



Exachk Feature and Issue Fix History

Version 2.2.2

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Purpose

This document provides the history of new features and issues fixed for prior versions of the exachk tool.

What's New By Version

Version 2.2.1_20130506:

No new functionality is added with this interim release

Version 2.2.1_20130228:

Major New Functionality:

- Database server parallel data collection
- Command line parameters for specifying components
- Command line profiles to run subsets of checks
- Utility to compare two reports and list differences
- Option to omit passed checks
- Counter to 90 day expiration limit to encourage regular updates
- nm2user userid is used for IB switch checks instead of root userid

Checks added:

- Check for Exadata critical issue EX12 (mos note 1270094.1)
- Check for Exadata critical issue EX11 (mos note 1270094.1)
- Check for Exadata critical issue DB16 (mos note 1270094.1)
- Check for Exadata critical issue DB17 (mos note 1270094.1)
- Check for alternate hot spare configuration in 11.2.3.2.1
- Verify database server logical volumes maximum mount count
- Verify service exachkcfg autostart status on database server
- Verify no asm external redundancy diskgroups exist
- Verify no asm unprotected templates exist
- Verify bundle patch version installed matches bundle patch version registered in database
- Verify 11.2.0.3 BP9 or greater if Write Back Flash Cache in use
- Verify hidden database initialization parameter usage
- Verify asm content type attribute in use for standard diskgroups

Checks removed:

None

NOTE: "Checks removed" does not typically indicate a loss of functionality, but that there is some other mechanism in base code that has taken over the purpose of this check, or a prior restriction has been lifted.

Issues Fixed By Version

Version 2.2.1_20130506:

Bug Num	Fixed	Description
16750919	2.2.1	under certain conditions, an environment variable may be retained

Version 2.2.1_20130228:

Bug Num	Fixed	Description
16423634	2.2.1	modify "verify exadata smart flash cache is created" for 1/8th rack
16411125	2.2.1	add check for alternate hot spare configuration in 11.2.3.2.1
16410261	2.2.1	check_env.out file has exadata_dbm_x2_2 = 1 on a 1/8th rack
16410114	2.2.1	with iaas enabled, all nodes are exadata_version = x2-3 in checkenv.out
16370332	2.2.1	"ora-01034: oracle not available" in exachk_error.log
16362753	2.2.1	incorrect result in check "verify bundle patch version installed matches..."
16356976	2.2.1	add check for exadata critical issue db17 (mos note 1270094.1)
16356401	2.2.1	html fail message for remote_listener potentially confusing
16345757	2.2.1	oracle net service name to ship redo to the standby is not configured properly
16293125	2.2.1	add check for exadata critical issue db16 (mos note 1270094.1)
16292792	2.2.1	add check for critical issue ex12
16277008	2.2.1	syntax ld_library_path=\${...} fails when ld_library_path set
16270674	2.2.1	add function to compare two exachk reports on local linux host
16245035	2.2.1	add "verify database server logical volumes maximum mount count"
16237591	2.2.1	exachk not detecting fix for ex3
16232489	2.2.1	add "verify service exachkcfg autostart status on database server
16219234	2.2.1	add check "verify no asm external redundancy diskgroups exist"
16219226	2.2.1	add check "verify no asm unprotected templates exist"
16219076	2.2.1	add check "verify bundle patch version installed matches bundle patch version.."
16105343	2.2.1	modify "exachkcfg daemon auto start status on storage servers"
16104998	2.2.1	add check for exadata critical issue ex11 (mos note 1270094.1)
16099292	2.2.1	exachk output display # days until version obsolete
16081291	2.2.1	default of "set timing on" in oracle userid profile breaks exachk
16068045	2.2.1	remove "sucess factors" text from html report
16032818	2.2.1	unable to verify root password for ib switch
16025222	2.2.1	modify "number of mounts before a file system check" to include logical volumes
16012455	2.2.1	verify 11.2.0.3 bp 9 or greater if write back flash cache in use
16012241	2.2.1	identify database server hardware types individually, rather than on rack basis
16005836	2.2.1	add suport for iaas
15999335	2.2.1	watcher script does not clean all child processes
15973548	2.2.1	exachk not detecting fix for ex5 (bug 12626126)
15971495	2.2.1	list db/storage servers and ib switches that could not be pinged in html report
15892981	2.2.1	add check "verify hidden database initialization parameter usage "
15889833	2.2.1	exachk report giving false errors
14844904	2.2.1	exachk can not collect storage server information when known_host has old keys
14712331	2.2.1	add 3 checks to verify asm content type attribute in use for standard diskgroups
14699603	2.2.1	exachk is reporting cssmiscount error
14383981	2.2.1	replace root user with nm2user for ib switch checks
14148570	2.2.1	add optional switch to review only a component level, i.e., storage servers
14142007	2.2.1	add database servers to parallel data collection

