

WORKLOAD REPOSITORY report for

DB Name	DB Id	Instance	Inst num	Startup Time	Release	RAC
AGMISRT	3959815449	AGMISRT		1 08-Jul-14 04:07	11.2.0.4.0	NO

Host Name	Platform	CPUs	Cores	Sockets	Memory (GB)
lmucr893	Linux x86 64-bit	12	6	1	35.33

	Snap Id	Snap Time	Sessions	Cursors/Session
Begin Snap:	2950	19-Aug-14 16:00:21	41	2.5
End Snap:	2976	20-Aug-14 05:00:31	38	2.4
Elapsed:		780.16 (mins)		
DB Time:		6,309.58 (mins)		

Report Summary

Load Profile

	Per Second	Per Transaction	Per Exec	Per Call
DB Time(s):	8.1	5.0	0.03	0.63
DB CPU(s):	3.4	2.1	0.01	0.26
Redo size (bytes):	16,818,990.9	10,345,594.7		
Logical read (blocks):	51,056.5	31,405.6		
Block changes:	3,548.9	2,183.0		
Physical read (blocks):	27,925.0	17,177.0		
Physical write (blocks):	5,719.7	3,518.3		
Read IO requests:	1,075.9	661.8		
Write IO requests:	558.9	343.8		
Read IO (MB):	218.2	134.2		
Write IO (MB):	44.7	27.5		
User calls:	12.9	7.9		
Parses (SQL):	14.3	8.8		
Hard parses (SQL):	0.5	0.3		
SQL Work Area (MB):	77.0	47.4		
Logons:	0.6	0.4		
Executes (SQL):	286.0	175.9		
Rollbacks:	0.0	0.0		
Transactions:	1.6			

Instance Efficiency Percentages (Target 100%)

Buffer Nowait %:	99.91	Redo NoWait %:	99.99
Buffer Hit %:	81.98	In-memory Sort %:	99.97
Library Hit %:	102.03	Soft Parse %:	96.47
Execute to Parse %:	95.01	Latch Hit %:	99.95
Parse CPU to Parse Elapsed %:	77.77	% Non-Parse CPU:	99.76

Top 10 Foreground Events by Total Wait Time

Event	Waits	Total Wait Time (sec)	Wait Avg(ms)	% DB time	Wait Class
DB CPU		157.2K		41.5	
direct path read	8,722,251	81.7K	9	21.6	User I/O
db file scattered read	11,609,647	42.4K	4	11.2	User I/O
direct path read temp	5,172,580	39.4K	8	10.4	User I/O
direct path write temp	1,771,752	14.1K	8	3.7	User I/O
db file sequential read	3,720,067	11.5K	3	3.0	User I/O
direct path write	242,833	2720	11	.7	User I/O
resmgr:cpu quantum	50,332	2427.4	48	.6	Scheduler
PX qref latch	3,354,772	2370.2	1	.6	Other
log buffer space	45,853	1089.4	24	.3	Configuration

Wait Classes by Total Wait Time

Wait Class	Waits	Total Wait Time (sec)	Avg Wait (ms)	% DB time	Avg Active Sessions
User I/O	32,543,625	194,325	6	51.3	4.2
DB CPU		157,214		41.5	3.4
System I/O	11,762,393	41,760	4	11.0	0.9
Administrative	4,931,742	23,360	5	6.2	0.5
Other	3,748,142	4,438	1	1.2	0.1
Scheduler	50,416	2,429	48	.6	0.1
Concurrency	282,446	1,758	6	.5	0.0
Configuration	50,713	1,362	27	.4	0.0
Commit	34,242	313	9	.1	0.0
Application	4,937	117	24	.0	0.0
Network	305,933	1	0	.0	0.0

Host CPU

CPUs	Cores	Sockets	Load Average Begin	Load Average End	%User	%System	%WIO	%Idle
12	6	1	0.12	0.16	27.9	2.0	12.8	69.4

Instance CPU

%Total CPU	%Busy CPU	%DB time waiting for CPU (Resource Manager)
29.0	94.9	0.7

IO Profile

	Read+Write Per Second	Read per Second	Write Per Second
Total Requests:	1,828.5	1,184.1	644.4
Database Requests:	1,634.8	1,075.9	558.9
Optimized Requests:	0.0	0.0	0.0
Redo Requests:	83.6	16.9	66.6
Total (MB):	416.0	321.6	94.4
Database (MB):	262.9	218.2	44.7
Optimized Total (MB):	0.0	0.0	0.0
Redo (MB):	49.8	16.7	33.1
Database (blocks):	33,644.7	27,925.0	5,719.7
Via Buffer Cache (blocks):	4,364.7	3,910.5	454.2
Direct (blocks):	29,280.0	24,014.5	5,265.5

Memory Statistics

	Begin	End
Host Mem (MB):	36,175.1	36,175.1
SGA use (MB):	9,216.0	9,216.0
PGA use (MB):	336.2	350.7
% Host Mem used for SGA+PGA:	26.41	26.45

Cache Sizes

	Begin	End
Buffer Cache:	7,520M	7,712M Std Block Size: 8K
Shared Pool Size:	1,565M	1,735M Log Buffer: 21,184K

Shared Pool Statistics

	Begin	End
Memory Usage %:	75.29	69.18
% SQL with executions>1:	96.63	81.57
% Memory for SQL w/exec>1:	94.18	63.51

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Time Model Statistics

- Total time in database user-calls (DB Time): 378574.6s
- Statistics including the word "background" measure background process time, and so do not contribute to the DB time statistic
- Ordered by % or DB time desc, Statistic name

Statistic Name	Time (s)	% of DB Time
sql execute elapsed time	366,398.14	96.78
DB CPU	157,214.23	41.53
RMAN cpu time (backup/restore)	2,364.27	0.62
PL/SQL execution elapsed time	1,112.16	0.29
parse time elapsed	737.73	0.19

hard parse elapsed time	697.51	0.18
Java execution elapsed time	168.12	0.04
sequence load elapsed time	91.15	0.02
inbound PL/SQL rpc elapsed time	76.88	0.02
PL/SQL compilation elapsed time	42.89	0.01
hard parse (sharing criteria) elapsed time	31.80	0.01
failed parse elapsed time	24.28	0.01
hard parse (bind mismatch) elapsed time	21.77	0.01
connection management call elapsed time	9.90	0.00
repeated bind elapsed time	1.80	0.00
DB time	378,574.64	
background elapsed time	72,325.71	
background cpu time	5,783.43	

