in the database is automatic so no action is necessary on any Exadata platform. For any Exadata platform using 12.1.0.5 or lower, please reference the recommended value. NUMA support in the database should always be off on Exadata OVM.
Needs attention on	randomadm07
Passed on	-

Status on randomadm07:

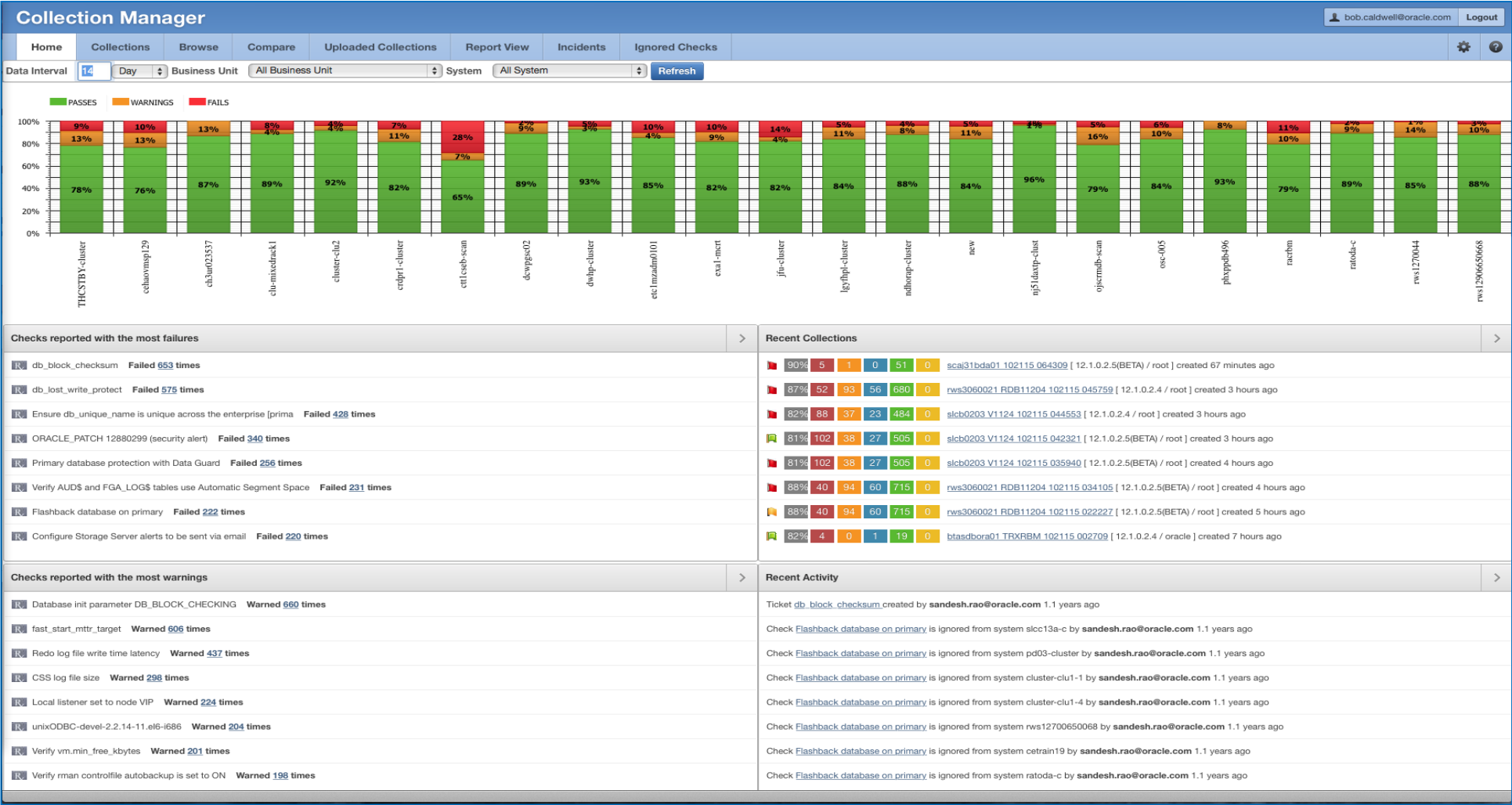
WARNING => Database parameter _enable_NUMA_support should be set to recommended value