Version 2.2.0

Major New Functionality:

- Support for Oracle SPARC SuperCluster (SSC)
- Increased support for X3 series hardware
- Parallel data collection for storage servers and InfiniBand switches

Automated Service Request (ASR) configuration validation
Support for mixed hardware in same rack (V2 and X2-2)
Improved MAA Scorecard

Checks added:

Version 2.2.0_20130109:

Check for Exadata critical issue ex9 (mos note 1270094.1)
Check for Exadata critical issue ex10 (mos note 1270094.1)

Version 2.2.0_20121109:

Verify AUD\$ and FGA_LOG\$ tables use Automatic Segment Space Management
Verify Shared Servers do not perform serial full table scans
Verify operating system hugepages count satisfies total SGA requirements

Checks removed:

None

NOTE: "Checks removed" does not typically indicate a loss of functionality, but that there is some other mechanism in base code that has taken over the purpose of this check, or a prior restriction has been lifted.

Version 2.1.6

Major New Functionality:

Enhanced MAA scorecard
Debug functionality for "expect" command during remote connection
ADA compatibility improvements in ExachkUserGuide and HTML report

Checks added:

Exadata Critical Issue DB14
Exadata Critical Issue DB13
MAA Scorecard "log_archive_config"
MAA Scorecard "block corruptions"
MAA Scorecard "redo log file size"
MAA Scorecard "database archive mode"
MAA Scorecard "software maintenance best practices"
Verify Solaris dynamic shared memory (dism) is not used on x86 systems

Checks removed:

"exachkcfg" daemon auto start status on storage servers

NOTE: "Checks removed" does not typically indicate a loss of functionality, but that there is some other mechanism in base code that has taken over the purpose of this check, or a prior restriction has been lifted.

Version 2.1.5

Major New Functionality:

Exalogic support
Consolidated Documentation – one User Guide

Checks added:

- Verify ambient temperature
- Exadata Critical Issue DB12
- Exadata Critical Issue DB11

Checks removed:

- Cluster Wide Check HCA firmware version does not match across system

NOTE: "Checks removed" does not typically indicate a loss of functionality, but that there is some other mechanism in base code that has taken over the purpose of this check, or a prior restriction has been lifted.

Version 2.1.4

Major New Functionality:

- Solaris 11 X86-64 support (not Express)
- 11.2.0.3 database upgrade module
- Remote database access
- Improved HTML report
 - "Killed Checks" section

Checks added:

- Verify celldisk configuration on disk drives
- Verify celldisk configuration on flash memory devices
- Verify there are no griddisks configured on flash memory devices
- Verify griddisk count matches across all storage servers where a given prefix name exists
- Verify griddisk ASM status
- Verify total number of griddisks with a given prefix name is evenly divisible by the number of celldisks
- Verify total size of all griddisks fully utilizes celldisk capacity
- Checks from My Oracle Support "exadata critical issues (doc id 1270094.1)"
- Check to implement My Oracle Support "Installing, Executing and Interpreting output from the "scnhealthcheck.sql" script (Doc ID 1393363.1)"
- Verify average ping times to DNS nameserver
- Verify initialization parameter RECYCLEBIN=ON
- ASM 11.2.0.3 parameter "memory_max_target"
- ASM 11.2.0.3 parameter "memory_target"
- ASM 11.2.0.3 parameter "pga_aggregate_target"
- ASM 11.2.0.3 parameter "sga_target"
- Verify "maxstartups 100" in /etc/ssh/sshd_config

Checks removed:

- cells image info version match
- disk firmware version on storage servers

NOTE: "Checks removed" does not typically indicate a loss of functionality, but that there is some other mechanism in base code that has taken over the purpose of this check, or a prior restriction has been lifted.