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Operating System Statistics

- *TIME statistic values are diffed. All others display actual values. End Value is displayed if different
- ordered by statistic type (CPU Use, Virtual Memory, Hardware Config), Name

Statistic	Value	End Value
BUSY_TIME	17,179,625	
IDLE_TIME	38,982,923	
IOWAIT_TIME	7,193,082	
NICE_TIME	7,016	
SYS_TIME	1,119,629	
USER_TIME	15,647,894	
LOAD	0	0
RSRC_MGR_CPU_WAIT_TIME	259,651	
VM_IN_BYTES	2,129,920	
VM_OUT_BYTES	0	
PHYSICAL_MEMORY_BYTES	37,932,392,448	
NUM_CPUS	12	
NUM_CPU_CORES	6	
NUM_CPU_SOCKETS	1	
GLOBAL_RECEIVE_SIZE_MAX	4,194,304	
GLOBAL_SEND_SIZE_MAX	1,048,576	
TCP_RECEIVE_SIZE_DEFAULT	87,380	
TCP_RECEIVE_SIZE_MAX	4,194,304	
TCP_RECEIVE_SIZE_MIN	4,096	
TCP_SEND_SIZE_DEFAULT	16,384	
TCP_SEND_SIZE_MAX	4,194,304	
TCP_SEND_SIZE_MIN	4,096	

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Operating System Statistics - Detail

Snap Time	Load	%busy	%user	%sys	%idle	%iowait
19-Aug 16:00:21	0.12					
19-Aug 16:30:23	2.24	15.49	14.47	0.87	84.51	5.43
19-Aug 17:00:24	4.08	37.60	34.87	2.21	62.40	12.66
19-Aug 17:30:26	3.89	29.17	26.82	1.89	70.83	13.23
19-Aug 18:00:28	3.87	30.18	27.29	2.05	69.82	13.68
19-Aug 18:30:30	4.50	30.65	28.27	1.89	69.35	13.63
19-Aug 19:00:32	4.83	49.36	47.22	1.70	50.64	10.42
19-Aug 19:30:35	5.01	38.66	36.43	1.96	61.34	7.48
19-Aug 20:00:36	2.17	29.46	25.63	2.62	70.54	13.44
19-Aug 20:30:38	7.66	48.52	45.51	2.38	51.48	10.43
19-Aug 21:00:44	9.27	64.90	60.42	3.53	35.10	11.27
19-Aug 21:30:49	5.52	44.26	40.98	2.52	55.74	21.41
19-Aug 22:00:54	26.94	58.88	53.85	3.43	41.12	23.61
19-Aug 22:30:58	0.92	43.88	39.09	3.23	56.12	23.84
19-Aug 23:00:02	1.99	44.58	41.98	2.00	55.42	11.30
19-Aug 23:30:04	2.90	20.65	18.50	1.53	79.35	13.84
20-Aug 00:00:06	1.66	19.62	18.15	1.00	80.38	8.91
20-Aug 00:30:08	5.24	17.32	14.27	1.92	82.68	16.51
20-Aug 01:00:11	1.74	28.88	25.82	1.95	71.12	14.56
20-Aug 01:30:13	11.41	20.29	17.47	1.84	79.71	17.36
20-Aug 02:00:16	3.97	37.01	32.42	3.08	62.99	21.83
20-Aug 02:30:18	1.43	23.16	20.17	2.08	76.84	19.19
20-Aug 03:00:20	0.50	4.12	2.66	0.79	95.88	7.54
20-Aug 03:30:23	1.41	9.92	8.16	1.09	90.08	7.46
20-Aug 04:00:26	1.99	20.79	17.21	3.30	79.21	7.05
20-Aug 04:30:29	2.61	12.83	11.98	0.68	87.17	4.89
20-Aug 05:00:31	0.16	16.27	15.89	0.30	83.73	1.85

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Foreground Wait Class

- s - second, ms - millisecond - 1000th of a second
- ordered by wait time desc, waits desc
- %Timeouts: value of 0 indicates value was < .5%. Value of null is truly 0
- Captured Time accounts for 95.0% of Total DB time 378,574.64 (s)
- Total FG Wait Time: 202,333.22 (s) DB CPU time: 157,214.23 (s)

Wait Class	Waits	%Time -outs	Total Wait Time (s)	Avg wait (ms)	%DB time
User I/O	31,973,705	0	193,156	6	51.02
DB CPU			157,214		41.53
Other	3,507,154	96	2,992	1	0.79
Scheduler	50,332	0	2,427	48	0.64
Concurrency	278,814	0	1,730	6	0.46
Configuration	50,640	0	1,358	27	0.36
Commit	34,189	0	312	9	0.08
System I/O	75,291	0	238	3	0.06
Application	4,933	0	117	24	0.03
Administrative	5	0	1	183	0.00
Network	294,833	0	1	0	0.00

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Foreground Wait Events

- s - second, ms - millisecond - 1000th of a second
- Only events with Total Wait Time (s) >= .001 are shown
- ordered by wait time desc, waits desc (idle events last)
- %Timeouts: value of 0 indicates value was < .5%. Value of null is truly 0