DATA FROM RANDOMADM07 - DBM DATABASE - VERIFY DATABASE PARAMETER _ENABLE_NUMA_SUPPORT

_enable_NUMA_support = FALSE
isdefault = FALSE

INFO	SQL Check	Direct NFS Client is NOT enabled	All Databases	View
------	-----------	----------------------------------	---------------	----------------------

Oracle 12c ORAchk – Collection Manager



Main Collections Dashboard

Oracle 12c ORAchk – Collection Manager

Collection Manager												
<div> Home Collections Browse Compare Uploaded Collections Report View Incidents Ignored Checks </div>												
<div> Data Interval: 14 Day Business Unit: All Business Unit System: All System Refresh </div>												
<div> Search for collection: Clear Filter by Profiles: Ignore Data Interval: </div>												
Collection Date	Incident	Collection Name	Profiles	Alert Flag	Score	Fail#	Warning#	Info#	Pass#	Ignores#	BU/SYS Info	Version / User
21-OCT-2015 06:43:47	▲	scaj31bda01_102115_064309	All	🚩	90%	5	1	0	51	0	DEFAULT: scaj31bda01	12.1.0.2.5(BETA)_20151021 / root
21-OCT-2015 05:01:24	▲	rws3060021_RDB11204_102115_045759	All	🚩	87%	52	93	56	680	0	DEFAULT: rws30602124	12.1.0.2.4_20150702 / root
21-OCT-2015 04:46:40	▲	slcb0203_V1124_102115_044553	All	🚩	82%	88	37	23	484	0	DEFAULT: slcb02-clust3	12.1.0.2.4_20150702 / root
21-OCT-2015 04:24:10	▲	slcb0203_V1124_102115_042321	All	🚩	81%	102	38	27	505	0	DEFAULT: slcb02-clust3	12.1.0.2.5(BETA)_20151021 / root
21-OCT-2015 04:00:28	▲	slcb0203_V1124_102115_035940	All	🚩	81%	102	38	27	505	0	DEFAULT: slcb02-clust3	12.1.0.2.5(BETA)_20151021 / root
21-OCT-2015 03:44:35	▲	rws3060021_RDB11204_102115_034105	All	🚩	88%	40	94	60	715	0	DEFAULT: rws30602124	12.1.0.2.5(BETA)_20151021 / root
21-OCT-2015 02:25:47	▲	rws3060021_RDB11204_102115_022227	All	🚩	88%	40	94	60	715	0	DEFAULT: rws30602124	12.1.0.2.5(BETA)_20151021 / root
21-OCT-2015 00:32:45	▲	btasdbora01_TRXRBM_102115_002709	asm	🚩	82%	4	0	1	19	0	DEFAULT: racrbm	12.1.0.2.4_20150702 / oracle
21-OCT-2015 00:09:43	▲	btasdbora01_TRXRBM_102115_000613	clusterware	🚩	90%	0	6	5	34	0	DEFAULT: racrbm	12.1.0.2.4_20150702 / oracle
20-OCT-2015 22:52:48	▲	btasdbora01_TRXRBM_102015_224932	dba	🚩	82%	34	29	36	228	0	DEFAULT: racrbm	12.1.0.2.4_20150702 / oracle
20-OCT-2015 22:34:25	▲	rws3060021_RDB11204_102015_223059	All	🚩	89%	41	86	56	718	0	DEFAULT: rws30602124	12.1.0.2.5(BETA)_20151020 / root