Version 2.1.3

Major New Functionality:

Maximum Availability Architecture Scorecard

Improved HTML report

- File name synchronizes with output directory name
- "Score" block
- Header Block
- Ability to remove items from report

Additional InfiniBand switch checks

Checks added:

Verify all "BIGFILE" tablespaces have non-default "MAXBYTES" values set

Verify Exadata Smart Flash Log is Created

Scan storage server alert log for open critical alerts

Verify Peripheral Component Interconnect (PCI) Bridges are Configured for Generation II on Storage Servers

Checks removed:

InfiniBand switch ib_umad driver status

BIOS firmware version does not match on all storage servers

Storage servers not accessed when "-s" or "-S" is used

Version 2.1.2

Major New Functionality:

X2-8 support

New checks for P1 database parameters

New HTML based report

Checks added:

Verify Platform Configuration and Initialization Parameters for Consolidation

Verify storage server metric CD_IO_ST_RQ

Verify Ethernet Cable Connection Quality

Verify Ethernet Cable Connection Quality on storage servers

Verify ASM griddisk,diskgroup and Failure group mapping

Checks removed:

None

Version 2.1.1

Major New Functionality:

Ability to run in silent mode (non-interactive for batch execution and cron scheduling)

Eliminated a number of false positives

Better handling of missing data and errors with the tool

Ability to check a subset of database or storage servers or IB Switches

Checks added:

Verify that "Disk Cache Policy" is set to "Disabled"

Verify Management Network Interface (eth0) is on a Separate Subnet
 Verify RAID Controller Battery Condition
 Verify RAID Controller Battery Temperature

Checks removed:

Variable extent size for ASM
 kernel.shmmax parameter is configured according to recommendation
 All nodes are using same NTP server across cluster
 Infiniband switch log_max_size check

Issues Fixed By Version

Version 2.2.0

Version 2.2.0_20130109:

Bug Num	Fixed	Description
15858961	2.2.0	add check for exadata critical issue ex9 (mos note 1270094.1)
15923112	2.2.0	add check for exadata critical issue ex10 (mos note 1270094.1)
13957117	2.2.0	modify check for exadata critical issue db11 (note 1270094.1)

Version 2.2.0_20121109:

Bug Num	Fixed	Description
14849668	2.2.0	add new "note:" to html report referring to mos 757552.1
14840691	2.2.0	add check for exadata critical issue db15 (mos note 1270094.1)
14839642	2.2.0	modify maa scorecard not to execute certain checks if no standby exists
14829116	2.2.0	modify "verify raid controller battery condition" for new command
14798994	2.2.0	modify "verify pci bridge is configured for generation ii on storage servers"
14780734	2.2.0	exachk on supercluster. false positive results for storage cell ambient temp
14739680	2.2.0	review logic for list alerthistory and correct rationale
14739503	2.2.0	add additional sentence about qa to the "findings needing attention" section.
14739438	2.2.0	add warning at top of report if killed processes or skipped checks are present
14733019	2.2.0	verify 11.2.0.3 asm processes parameter logic and rationale match wiki
14707498	2.2.0	add "verify aud\$ and fga_log\$ tables use automatic segment space management"
14707249	2.2.0	add check "verify shared servers do not perform serial full table scans"
14702396	2.2.0	add 11.2.3.2.0 check for "verify database server physical drive configuration"
14702374	2.2.0	add check for 11.2.3.2.0 "verify database server virtual drive configuration"
14702355	2.2.0	add check for 11.2.3.2.0 "verify database server disk controller configuration"
14680693	2.2.0	add support for x3-8
14674627	2.2.0	add new error message when ib switches are not pingable, and they are skipped
14668103	2.2.0	add "no checks failed, see "findings passed" section" to html report
14647366	2.2.0	add discussion of "rat_noclean_dir" to userguide
14647230	2.2.0	add discussion of "/opt/oracle.supporttools/exachk" to userguide
14630200	2.2.0	retain leading spaces from ibqueryerrors.pl output
14598813	2.2.0	raid battery condition [db server] mistakes 3 failed db servers as "all ..."
14587899	2.2.0	add support for 1/8 rack configuration
14575242	2.2.0	exacheck 2.1.6 solaris, bogus "infiniband network error counters are non-zero"
14552275	2.2.0	add "verify operating system hugepages count satisfies total sga requirements"
14552206	2.2.0	critical issue db13 fails when raw data shows ok