Event	Waits	%Time -outs	Total Wait Time (s)	Avg wait (ms)	Waits /txn	% DB time
direct path read	8,722,251	0	81,690	9	114.62	21.58
db file scattered read	11,609,647	0	42,450	4	152.56	11.21
direct path read temp	5,172,580	0	39,354	8	67.97	10.40
direct path write temp	1,771,752	0	14,112	8	23.28	3.73
db file sequential read	3,720,067	0	11,502	3	48.88	3.04
direct path write	242,833	0	2,720	11	3.19	0.72
resmgr:cpu quantum	50,332	0	2,427	48	0.66	0.64
PX qref latch	3,354,772	100	2,370	1	44.08	0.63
log buffer space	45,853	0	1,089	24	0.60	0.29
read by other session	461,552	0	998	2	6.07	0.26
library cache lock	264	0	649	2459	0.00	0.17
cursor: pin S wait on X	4,643	0	567	122	0.06	0.15
buffer busy waits	238,506	0	397	2	3.13	0.10
log file sync	34,189	0	312	9	0.45	0.08
latch: parallel query alloc buffer	2,636	0	236	89	0.03	0.06
local write wait	112,331	0	205	2	1.48	0.05
control file sequential read	67,302	0	191	3	0.88	0.05
log file switch completion	2,077	0	139	67	0.03	0.04
latch free	6,764	0	136	20	0.09	0.04
db file parallel read	5,777	0	116	20	0.08	0.03
log file switch (private strand flush incomplete)	1,290	0	89	69	0.02	0.02
PX Deq: Slave Session Stats	50,578	0	69	1	0.66	0.02
enq: RO - fast object reuse	2,078	0	67	32	0.03	0.02
os thread startup	2,250	0	46	20	0.03	0.01
log file switch (checkpoint incomplete)	42	0	29	679	0.00	0.01
library cache: mutex X	17,864	0	27	2	0.23	0.01
kksfbc child completion	535	88	25	46	0.01	0.01
log file sequential read	4,446	0	24	5	0.06	0.01
enq: KO - fast object checkpoint	136	0	23	171	0.00	0.01
enq: TM - contention	5	0	23	4532	0.00	0.01
PX Deq: Table Q Get Keys	1,467	0	22	15	0.02	0.01
CSS initialization	1,366	0	19	14	0.02	0.00
control file single write	1,976	0	18	9	0.03	0.00
imm op	43	37	17	393	0.00	0.00
enq: TX - index contention	728	0	16	22	0.01	0.00
latch: cache buffers chains	8,382	0	14	2	0.11	0.00
buffer deadlock	4,426	100	12	3	0.06	0.00
reliable message	2,733	0	11	4	0.04	0.00
recovery area: computing obsolete files	18	0	11	630	0.00	0.00
SGA: allocation forcing component growth	311	0	11	35	0.00	0.00
Disk file operations I/O	154,906	0	10	0	2.04	0.00
CSS operation: action	1,386	0	9	6	0.02	0.00
cursor: pin S	2,978	0	8	3	0.04	0.00
enq: HW - contention	1,074	0	7	6	0.01	0.00
asynch descriptor resize	2,021	100	7	3	0.03	0.00
CSS operation: query	8,196	0	5	1	0.11	0.00
PX Deq: Signal ACK RSG	25,232	0	5	0	0.33	0.00
control file parallel write	1,153	0	5	4	0.02	0.00
PX Deq: Signal ACK EXT	25,312	0	4	0	0.33	0.00
buffer exterminate	367	99	4	11	0.00	0.00
enq: TX - row lock contention	188	0	4	20	0.00	0.00

latch: shared pool	2,504	0	4	1	0.03	0.00
latch: undo global data	886	0	4	4	0.01	0.00
enq: CR - block range reuse ckpt	392	0	3	9	0.01	0.00
latch: object queue header operation	3,361	0	3	1	0.04	0.00
recovery area: computing backed up files	705	0	2	3	0.01	0.00
undo segment extension	58	66	2	41	0.00	0.00
enq: TX - allocate ITL entry	176	0	2	9	0.00	0.00
enq: TX - contention	201	0	1	6	0.00	0.00
enq: PS - contention	1,845	0	1	1	0.02	0.00
resmgr:internal state change	13	92	1	96	0.00	0.00
library cache load lock	61	0	1	17	0.00	0.00
write complete waits	64	0	1	15	0.00	0.00
switch logfile command	5	0	1	183	0.00	0.00
latch: redo allocation	268	0	1	3	0.00	0.00
latch: row cache objects	438	0	1	2	0.01	0.00
enq: WF - contention	1	0	1	688	0.00	0.00
enq: FB - contention	189	0	1	3	0.00	0.00
Log archive I/O	378	0	1	2	0.00	0.00
SQL*Net message to client	293,729	0	1	0	3.86	0.00
recovery area: computing dropped files	18	0	1	33	0.00	0.00
SQL*Net break/reset to client	2,526	0	0	0	0.03	0.00
PX Deq: Table Q qref	8,795	0	0	0	0.12	0.00
Data file init write	2	0	0	172	0.00	0.00
latch: enqueue hash chains	84	0	0	4	0.00	0.00
row cache lock	8	0	0	37	0.00	0.00
kfk: async disk IO	36	0	0	8	0.00	0.00
enq: CF - contention	11	0	0	25	0.00	0.00
ADR block file read	483	0	0	0	0.01	0.00
wait list latch free	22	0	0	2	0.00	0.00
enq: PR - contention	2	0	0	16	0.00	0.00
latch: call allocation	41	0	0	1	0.00	0.00
SQL*Net more data from client	323	0	0	0	0.00	0.00
cursor: mutex S	25	0	0	1	0.00	0.00
latch: cache buffers lru chain	31	0	0	1	0.00	0.00
Parameter File I/O	2	0	0	7	0.00	0.00
SQL*Net more data to client	781	0	0	0	0.01	0.00
cursor: mutex X	48	0	0	0	0.00	0.00
latch: In memory undo latch	102	0	0	0	0.00	0.00
latch: checkpoint queue latch	2	0	0	4	0.00	0.00
ASM file metadata operation	481	0	0	0	0.01	0.00
ADR block file write	65	0	0	0	0.00	0.00
latch: active service list	18	0	0	0	0.00	0.00
PX Deq Credit: free buffer	1,005	0	0	0	0.01	0.00
SQL*Net message from client	293,732	0	519,086	1767	3.86	
PX Deq: Execution Msg	722,927	0	481,751	666	9.50	
PX Deq Credit: send blkd	17,297,157	0	321,594	19	227.30	
Streams AQ: waiting for messages in the queue	37,367	85	227,531	6089	0.49	
PX Deq: Table Q Normal	75,853,036	0	191,556	3	996.77	
PX Deq: Execute Reply	6,358,957	0	32,389	5	83.56	
PX Deq Credit: need buffer	1,518,100	0	10,305	7	19.95	
jobq slave wait	16,623	100	8,333	501	0.22	
KSV master wait	1,375	0	701	510	0.02	
PX Deq: Table Q Sample	4,019	0	189	47	0.05	
PX Deq: Parse Reply	25,312	0	41	2	0.33	
PX Deq: Msg Fragment	16,235	0	17	1	0.21	
PX Deq: Join ACK	25,312	0	6	0	0.33	
PL/SQL lock timer	1	100	1	1001	0.00	
PX Deq: Metadata Update	1,864	0	1	0	0.02	