20-OCT-2015 20:47:13	▲	slcb0203_V1124_102015_204624	All	🚩	78%	86	36	27	368	0	DEFAULT: slcb02-clust3	12.1.0.2.5(BETA)_20151020 / root
20-OCT-2015 20:09:00	▲	slcb0203_V1124_102015_200811	All	🚩	78%	86	38	27	369	0	DEFAULT: slcb02-clust3	12.1.0.2.5(BETA)_20151020 / root
20-OCT-2015 20:07:56	▲	rws3060021_RDB11204_102015_200441	All	🚩	87%	22	56	43	354	0	DEFAULT: rws30602124	12.1.0.2.5(BETA)_20151020 / oradb
20-OCT-2015 14:22:40	▲	slcb0203_V1124_102015_142150	All	🚩	78%	86	38	27	369	0	DEFAULT: slcb02-clust3	12.1.0.2.5(BETA)_20151020 / root
20-OCT-2015 13:44:11	▲	d2wipds22c001_ox5p1_102015_134203	All	🚩	84%	25	47	38	255	0	DEFAULT: wrnp22oc01	12.1.0.2.4_20150702 / oracle
20-OCT-2015 07:58:31	▲	cehaovmsp129_sldb_102015_075813	All	🚩	82%	18	28	17	143	0	DEFAULT: cehaovmsp129	12.1.0.2.4_20150702 / oracle
20-OCT-2015 07:23:28	▲	cehaovmsp129_sldb_102015_072310	All	🚩	81%	26	26	18	158	0	DEFAULT: cehaovmsp129	12.1.0.2.5(BETA)_20151020 / oracle
20-OCT-2015 07:21:36	▲	rws3060021_RDB11204_102015_071822	All	🚩	87%	52	94	52	683	0	DEFAULT: rws30602124	12.1.0.2.4_20150702 / root
20-OCT-2015 06:47:58	▲	cehaovmsp129_sldb_102015_064740	All	🚩	81%	26	26	18	158	0	DEFAULT: cehaovmsp129	12.1.0.2.5(BETA)_20151020 / oracle
20-OCT-2015 06:12:53	▲	rws3060021_RDB11204_102015_060935	All	🚩	89%	38	87	56	720	0	DEFAULT: rws30602124	12.1.0.2.5(BETA)_20151020 / root
20-OCT-2015 05:02:34	▲	rws3060021_RDB11204_102015_045917	All	🚩	89%	38	87	59	717	0	DEFAULT: rws30602124	12.1.0.2.5(BETA)_20151020 / root
20-OCT-2015 04:49:45	▲	slcac460_test1_102015_044839	All	🚩	91%	3	26	12	172	0	DEVELOPMENT: ratoda-c	12.1.0.2.4_20150702 / oracle
20-OCT-2015 04:25:05	▲	slcb0203_V1124_102015_042415	All	🚩	82%	89	37	23	483	0	DEFAULT: slcb02-clust3	12.1.0.2.4_20150702 / root
20-OCT-2015 04:07:16	▲	slcb0203_V1124_102015_040628	All	🚩	78%	86	36	27	368	0	DEFAULT: slcb02-clust3	12.1.0.2.5(BETA)_20151020 / root
20-OCT-2015 04:03:54	▲	scab01db04_dbm01_102015_040218	All	🚩	90%	69	46	20	895	0	DEFAULT: clu-mixedrack1	12.1.0.2.4_20150702 / root
20-OCT-2015 03:58:44	▲	slcac460_test1_102015_035738	All	🚩	90%	3	26	12	164	0	DEVELOPMENT: ratoda-c	12.1.0.2.5(BETA)_20151020 / oracle
20-OCT-2015 03:48:45	▲	slcb0203_V1124_102015_034758	All	🚩	78%	86	36	27	368	0	DEFAULT: slcb02-clust3	12.1.0.2.5(BETA)_20151020 / root