14530034	2.2.0	error "rc-001 - unable to read driver files" when rat_output is not writable
14526155	2.2.0	modify "_kill_diagnostics_timeout" not to execute at 11.2.0.3.0 or higher
14526144	2.2.0	modify "_lm_rcvr_hang_allow_time" not to execute at 11.2.0.3.0 or higher
14383945	2.2.0	exachk ambient temperature check executed on subset of storage servers
14255993	2.2.0	maa scorecard missing checks on x2-2 running solaris without standby present
14255893	2.2.0	maa scorecard missing checks on x2-2(4170) aka "v2"
14138606	2.2.0	parallelize the storage server and ib switch data collection phase
13863245	2.2.0	add functionality to verify asr is correctly deployed
13860795	2.2.0	datacolumn value for "paramname" not available on results and exception file
13568398	2.2.0	exachk in mixed hardware environment - v2 and x2-2 in same rack
13525491	2.2.0	enable exachk for sparc super cluster

Version 2.1.6

Bug Num	Fixed	Description
14496464	2.1.6	add check for exadata critical issue db14 (mos note 1270094.1)
14400390	2.1.6	add ability to debug expect connections
14394063	2.1.6	add language that exachk is not a security tool to mos 1070954.1
14362103	2.1.6	"verify storage server disk controllers use writeback cache" missing on x2-8
14354194	2.1.6	modify mos 1070954.1 to include full bundle file manifest
14319840	2.1.6	add check for exadata critical issue db13 (note 1270094.1)
14319077	2.1.6	exachk reports ambient temperature check failed when raw data shows ok
14262805	2.1.6	classic exachk sees entire ib fabric components in exalogic environment
14227779	2.1.6	maa scorecard "db_block_checking" for standby present when no standby exists
14227025	2.1.6	modify maa scorecard check "oracle net service name.." rationale
14226729	2.1.6	add maa scorecard check "log_archive_config"
14220386	2.1.6	exachk is generating an invalid exceptions xml file
14217183	2.1.6	add maa scorecard check "block corruptions"
14217128	2.1.6	move check "log_buffer" into maa scorecard "computer failure..." section
14217042	2.1.6	remove check "redo log file size for database machine"
14217005	2.1.6	add maa scorecard check "redo log file size"
14216838	2.1.6	add maa scorecard check "database archiving mode"
14216678	2.1.6	modify maa scorecard "storage failures prevention best practices"
14216646	2.1.6	modify maa scorecard "client failover operational best practices"
14216177	2.1.6	modify maa scorecard "network failure prevention best practices"
14216122	2.1.6	modify maa scorecard "database/cluster/site failure prevention best practices"
14215818	2.1.6	move check "recyclebin" into maa scorecard "logical corruptions..." section
14215696	2.1.6	modify maa scorecard "logical corruption prevention best practices"
14215619	2.1.6	modify maa scorecard "data corruption prevention best practices"
14211851	2.1.6	modify maa scorecard "computer failure prevention best practices"
14211191	2.1.6	add maa scorecard "software maintenance best practices"
14211158	2.1.6	modify maa scorecard "operational best practices"
14211114	2.1.6	modify maa scorecard "consolidation database best practices"
14198751	2.1.6	setting "root nofiles unlimited" encountered redhat bug 485955
14153828	2.1.6	add check "verify dynamic shared memory (dism) is not used on x86 systems"
14153392	2.1.6	remove check "exachkcfg daemon auto start status on storage servers"
14148335	2.1.6	not all skipped checks are included in "skipped checks" section of html report
14143292	2.1.6	synchronize rationales for checks "asm griddisk,diskgroup and failure group ..."
14118978	2.1.6	modify logic for storage server "list alerhistory..."
13992833	2.1.6	ada: exachk user guide not fully ada compliant
13992787	2.1.6	ada: exachk html report fails oghag compliance checks
13862446	2.1.6	include "minimal execution interval" in documentation