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Background Wait Events

- ordered by wait time desc, waits desc (idle events last)
- Only events with Total Wait Time (s) >= .001 are shown
- %Timeouts: value of 0 indicates value was < .5%. Value of null is truly 0

Event	Waits	%Time -outs	Total Wait Time (s)	Avg wait (ms)	Waits /txn	% bg time
Backup: MML write backup piece	4,930,775	0	23,316	5	64.79	32.24
io done	2,341,955	1	23,154	10	30.78	32.01
log file parallel write	708,576	0	7,759	11	9.31	10.73
RMAN backup & recovery I/O	2,125,067	0	6,463	3	27.93	8.94
log file sequential read	467,029	0	2,662	6	6.14	3.68
db file sequential read	534,228	0	1,109	2	7.02	1.53
imm op	1,610	45	886	550	0.02	1.22
db file parallel write	530,868	0	761	1	6.98	1.05
control file sequential read	151,006	0	392	3	1.98	0.54
ASM file metadata operation	108,038	0	333	3	1.42	0.46
control file parallel write	50,985	0	254	5	0.67	0.35
enq: WF - contention	1	0	103	102561	0.00	0.14
latch: parallel query alloc buffer	85	0	93	1096	0.00	0.13
RMAN Tape slave I/O	4,931,717	0	30	0	64.81	0.04

log archive I/O	22,169	0	30	1	0.29	0.04
Backup: MML query backup piece	692	0	19	27	0.01	0.03
db file scattered read	3,076	0	19	6	0.04	0.03
direct path write	2,346	0	17	7	0.03	0.02
os thread startup	679	0	16	24	0.01	0.02
direct path read	1,327	0	15	11	0.02	0.02
Backup: MML commit backup piece	78	0	14	181	0.00	0.02
LGWR wait for redo copy	116,415	0	10	0	1.53	0.01
slave exit	30	47	7	234	0.00	0.01
kfk: async disk IO	2,373	0	7	3	0.03	0.01
log file single write	3,176	0	7	2	0.04	0.01
row cache lock	1	100	6	6002	0.00	0.01
JS kill job wait	6	83	5	834	0.00	0.01
control file single write	676	0	5	7	0.01	0.01
latch: shared pool	2,297	0	5	2	0.03	0.01
enq: CF - contention	47	0	4	93	0.00	0.01
Parameter File I/O	772	0	4	5	0.01	0.00
Disk file operations I/O	28,051	0	3	0	0.37	0.00
latch: call allocation	3,100	0	3	1	0.04	0.00
log buffer space	68	0	3	43	0.00	0.00
Backup: MML create a backup piece	78	0	2	26	0.00	0.00
Backup: MML delete backup piece	60	0	2	31	0.00	0.00
enq: TC - contention	2	0	2	772	0.00	0.00
log file sync	53	0	1	24	0.00	0.00
resmgr:cpu quantum	84	0	1	15	0.00	0.00
latch: redo allocation	390	0	1	3	0.01	0.00
rdbms ipc reply	42	0	1	24	0.00	0.00
latch: cache buffers lru chain	455	0	1	2	0.01	0.00
direct path write temp	23	0	1	37	0.00	0.00
reliable message	1,158	0	1	1	0.02	0.00
db file parallel read	35	0	1	22	0.00	0.00
Backup: MML initialization	16	0	1	47	0.00	0.00
latch free	1,364	0	1	0	0.02	0.00
log file switch completion	1	0	0	405	0.00	0.00
ADR block file read	793	0	0	0	0.01	0.00
direct path read temp	10	0	0	32	0.00	0.00
log file switch (private strand flush incomplete)	1	0	0	310	0.00	0.00
db file async I/O submit	351,505	0	0	0	4.62	0.00
read by other session	21	0	0	8	0.00	0.00
latch: cache buffers chains	319	0	0	1	0.00	0.00
CSS initialization	41	0	0	4	0.00	0.00
buffer busy waits	286	0	0	1	0.00	0.00
process diagnostic dump	498	0	0	0	0.01	0.00
latch: object queue header operation	256	0	0	1	0.00	0.00
enq: CR - block range reuse ckpt	4	0	0	28	0.00	0.00
resmgr:internal state change	1	100	0	102	0.00	0.00
enq: PR - contention	2	0	0	39	0.00	0.00
latch: checkpoint queue latch	26	0	0	3	0.00	0.00
wait list latch free	35	0	0	2	0.00	0.00
asynch descriptor resize	4,714	100	0	0	0.06	0.00
CSS operation: action	54	0	0	1	0.00	0.00
db file single write	36	0	0	2	0.00	0.00
SGA: allocation forcing component growth	1	0	0	47	0.00	0.00
SQL*Net message to client	11,098	0	0	0	0.15	0.00
latch: active service list	221	0	0	0	0.00	0.00
library cache: mutex X	27	0	0	1	0.00	0.00
ADR block file write	164	0	0	0	0.00	0.00
CSS operation: query	246	0	0	0	0.00	0.00
enq: PV - syncstart	1	0	0	18	0.00	0.00
latch: redo writing	3	0	0	4	0.00	0.00
Backup: MML shutdown	16	0	0	1	0.00	0.00
ARCH wait for archivelog lock	933	0	0	0	0.01	0.00
ADR file lock	258	2	0	0	0.00	0.00
cursor: pin S wait on X	1	0	0	3	0.00	0.00
enq: JS - queue lock	2	0	0	1	0.00	0.00
cursor: pin S	6	0	0	0	0.00	0.00
PX Idle Wait	27,467	0	808,762	29445	0.36	
rdbms ipc message	993,592	24	782,581	788	13.06	
Space Manager: slave idle wait	74,930	71	300,727	4013	0.98	
Streams AQ: waiting for time management or cleanup tasks	5	40	147,453	29490576	0.00	
class slave wait	57,216	0	123,974	2167	0.75	
DIAG idle wait	93,361	100	93,496	1001	1.23	
smon timer	1,765	3	47,077	26673	0.02	
wait for unread message on broadcast channel	46,742	100	46,809	1001	0.61	
ASM background timer	59,416	0	46,804	788	0.78	
Streams AQ: qmn coordinator idle wait	3,342	50	46,802	14004	0.04	
Streams AQ: qmn slave idle wait	1,671	0	46,802	28008	0.02	
pmon timer	15,659	100	46,802	2989	0.21	
JOX Jit Process Sleep	3,014	100	45,122	14971	0.04	
VKRM Idle	1	0	14,399	14399344	0.00	
i/o slave wait	4,639,812	0	11,503	2	60.97	
SQL*Net message from client	12,883	0	2,588	201	0.17	
KSV master wait	47,036	0	312	7	0.62	