Collections List View

Oracle 12c ORAchk – Collection Manager

Collection Manager

bob.caldwell@oracle.com

Logout

HomeCollectionsBrowseCompareUploaded CollectionsReport ViewIncidentsIgnored Checks

Data Interval14DayBusiness UnitAll Business UnitSystemAll SystemRefresh

DB Version-- Select DB Version --Platform-- Select OS Platform --☐ Show Only Collections With Patch Results

Above are filters to narrow down the below collections list

Collection1scaj31bda01 101215 213327Collection2scaj31bda01 102115 064309Audit Checks DiffReset PageSwitch to New

Health Checks Baseline Comparison Report

Note: These collections were taken with different versions of the tool. Newer versions could have more checks or some checks may have changed accounting for some differences between the collections

Collections Details

Checks Differed

Check Name	Status1	StatusMsg1	Act Values1	Hostname1	DBName1	InstName1	Status2	StatusMsg2	Act Values2	Hostname2	DBName2	InstName2
Check Local Disk Usage Limit	PASS	The root partition of the local disk has enough free space. View		scaj31bda05		NA	FAIL	Usage of the root partition of the local disk is above 90% of its capacity View		scaj31bda05		NA

1 - 1

Unique findings in collection1

1 - 11

Check Name	Status	Status Message	Act Values	Hostname	DB Name	Instance Name
Verify InfiniBand Cable Connection Quality	PASS	All InfiniBand network cables are connected View		scaj31bda03		NA
Verify DNS Setup	PASS	The DNS service is configured correctly. View		scaj31bda03		NA
Verify BDA Hardware Profile -- Warning	PASS	Big Data Appliance hardware validation checks succeeded - NO WARNINGS. View		scaj31bda03		NA
Verify MTU Size	PASS	The MTU size is set to the recommended value View		scaj31bda03		NA
Check Local Disk Usage Limit	PASS	The root partition of the local disk has enough free space. View		scaj31bda03		NA
Verify ILOM Power Up Configuration	PASS	ILOM power up is configured View		scaj31bda03		NA
Verify BDA Hardware Profile -- Failure	PASS	Big Data Appliance hardware validation checks succeeded - NO ERRORS. View		scaj31bda03		NA
Verify BDA Software Profile -- Failure	PASS	Big Data Appliance software validation checks succeeded without any errors View		scaj31bda03		NA
Verify NTP Synchronization	PASS	NTP is synchronized. View		scaj31bda03		NA
Verify BDA Software Profile -- Warning	PASS	Big Data Appliance software validation checks succeeded without any warnings. View		scaj31bda03		NA
Verify Subnet Manager	PASS	The master subnet manager (SM) is properly configured. View		scaj31bda03		NA

Compare Baselines View



Oracle 12c ORAchk – Collection Manager

Collection Manager

bob.caldwell@oracle.com Logout

HomeCollectionsBrowseCompareUploaded CollectionsReport ViewIncidentsIgnored Checks