Version 2.1.5

Bug Num	Fixed	Subject
14104401	2.1.5	mixed case server names leads to double checks

14081898	2.1.5	modify rationale for check "verify celldisk configuration on flash memory device
14076465	2.1.5	11.2.0.3 "asm_power_limit" check rationale is off
14027631	2.1.5	modify check db_block_checksum to account for new maa bp guidance
14027618	2.1.5	modify check db_block_checking to account for new maa bp guidance
14027531	2.1.5	modify script to account for new login delay
14027171	2.1.5	exachk reports "system is exposed to exadata critical issue db8" on 11.2.2.3.5
14023304	2.1.5	"physcial drive" check off on 11.2.3.1.0
13979454	2.1.5	exachk fails to find rdbms binaries on exadata machine
13967483	2.1.5	modify "high redundancy controlfile" to match current best practice
13967352	2.1.5	modify "verify hardware and firmware on database..." report command
13957170	2.1.5	add check for exadata critical issue db12 (note 1270094.1)
13957117	2.1.5	add check for exadata critical issue db11 (note 1270094.1)
13957030	2.1.5	check "asm_power limit for quarter rack" using 2 as comparison rather than 1
13952463	2.1.5	modify check "processes parameter for asm instance"
13922580	2.1.5	report component "systemwide firmware and software versions" missing in xck_v2
13888518	2.1.5	esm_lifetime check always fails with f20m2 cards
13888162	2.1.5	"rat_local=1" not working
13872114	2.1.5	consolidate "how to" into userguide
13867926	2.1.5	rat_noclean_dir=1 not leaving directories behind
13862684	2.1.5	modify check "maxstartups setting in sshd_config" rationale
13862391	2.1.5	modify rationale "verify database server physical drive configuration"
13784891	2.1.5	modify check " __asm disk group compatible.rdbms parameter"

Version 2.1.4

Bug Num	Fixed	Subject
13800472	2.1.4	modify check "verify there are no griddisks configured on flash memory devices"
13790437	2.1.4	"critical issue db09" fails with "10gig_rxusecs0: unrecognized service"
13786242	2.1.4	"client failover" check appears in html report; linkages broken
13784942	2.1.4	modify check " __asm disk group compatible.asm parameter"
13784701	2.1.4	modify check "compatible" to pass if set to current version in use
13784595	2.1.4	modify check "cluster_interconnects" not to run on 11.2.0.2
13779893	2.1.4	exachk esm lifetime is displaying "n/a" for all thresholds
13775832	2.1.4	modify check "filesystemio_options"
13734166	2.1.4	exachk did not determine correct asm home
13629205	2.1.4	modify "verify cluster synchronization services (css) misscount = 60"
13619696	2.1.4	modify check "asm_power_limit"
13618581	2.1.4	modify check " verify exadata smart flash cache is created"
13608775	2.1.4	cluster_interconnects check appears under different 'type' categories
13592595	2.1.4	modify check "set "mpt_cmd_retry_count=10" in ..." for only 11.2.2.3.1
13582082	2.1.4	skgxpinfo called on versions below 11.2.0.2
13582024	2.1.4	add report component "systemwide firmware and software versions" to xck_v2
13536768	2.1.4	exachk shows esm lifetime fail though the value is under the threshold
13523733	2.1.4	exachk failed with rc-003
13516672	2.1.4	modify rationale text for check name "db_lost_write_protect"
13482172	2.1.3	v2 maa scorecard missing a few items
13482150	2.1.3	smart flash log always passed (even when should fail)
13481693	2.1.3	modify lsi controller battery condition checks for different battery types
13365925	2.1.4	/tmp/exachk_cells.sh: line 180: printf: 09: invalid number
12953734	2.1.3	./exachk: line 9630: [: too many arguments with "-s" option
12952509	2.1.3	exachk determines database down when db version 11.2.0.1 and grid 11.2.0.2