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Wait Event Histogram

- Units for Total Waits column: K is 1000, M is 1000000, G is 1000000000
- % of Waits: value of .0 indicates value was <.05%; value of null is truly 0
- % of Waits: column heading of <=1s is truly <1024ms, >1s is truly >=1024ms
- Ordered by Event (idle events last)

Event	Total Waits	% of Waits							
		<1ms	<2ms	<4ms	<8ms	<16ms	<32ms	<=1s	>1s
ADR block file read	1276	97.1	.4	.8	1.0	.5	.1	.2	
ADR block file write	229	99.1	.4			.4			
ADR file lock	336	100.0							
ARCH wait for archivelog lock	938	100.0							
ASM file metadata operation	108.5K	86.6	5.0	2.2	1.5	1.7	.8	2.1	.0
Backup: MML commit backup piece	78				1.3	29.5	9.0	60.3	
Backup: MML create a backup piece	78						89.7	10.3	
Backup: MML delete backup piece	60						66.7	33.3	
Backup: MML extended initialization	16	100.0							
Backup: MML initialization	16						6.3	93.8	
Backup: MML query backup piece	692					.9	81.8	17.3	
Backup: MML shutdown	16	100.0							
Backup: MML write backup piece	4930.8K			26.4	71.7	1.6	.3	.1	.0
CSS initialization	1407			26.8	31.1	18.5	13.4	10.2	
CSS operation: action	1440	23.2	31.3	12.1	11.5	12.3	6.9	2.8	
CSS operation: query	8440	92.1	1.9	2.1	2.2	1.1	.3	.3	
Data file init write	2						50.0	50.0	
Disk file operations I/O	183K	99.8	.1	.1	.0	.0	.0	.0	
JS kill job wait	6	16.7						83.3	
L1 validation	1	100.0							
LGWR wait for redo copy	116.4K	99.1	.3	.3	.1	.1	.1	.0	
Log archive I/O	22.5K	60.4	21.6	12.7	4.1	.9	.3	.1	
PX Deq Credit: free buffer	1007	100.0							
PX Deq: Signal ACK EXT	25.3K	97.3	1.3	.8	.3	.2	.0	.0	
PX Deq: Signal ACK RSG	25.2K	96.6	1.4	1.0	.7	.2	.0	.1	
PX Deq: Slave Session Stats	50.6K	76.2	11.1	6.0	3.7	2.5	.4	.2	
PX Deq: Table Q Get Keys	1465	67.2	12.4	7.4	5.0	2.5	.8	4.6	.1
PX Deq: Table Q qref	8795	99.1	.5	.1	.1	.2	.0		
PX qref latch	3355K	93.5	1.7	1.6	1.3	.9	.5	.4	.0
Parameter File I/O	774	56.2	11.0	8.8	9.9	8.4	2.5	3.2	
RMAN Tape slave I/O	4931.7K	100.0	.0		.0	.0			
RMAN backup & recovery I/O	2125K	42.3	19.2	19.3	11.9	4.9	1.7	.8	
SGA: allocation forcing component growth	312	40.7			1.0		2.6	55.8	
SQL*Net break/reset to client	2526	97.2	1.2	.8	.4	.3	.2		
SQL*Net message to client	304.8K	100.0	.0				.0	.0	
SQL*Net more data from client	324	98.8	.9			.3			
SQL*Net more data to client	782	100.0							
asynch descriptor resize	6737	96.7	.5	.5	.5	.7	.5	.7	
buffer busy waits	238.8K	87.8	2.5	2.8	2.5	1.9	1.2	1.3	
buffer deadlock	4426	86.6	2.3	2.1	2.7	2.3	1.9	2.1	
buffer exterminate	367	.5		.3		98.6	.5		
control file parallel write	52.1K	48.6	12.6	11.0	10.3	10.5	4.4	2.6	
control file sequential read	218.3K	68.4	9.8	8.0	5.6	4.8	2.2	1.2	
control file single write	2652	8.3	21.0	34.1	17.7	10.4	2.6	5.9	
cursor: mutex S	25	84.0	4.0	4.0	4.0	4.0			
cursor: mutex X	48	97.9				2.1			
cursor: pin S	2910	77.2	1.0	.7	1.5	18.3	.9	.3	
cursor: pin S wait on X	4590	.2	.2	1.1	.5	38.1	24.1	32.1	3.7
db file async I/O submit	351.5K	100.0							
db file parallel read	5812	2.2	1.2	1.4	8.6	38.3	34.0	14.3	
db file parallel write	530.9K	77.0	9.9	6.2	3.7	1.9	.9	.5	
db file scattered read	11.6M	44.1	20.4	13.6	10.3	7.8	2.6	1.1	.0
db file sequential read	4254.2K	65.9	7.6	5.6	9.8	8.0	2.0	1.0	.0
db file single write	36	55.6	19.4	11.1	13.9				
direct path read	8722.5K	18.7	14.0	18.4	20.0	15.7	8.0	5.3	.0
direct path read temp	5172.1K	29.1	14.4	13.2	15.4	15.5	8.2	4.1	
direct path write	245.2K	13.3	11.1	17.0	21.1	18.3	11.5	7.7	
direct path write temp	1771.6K	30.9	18.5	15.1	12.4	11.3	6.6	5.2	.0
enq: CF - contention	58	10.3	1.7	1.7	12.1	5.2	15.5	53.4	
enq: CR - block range reuse ckpt	396	12.9	13.9	18.2	19.2	25.5	5.6	4.8	
enq: FB - contention	189	62.4	7.9	12.2	5.8	6.3	3.7	1.6	
enq: HW - contention	1074	39.3	19.1	12.2	7.9	11.0	7.1	3.4	
enq: JS - queue lock	2	50.0	50.0						
enq: KO - fast object checkpoint	136	4.4	5.9	5.1	5.1	16.9	21.3	36.8	4.4
enq: PR - contention	4					25.0	50.0	25.0	
enq: PS - contention	1845	96.1	.5	.1	.4	2.3	.1	.4	
enq: PV - syncstart	1						100.0		
enq: RO - fast object reuse	2082	21.9	9.4	6.7	6.9	18.3	12.5	24.3	.1
enq: SQ - contention	3	100.0							