Data Interval14DayBusiness UnitAll Business UnitSystemAll SystemRefresh

Administration

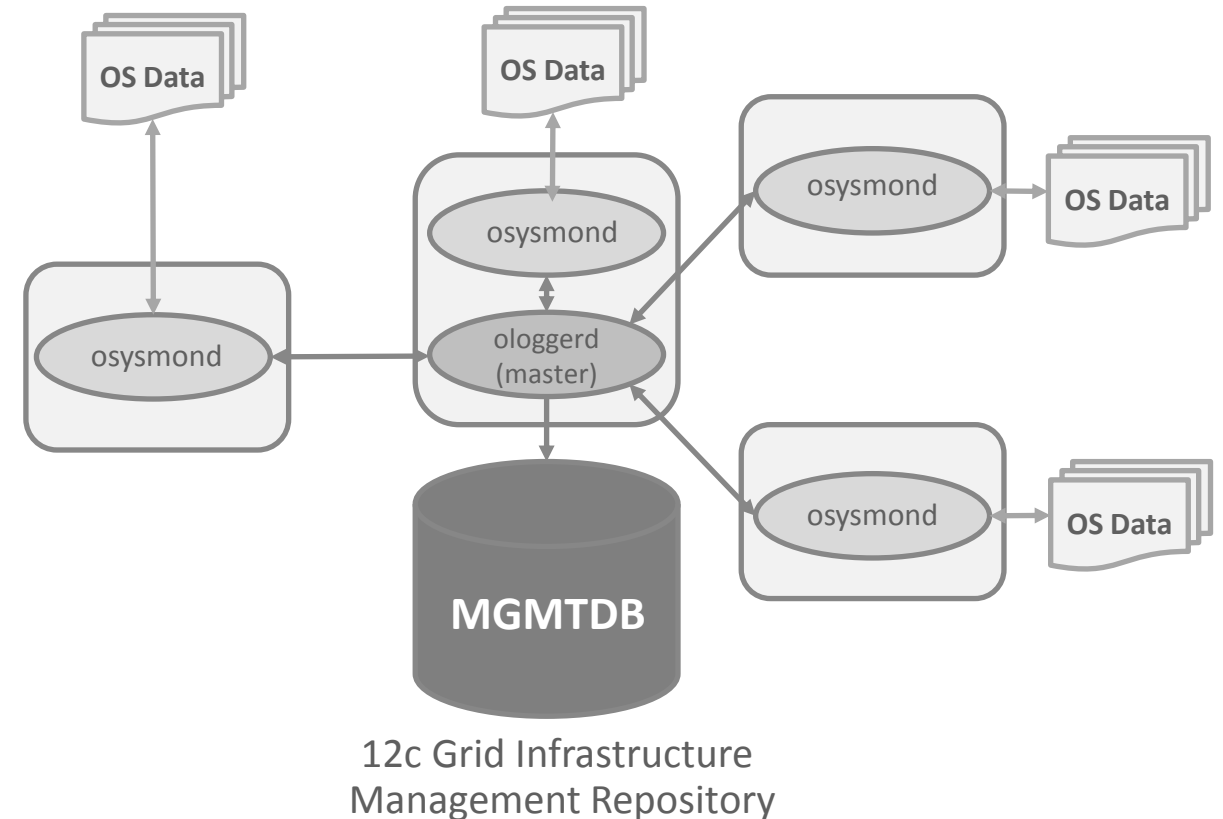
Administration	Manage Data & Other stuff
<div> Products Manage products with drill down to manage product versions</div>	<div> Manage Business Unit When Access Control is enabled, Admins can define the Business Unit and assign users to it to control the collections.</div>
<div> Category Manage categories which are used to classify tickets.</div>	<div> Assign System to Business Unit Admin will have access to assign System to Business Unit. A System belongs to only one Business Unit.</div>
<div> Customers Manage and report on customer information.</div>	<div> Manage User Roles and assign System to users 1. Admin can Add/Delete Admins, DBA managers and assigning DBA's to DBA managers. 2. Admin can assigning Business Unit to DBA managers. 3. One DBA/DBA manager can belong to more than one Business Unit. One Business Unit can have more than one dba/dba managers. DBA Manager will have access to whole Business Unit and DBA's will have access to only particular System of Business Unit. 4. DBA Managers can add/remove DBA's for the units they have access to. 5. DBA's doesn't have access to ACL System.</div>
<div> Customer Contacts Search and locate customer contacts</div>	<div> Delete data Where you can delete data older than certain time</div>
<div> Notifications Define notifications that are displayed on the application home page. Use notifications to alert users of important information. You will see notification in Home page.</div>	<div> Manage Notifications Where you can (un)register for notifications and manage notifications. Please make sure that email server is configured. Please check with admin.</div>
<div> Application Error Log Report of all internal errors encountered within the application.</div>	
<div> Manage Email Server & Job Details Please enter valid email server name and port values.</div>	
Manage Look Up Codes	Access Control (Disabled)
<div> Status Codes</div>	<div> Enable Enabling Access Control allows access to the application and its features to be controlled by an Access Control List (ACL). Until access control is enabled all authenticated users are administrators.</div>
<div> Incident Severity</div>	
<div> Urgency</div>	
<div> Preferences</div>	