Version 2.1.3

Bug Num	Fixed	Subject
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13415618	2.1.3	verify-topology fails "only valid value is interconnected_quarterrack"
13366321	2.1.3	add "verify switch name is properly configured in the infiniband switch /etc..."
13366288	2.1.3	add "verify infiniband subnet manager is running on an infiniband switch"
13366143	2.1.3	modify "infiniband switch log_flags configuration"
13366057	2.1.3	modify check "non-autoextensible datafiles"
13365996	2.1.3	add "verify all "bigfile" tablespaces have non-default "maxbytes" values set"
13360357	2.1.3	add report section "maa scorecard"
13356166	2.1.3	remove check "infiniband switch ib_umad driver status"
13336667	2.1.3	"manage asm audit file directory growth with cron" not executing on v2,x2-8
13325764	2.1.3	set check "infiniband switch ntp configuration" alert level to "warn"
13325598	2.1.3	add check "verify infiniband switch software is 1.3.3-2 or greater"
13243681	2.1.3	n/a: integer expression expected during esm lifetime collection
13109481	2.1.3	create check "verify exadata smart flash log is enabled"
13102954	2.1.3	remove check "bios firmware version does not match on all storage servers"
13094849	2.1.3	exachk warning for asm memory_target
13089302	2.1.3	exadata: warning = local listener init parameter is not set to local node vip.
13072804	2.1.3	exachk reports flashcache size of 364.75g
13069101	2.1.3	add ability to "hide" findings on html report
13057104	2.1.3	extend "db_block_checking" check to x2-2, x2-8
13051235	2.1.3	scan storage server alerthistory for open alerts
13051165	2.1.3	disable exachk usage of sudo to root from cellmonitor
13050745	2.1.3	modify "verify raid controller battery condition" for two alert levels
13036578	2.1.3	v2 to x2-2/x2-8 consolidation for checks and collections
13031814	2.1.3	add run identification string to header of exachk.html
13017633	2.1.3	add exadatatype in exachk_results.xml and exachk_exceptions.xml
13000104	2.1.3	message text wrong for "database parameter db_block_checking is not set to ..."
12999901	2.1.3	rat site generated report differs from exachk local html report
12993594	2.1.3	can't read "...": no such variable when "\$" embedded in password
12993429	2.1.3	exachk fails to accept correct password for infiniband switches
12977998	2.1.3	verify master rack serial number matches on all servers
12968765	2.1.3	improve exachk message -infiniband network is not being used for rac communicati
12958550	2.1.3	modify check: "warning kernel parameter rp_filter is set to 1."
12953703	2.1.3	remove comment line about "perl wrapper"
12945073	2.1.3	correct readme for x2-8 as a supported platform
12941667	2.1.3	storage server master serial number check fails when msn is correctly set
12918576	2.1.3	rat site generated report produces incorrect finding
12861937	2.1.3	script to cleanup older runs of exachk
12815752	2.1.3	"exachk -a" exits with "audit script version (11.2.0.2.0) and database vers..."
12779308	2.1.3	exacheck needs to verify interconnect address used by rdbms
12756149	2.1.3	verify pci generation with a new exachk check

Version 2.1.2

Bug Num	Fixed	Subject
12933214	2.1.2	refer to consolidation best practice wiki if more than 1 db instance
12889556	2.1.2	create check "verify storage server metric cd_io_st_rq"
12865718	2.1.2	merge: x2-8: bug 12865577 - "disk cache policy" check missing corrective action
12865711	2.1.2	merge bug 12865577 - "disk cache policy" check missing corrective action in fail
12865577	2.1.2	"disk cache policy" check missing corrective action in fail message
12840741	2.1.2	merge bug 12840730 - create check "verify ethernet cable connection quality"
12840730	2.1.2	create check "verify ethernet cable connection quality"

12840721	2.1.2	merge bug 12840683 - modify "verify infiniband cable connection quality [all]"
12840683	2.1.2	modify "verify infiniband cable connection quality [all]"
12814204	2.1.2	db_block_checksum is not evaluated correctly on exachk side
12810666	2.1.2	merge bug 12806565 - modify "verify database server disk controller config
12810646	2.1.2	merge bug 12806599 - modify "verify database server physical drive config
12806599	2.1.2	modify "verify database server physical drive configuration" command
12806565	2.1.2	modify "verify database server disk controller configuration" command
12800318	2.1.2	typo in "sshell=\$rat_scopy"
12793814	2.1.2	recommendation text is missing in metadata file in the latest exachk code
12762655	2.1.2	database server physical drive configuration does not meet recommendation
12751550	2.1.2	exachk reporting failed checks but output files missing
12750244	2.1.2	d_check_sid.sql should tuned for faster execution
12746131	2.1.2	exachk reports fail for asm_power_limit = 4 instead of info (or at most warn)
12618142	2.1.2	incorporate priority 1 database initialization parameters from x2-2 bp wiki
12617614	2.1.2	produce html report with links to detailed data files
12614022	2.1.2	create exachk x2-8 (linux) section
12539457	2.1.2	add check for cell griddisks in wrong failgroup (effect of bug 12433293)