enq: TC - contention	2					50.0			50.0
enq: TM - contention	5					20.0	20.0	40.0	20.0
enq: TX - allocate ITL entry	176	47.2	2.8	9.7	9.1	11.9	13.6	5.7	
enq: TX - contention	201	59.7	11.4	10.4	4.0	4.0	4.0	6.5	
enq: TX - index contention	728	30.4	4.0	8.0	9.5	12.6	16.6	19.0	
enq: TX - row lock contention	188	13.8	11.2	11.2	13.3	19.7	15.4	15.4	
enq: WF - contention	2								50.0 50.0
imm op	1653	2.5	.5	1.0	2.6	14.0	14.2	65.2	
io done	2341.9K	.4	.0	.1	21.1	72.3	5.6	.6	.0
kfk: async disk IO	2409	61.6	11.2	10.9	8.0	5.4	1.8	1.1	
kksfbc child completion	527	11.4	.2					88.4	
latch free	8128	56.5	5.0	5.6	7.6	4.9	5.6	14.8	
latch: In memory undo latch	102	97.1	2.0	1.0					
latch: active service list	239	99.6	.4						
latch: cache buffer handles	1	100.0							
latch: cache buffers chains	8700	85.0	3.5	3.1	2.7	2.9	2.0	.9	
latch: cache buffers lru chain	486	83.7	6.8	2.9	2.7	1.6	.8	1.4	
latch: call allocation	3141	78.2	6.8	9.1	4.4	1.2	.1	.1	
latch: checkpoint queue latch	28	53.6	14.3	25.0	3.6			3.6	
latch: enqueue hash chains	84	44.0	16.7	14.3	8.3	8.3	8.3		
latch: messages	2	100.0							
latch: object queue header operation	3617	82.9	10.2	4.2	1.2	.6	.5	.3	
latch: parallel query alloc buffer	2721	54.1	13.2	11.3	6.2	4.0	4.3	2.4	4.5
latch: redo allocation	658	69.6	7.8	8.7	4.3	4.7	3.2	1.8	
latch: redo writing	6	66.7			33.3				
latch: row cache objects	453	75.9	9.5	7.3	4.6	1.5		1.1	
latch: shared pool	4801	65.8	14.5	11.5	4.2	2.2	1.2	.5	
latch: undo global data	891	59.8	10.9	10.9	5.4	5.8	5.2	2.0	
library cache load lock	61	13.1	3.3	11.5	8.2	26.2	26.2	11.5	
library cache lock	264	10.6	3.0	43.9	5.7	18.6	9.8	6.8	1.5
library cache: mutex X	17.8K	86.1	3.8	1.4	1.3	5.8	.9	.6	
local write wait	112.3K	64.9	17.0	9.8	4.5	2.4	.8	.5	
log buffer space	45.9K	3.1	3.6	7.3	13.7	23.4	25.9	22.9	
log file parallel write	708.6K	12.9	4.4	19.8	23.6	21.0	11.4	6.9	
log file sequential read	471.5K	15.9	17.9	27.0	20.7	12.0	4.7	1.8	
log file single write	3176	69.8	9.5	7.8	6.4	4.4	1.4	.8	
log file switch (checkpoint incomplete)	42				2.4	11.9	16.7	35.7	33.3
log file switch (private strand flush incomplete)	1291	.4	.8	1.0	8.2	18.4	22.6	48.6	
log file switch completion	2069	.2	.3	.9	4.3	13.9	19.8	60.6	
log file sync	34.2K	36.8	14.0	13.1	11.9	10.9	6.5	6.8	
os thread startup	2929					43.3	50.4	6.3	.0
process diagnostic dump	498	88.2	3.6	8.2					
rdbms ipc reply	42	90.5				4.8		4.8	
read by other session	461.6K	58.1	21.6	7.9	5.9	5.3	.9	.3	
recovery area: computing backed up files	705	97.4						2.6	
recovery area: computing dropped files	18						72.2	27.8	
recovery area: computing obsolete files	18							100.0	
reliable message	3891	95.1	2.1	1.0	.7	.4	.3	.4	.2
resmgr:cpu quantum	50.4K	9.4	2.6	3.6	6.0	9.9	16.4	52.1	
resmgr:internal state change	14	7.1						92.9	
row cache lock	9	33.3					22.2	33.3	11.1
slave exit	30	46.7	6.7					46.7	
switch logfile command	5							100.0	
undo segment extension	58	39.7	3.4		1.7	13.8	17.2	24.1	
utl_file I/O	5	100.0							
wait list latch free	57	15.8	49.1	26.3	8.8				
write complete waits	64	28.1	7.8	6.3	4.7	18.8	17.2	17.2	
ASM background timer	59.4K	50.2	6.1	4.1	5.3	5.8	3.6	7.8	17.1
DIAG idle wait	93.4K							99.9	.1
JOX Jit Process Sleep	3014							.0	100.0
KSV master wait	48.4K	70.6	10.7	5.0	3.3	3.8	1.6	4.4	.5
PL/SQL lock timer	1							100.0	
PX Deq Credit: need buffer	1518.1K	30.6	19.0	22.8	14.5	7.0	3.0	3.1	.0
PX Deq Credit: send blkd	17.3M	12.3	11.8	20.9	19.1	20.1	8.3	7.3	.1
PX Deq: Execute Reply	6358.9K	96.4	.5	.5	.5	.5	.5	1.1	.1
PX Deq: Execution Msg	722.6K	64.1	6.8	6.7	6.2	5.7	3.6	4.7	2.2
PX Deq: Join ACK	25.3K	96.8	1.8	.8	.3	.2	.1	.0	
PX Deq: Metadata Update	1864	89.6	5.6	3.4	.9	.3	.1		
PX Deq: Msg Fragment	16.2K	83.4	5.0	6.5	2.2	1.6	.9	.3	
PX Deq: Parse Reply	25.3K	89.1	3.7	2.2	1.4	2.6	.6	.4	.0
PX Deq: Table Q Normal	75.8M	75.8	9.2	7.5	3.7	2.0	1.0	.8	.0
PX Deq: Table Q Sample	4012	69.9	13.3	3.9	4.5	2.5	1.6	2.1	2.2
PX Idle Wait	25.2K	.5	.9	1.9	1.4	17.4	19.9	34.9	23.2
SGA: MMAN sleep for component shrink	672	4.6	2.1	1.3	1.6	90.2	.1		
SQL*Net message from client	306.6K	80.0	3.4	2.3	.9	5.8	2.5	2.2	2.8
Space Manager: slave idle wait	74.5K	.2	.1	.3	.3	.5	.8	11.9	85.9
Streams AQ: qmn coordinator idle wait	3342	47.8	.9	.6	.4	.2	.0	.1	50.0
Streams AQ: qmn slave idle wait	1671								100.0
Streams AQ: waiting for messages in the queue	37.4K	.0	.0	.1	.2	1.4	1.8	8.1	88.4
Streams AQ: waiting for time management or cleanup tasks	5	20.0						40.0	40.0
VKRM Idle	1								100.0
class slave wait	57.2K	27.8	5.3	7.6	6.9	8.2	10.2	17.8	16.2