Administration Console

Cluster Health Monitor (CHM)

Diagnostic Metric View of Cluster and Databases

- Always on - Enabled by default
- Detailed OS Resource Metrics
- Node eviction analysis
- Local logging of process data
- User defined pinned processes



Oracle 12c Trace File Analyzer Collector

Speeds Issue Diagnosis and Resolution

- Always on – Enabled by default
- Improved comprehensive first failure diagnostics collection
- Efficient collection, packaging and transfer of data for Customers to Support
- Reduce round trips between Customers and Oracle
- Supports Database 10.2 and above
- Included in the 11.2.0.4 and 12.1.0.2 patchsets, PSUs and future versions

```

$ tfactl diagcollect
Collecting data for the last 4 hours for all components...
Collecting data for all nodes

Collection Id : $ tfactl analyze -type generic -since 24h
INFO: analyzing all (Alert and Unix System Logs) logs for the last 1440 minutes... Please wait...
INFO: analyzing host: myHost1

Repository Location: /u01/tfa/myHost1/tfa_home/ext/tnt/conf/tnt.prop
Report title: Analysis of Alert, System Logs
Report date range: last ~1 day(s)
Report (default) time zone: PST - Pacific Standard Time
Analysis started at: 25-Sep-2014 01:52:01 PM PDT
Elapsed analysis time: 1 second(s)
Configuration file: /u01/tfa/myHost1/tfa_home/ext/tnt/conf/tnt.prop
Configuration group: all
Total message count: 4,539, from 30-Jul-2014 11:59:39 PM PDT to 25-Sep-2014 01:51:54 PM PDT
Messages matching last ~1 day(s): 258, from 24-Sep-2014 01:54:53 PM PDT to 25-Sep-2014 01:51:54 PM PDT
last ~1 day(s) generic count: 258, from 24-Sep-2014 01:54:53 PM PDT to 25-Sep-2014 01:51:54 PM PDT