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Bug Num	Fixed	Subject
12712260	2.1.1	include list of bug fixes for 2.1.1 in readme file
12707295	2.1.1	modify user guide to include running exachk before go-live
12703053	2.1.1	merge bug 12703047 - place check for kernel.shmmax on hold
12703047	2.1.1	place check for kernel.shmmax on hold
12703033	2.1.1	merge bug 12702949 - exachk does detect incorrect system model number
12702949	2.1.1	exachk does detect incorrect system model number
12698345	2.1.1	merge bug 12583095 - verify raid controller battery temperature
12698330	2.1.1	merge bug 12583086 - verify raid controller battery condition
12684549	2.1.1	remove "fail= all nodes are not using the same ntp server across cluster"
12676287	2.1.1	exachk reports hca firmware output of form "nodename = =="
12670689	2.1.1	merge bug 12582575 - verify disk cache policy is disabled on all servers
12669727	2.1.1	remove check:- warning = asm variable sized extents are enabled [dbmv2]
12658060	2.1.1	merge bug 12658015 - exachk executes ib fabric checks on more than one database
12658015	2.1.1	exachk executes ib fabric checks on more than one database server
12656527	2.1.1	merge bug 12656500 - exachk error: /usr/bin/scp -q: no such file or directory
12656500	2.1.1	exachk error: /usr/bin/scp -q: no such file or directory
12656447	2.1.1	merge bug 12656433 - exachk generates multiple "[: -ne: unary operator expected
12656433	2.1.1	exachk generates multiple "[: -ne: unary operator expected "
12653361	2.1.1	merge bug 12653350 - exachk missing version in check_env.out
12653350	2.1.1	exachk missing version in check_env.out
12653294	2.1.1	merge bug 12653279 - exachk does not evaluate storage server data when typos exi
12653279	2.1.1	exachk does not evaluate storage server data when typos exist in /etc/hosts
12627748	2.1.1	invalid target /sys/mb/riser1/pcie4/f20card/uptime in esm lifetime check
12617498	2.1.1	exachk root checks fail if ssh equiv previously established
12614218	2.1.1	add input file function to permit exachk running in batch unattended
12613555	2.1.1	merge bug 12600905 - exachk fails to account for spine switch
12613514	2.1.1	merge bug 12586196 - verify management network interface (eth0) is on a separate
12600905	2.1.1	exachk fails to account for spine switch
12597030	2.1.1	add upgrade instructions to exachk documentation set
12596890	2.1.1	message: another instance of exachk is running on xxxxxx.

12596762	2.1.1	merge bug 12583078 - verify database server physical drive configuration
12596677	2.1.1	merge bug 12583064 - verify database server virtual drive configuration
12596656	2.1.1	merge bug 12583012 - verify database server disk controller configuration
12596620	2.1.1	merge bug 12587541 - exachk fails on verify-topology for physical 1/4 rack
12596608	2.1.1	merge bug 12583528 - verify oracle rac databases use rds protocol over infiniban
12587541	2.1.1	exachk fails on verify-topology for physical 1/4 rack
12586196	2.1.1	verify management network interface (eth0) is on a separate subnet
12583528	2.1.1	verify oracle rac databases use rds protocol over infiniband network
12583095	2.1.1	verify raid controller battery temperature
12583086	2.1.1	verify raid controller battery condition
12583078	2.1.1	verify database server physical drive configuration
12583064	2.1.1	verify database server virtual drive configuration
12583012	2.1.1	verify database server disk controller configuration
12582575	2.1.1	verify disk cache policy is disabled on all servers
12747779	2.1.1	remove infiniband switch log_max_size check

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