slave wait	4639.8K	95.7	2.3	.7	.3	.2	.2	.5	.0
jobq slave wait	16.6K							100.0	
pmon timer	15.7K	.1	.0	.0	.0	.0		.2	99.6
rdbs ipc message	993.6K	24.8	2.7	3.0	5.7	9.5	11.6	28.2	14.6
smon timer	1765	1.1	.4	.8	1.1	2.7	4.1	35.9	53.8
wait for unread message on broadcast channel	46.7K							99.9	.1

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Wait Event Histogram Detail (64 msec to 2 sec)

- Units for Total Waits column: K is 1000, M is 1000000, G is 1000000000
- Units for % of Total Waits: ms is milliseconds s is 1024 milliseconds (approximately 1 second)
- % of Total Waits: total waits for all wait classes, including Idle
- % of Total Waits: value of .0 indicates value was <.05%; value of null is truly 0
- Ordered by Event (only non-idle events are displayed)

Event	Waits 64ms to 2s	% of Total Waits								
		<32ms	<64ms	<1/8s	<1/4s	<1/2s	<1s	<2s	>=2s	
ADR block file read	2	99.8	.1	.1						
ASM file metadata operation	2281	97.9	.5	1.2	.3	.0	.0	.0	.0	
Backup: MML commit backup piece	47	39.7	2.6	3.8	1.3	52.6				
Backup: MML create a backup piece	8	89.7	7.7	2.6						
Backup: MML delete backup piece	20	66.7	33.3							
Backup: MML initialization	15	6.3	93.8							
Backup: MML query backup piece	120	82.7	13.4	3.5	.4					
Backup: MML write backup piece	3483	99.9	.1	.0	.0	.0	.0	.0	.0	
CSS initialization	144	89.8	7.8	2.3	.1					
CSS operation: action	40	97.2	2.2	.6	.1					
CSS operation: query	22	99.7	.2	.0	.0					
Data file init write	1	50.0				50.0				
Disk file operations I/O	13	100.0	.0	.0						
JS kill job wait	5	16.7					83.3			
LGWR wait for redo copy	52	100.0	.0	.0	.0					
Log archive I/O	24	99.9	.1	.0						
PX Deq: Signal ACK EXT	8	100.0	.0	.0	.0					
PX Deq: Signal ACK RSG	13	99.9	.0	.0	.0					
PX Deq: Slave Session Stats	94	99.8	.1	.0		.1				
PX Deq: Table Q Get Keys	70	95.2	1.3	.7	.8	1.3	.6	.1		
PX qref latch	14.4K	99.6	.3	.1	.0	.0	.0	.0	.0	
Parameter File I/O	25	96.8	2.3	.8	.1					
RMAN backup & recovery I/O	16.7K	99.2	.6	.1	.0	.0	.0			
SGA: allocation forcing component growth	174	44.2	43.6	8.7	2.6	1.0				
SQL*Net message to client	1	100.0		.0						
asynch descriptor resize	48	99.3	.4	.2	.1	.0	.0			
buffer busy waits	3058	98.7	.8	.4	.1	.0	.0			
buffer deadlock	95	97.9	1.2	.7	.2	.1				
control file parallel write	1335	97.4	2.0	.6	.0	.0	.0			
control file sequential read	2585	98.8	.9	.2	.0	.0	.0			
control file single write	156	94.1	2.9	2.2	.7	.0				
cursor: pin S	10	99.7	.3	.1						
cursor: pin S wait on X	1582	64.2	15.4	9.5	3.1	2.0	2.0	2.4	1.3	
db file parallel read	832	85.7	12.1	2.1	.1	.0				
db file parallel write	2565	99.5	.4	.1	.0	.0				
db file scattered read	130.7K	98.9	.9	.2	.0	.0	.0	.0		
db file sequential read	43.1K	99.0	.8	.2	.0	.0	.0	.0		
direct path read	461.7K	94.7	3.5	1.4	.4	.1	.0	.0		
direct path read temp	213K	95.9	3.2	.8	.1	.0	.0			
direct path write	18.8K	92.3	5.7	1.8	.1	.0	.0			
direct path write temp	91.7K	94.8	3.4	1.3	.3	.1	.0	.0		
enq: CF - contention	31	46.6	17.2	17.2	13.8	1.7	3.4			
enq: CR - block range reuse ckpt	19	95.2	3.8	.8	.3					
enq: FB - contention	3	98.4	1.1	.5						
enq: HW - contention	37	96.6	2.1	1.3						
enq: KO - fast object checkpoint	51	58.8	14.0	8.1	7.4	5.1	2.2	.7	3.7	
enq: PR - contention	1	75.0	25.0							
enq: PS - contention	8	99.6	.3	.2						
enq: RO - fast object reuse	505	75.6	12.4	6.4	4.3	1.2			.1	
enq: TC - contention	1	50.0					50.0			
enq: TM - contention	2	40.0		40.0					20.0	
enq: TX - allocate ITL entry	10	94.3	4.0	1.1	.6					
enq: TX - contention	13	93.5	5.0	1.5						
enq: TX - index contention	138	81.0	8.5	8.8	1.5		.1			
enq: TX - row lock contention	29	84.6	8.0	6.4	.5		.5			
enq: WF - contention	1						50.0		50.0	
imm op	1078	34.8	5.7	2.1	.6	4.1	52.7			
io done	13.1K	99.4	.5	.1	.0	.0	.0	.0	.0	
kfk: async disk IO	26	98.9	.6	.4	.1					
kksfbc child completion	466	11.6	87.5	.9						
latch free	1199	85.2	5.2	7.4	1.9	.3	.0			
latch: cache buffers chains	77	99.1	.7	.2	.0					
latch: cache buffers lru chain	7	98.6	.8	.4	.2					