last ~1 day(s) ignored generic count: 0
last ~1 day(s) unique generic count: 39

Message types for last ~1 day(s)
Occurrences percent server name type
-----
258 100.0% myHost1 generic

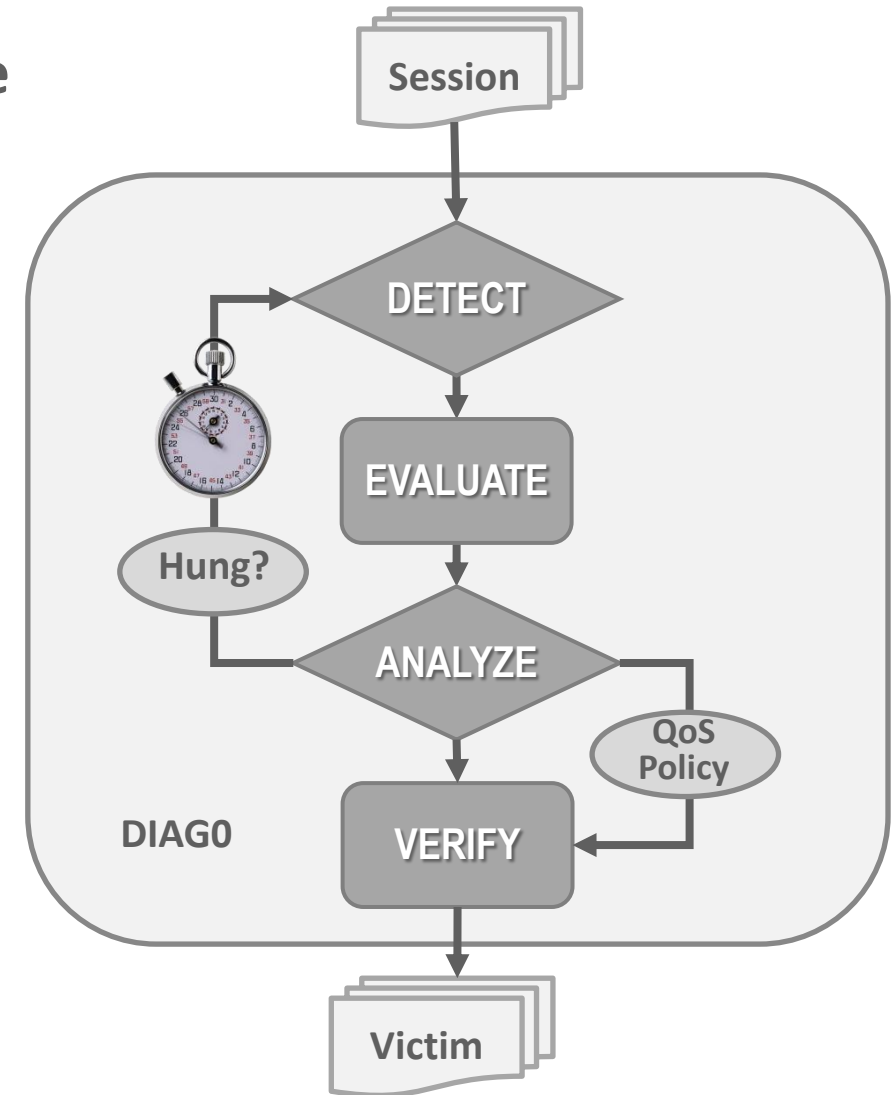
Unique generic messages for last ~1 day(s)
Occurrences percent server name generic
-----
216 83.7% myHost1 myHost1 init: Id "co" respawning too fast: disabled for 5 minutes
3 1.2% myHost1 myHost1 CLSD: The clock on host myHost1 has been updated by the Cluster Time
Synchronization Service to be synchronous with the mean cluster time.
3 1.2% myHost1 [OCTSSD(12358)]CRS-2408: The clock on host myHost1 has been updated by the Cluster
Time Synchronization Service to be synchronous with the mean cluster time.
1 0.4% myHost1 Thread 2 advanced to log sequence 232 (LGWR switch)
Current log# 4 seq# 232 mem# 0:
+DATA12102/CDB12102/ONLINELOG/group_4.270.854340625
1 0.4% myHost1 myHost1 kernel: cgrep[7720]: segfault at 0 ip 00000004e7365cc sp 00000000ff8bfe3c
error 4 in libc-2.5.so[4e6df000+152000]
1 0.4% myHost1 Thread 2 advanced to log sequence 235 (LGWR switch)
Current log# 3 seq# 235 mem# 0:
+DATA12102/CDB12102/ONLINELOG/group_3.269.854340625
1 0.4% myHost1 [CLSECHO(2332)]CRS-10001: 24-Sep-14 14:40 AFD-9204: false
1 0.4% myHost1 [CLSECHO(27286)]CRS-10001: 24-Sep-14 20:40 AFD-9204: false
1 0.4% myHost1 TABLE SYS.WRP$_REPORTS: ADDED INTERVAL PARTITION SYS_P816 (1729) VALUES LESS THAN
(TO_DATE(' 2014-09-26 01:00:00', 'YYYY-MM-DD HH24:MI:SS', 'NLS_CALENDAR=GREGORIAN'))
TABLE SYS.WRP$_REPORTS_DETAILS: ADDED INTERVAL PARTITION SYS_P817 (1729) VALUES
LESS THAN (TO_DATE(' 2014-09-26 01:00:00', 'YYYY-MM-DD HH24:MI:SS', 'NLS_CALENDAR=GREGORIAN'))

```

Oracle 12c Hang Manager

Autonomously preserve Your Database Performance

- Always on - Enabled by default
- Reliably detects database hangs and deadlocks
- Autonomously resolves them
- Supports QoS Performance Classes, Ranks and Policies to maintain SLAs
- Logs all detections and resolutions



Oracle 12c Hang Manager

Full Resolution Dump Trace File and DB Alert Log Audit Reports

Dump file .../diag/rdbms/hm6/hm62/incident/incdir_5753/hm62_dia0_12656_i5753.trc

Oracle Database 12c Enterprise Edition Release 12.2.0.0.0 - 64bit Beta
With the Partitioning, Real Application Clusters, OLAP, Advanced Analytics
and Real Application Testing options

Build label: RDBMS_MAIN_LINUX.X64_151013

ORACLE_HOME: .../3775268204/oracle

System name: Linux

Node name: slc05kyr

Release: 2.6.39-400.211.1.el6uek.x86_64

Version: #1 SMP Fri Nov 15 13:39:16 PST 2013

Machine: x86_64

VM name: Xen Version: 3.4 (PVM)

Instance name: hm62

Redo thread mounted by this instance: 2

Oracle process number: 19

Unix process pid: 12656, image: oracle@slc05kyr (DIA0)

*** 2015-10-13T16:47:59.541509+17:00

*** SESSION ID:(96.41299) 2015-10-13T16:47:59.541519+17:00

*** CLIENT ID:() 2015-10-13T16:47:59.541529+17:00

*** SERVICE NAME:(SYS\$BACKGROUND) 2015-10-13T16:47:59.541538+17:00

*** MODULE NAME:() 2015-10-13T16:47:59.541547+17:00

*** ACTION NAME:() 2015-10-13T16:47:59.541556+17:00

*** CLIENT DRIVER:() 2015-10-13T16:47:59.541565+17:00

2015-10-13T16:47:59.435039+17:00

Errors in file /oracle/log/diag/rdbms/hm6/hm6/trace/hm6_dia0_12433.trc (incident=7353):

ORA-32701: Possible hangs up to hang ID=1 detected

Incident details in: .../diag/rdbms/hm6/hm6/incident/incdir_7353/hm6_dia0_12433_i7353.trc

2015-10-13T16:47:59.506775+17:00

DIA0 requesting termination of session sid:40 with serial # 43179 (ospid:13031) on instance 2
due to a GLOBAL, HIGH confidence hang with ID=1.

Hang Resolution Reason: Automatic hang resolution was performed to free a
significant number of affected sessions.

DIA0: Examine the alert log on instance 2 for session termination status of hang with ID=1.

In the alert log on the instance local to the session (instance 2 in this case),
we see the following:

2015-10-13T16:47:59.538673+17:00

Errors in file .../diag/rdbms/hm6/hm62/trace/hm62_dia0_12656.trc (incident=5753):

ORA-32701: Possible hangs up to hang ID=1 detected

Incident details in: .../diag/rdbms/hm6/hm62/incident/incdir_5753/hm62_dia0_12656_i5753.trc

2015-10-13T16:48:04.222661+17:00

DIA0 terminating blocker (ospid: 13031 sid: 40 ser#: 43179) of hang with ID = 1
requested by master DIA0 process on instance 1

Hang Resolution Reason: Automatic hang resolution was performed to free a
significant number of affected sessions.

by terminating session sid:40 with serial # 43179 (ospid:13031)

For Further Information

- [Oracle 12c Clusterware Admin Guide](#)
- [Oracle Clusterware on OTN](#)
- [Oracle QoS Management 12c Documentation](#)
- [Oracle QoS Management on OTN](#)
- [Oracle 12c ORAchk](#)
- [Oracle 12c Trace File Analyzer](#)