latch: call allocation	3	99.9	.1							
latch: checkpoint queue latch	1	96.4	3.6							
latch: object queue header operation	11	99.7	.2	.1						
latch: parallel query alloc buffer	67	93.1	.3	.8	.1	1.1		.1	4.4	
latch: redo allocation	12	98.2	1.4	.5						
latch: row cache objects	5	98.9	.9		.2					
latch: shared pool	25	99.5	.3	.2						
latch: undo global data	18	98.0	1.1	.9						
library cache load lock	7	88.5	4.9	6.6						
library cache lock	20	91.7	4.2	1.1				1.5	.8	.8
library cache: mutex X	108	99.4	.3	.2	.0	.0				
local write wait	550	99.5	.4	.1	.0					
log buffer space	10.5K	77.1	16.9	5.3	.7	.0	.0			
log file parallel write	48.7K	93.1	5.3	1.5	.1	.0	.0			
log file sequential read	8478	98.2	1.5	.3	.0	.0	.0			
log file single write	24	99.2	.7	.1	.0					
log file switch (checkpoint incomplete)	29	31.0	11.9	9.5				14.3	33.3	
log file switch (private strand flush incomplete)	628	51.4	20.4	15.5	8.4	2.2	2.2			
log file switch completion	1254	39.4	27.4	21.4	8.9	2.1	.8			
log file sync	2326	93.2	4.3	1.9	.5	.0	.0			
os thread startup	185	93.7	4.3	1.4	.6				.0	
rdbms ipc reply	2	95.2		2.4				2.4		
read by other session	1356	99.7	.2	.0	.0	.0	.0			
recovery area: computing backed up files	18	97.4		1.8	.7					
recovery area: computing dropped files	5	72.2	27.8							
recovery area: computing obsolete files	18							11.1	88.9	
reliable message	19	99.5	.2	.1	.1	.0		.1	.0	
resmgr:cpu quantum	26.3K	47.9	22.9	23.3	5.8	.1				
resmgr:internal state change	13	7.1		92.9						
row cache lock	3	55.6	11.1	22.2						11.1
slave exit	14	53.3						46.7		
switch logfile command	5			20.0	80.0					
undo segment extension	14	75.9	13.8	5.2	1.7	1.7	1.7			
write complete waits	11	82.8	17.2							

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Wait Event Histogram Detail (4 sec to 2 min)

- Units for Total Waits column: K is 1000, M is 1000000, G is 1000000000
- Units for % of Total Waits: s is 1024 milliseconds (approximately 1 second) m is 64*1024 milliseconds (approximately 67 seconds or 1.1 minutes)
- % of Total Waits: total waits for all wait classes, including Idle
- % of Total Waits: value of .0 indicates value was <.05%; value of null is truly 0
- Ordered by Event (only non-idle events are displayed)

Event	Waits 4s to 2m	% of Total Waits							
		<2s	<4s	<8s	<16s	<32s	< 1m	< 2m	>=2m
ASM file metadata operation	2	100.0	.0	.0					
Backup: MML write backup piece	10	100.0	.0	.0	.0				
PX qref latch	1	100.0	.0						
cursor: pin S wait on X	61	98.7	1.3						
enq: KO - fast object checkpoint	5	96.3	3.7						
enq: RO - fast object reuse	2	99.9	.1						
enq: TM - contention	1	80.0				20.0			
enq: WF - contention	1	50.0						50.0	
io done	5	100.0	.0	.0					
latch: parallel query alloc buffer	121	95.6	4.4						
library cache lock	1	99.2	.4						.4
reliable message	1	100.0	.0						
row cache lock	1	88.9		11.1					

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Wait Event Histogram Detail (4 min to 1 hr)

- Units for Total Waits column: K is 1000, M is 1000000, G is 1000000000
- Units for % of Total Waits: m is 64*1024 milliseconds (approximately 67 seconds or 1.1 minutes) h is 4096*1024 milliseconds (approximately 70 minutes or 1.17 hours)
- % of Total Waits: total waits for all wait classes, including Idle
- % of Total Waits: value of .0 indicates value was <.05%; value of null is truly 0
- Ordered by Event (only non-idle events are displayed)

Event	Waits 4m to 1h	% of Total Waits						
		<2m	<4m	<8m	<1/4h	<1/2h	< 1h	>=1h
library cache lock	1	99.6			.4			

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Service Statistics

- ordered by DB Time

Service Name	DB Time (s)	DB CPU (s)	Physical Reads (K)	Logical Reads (K)
AGMISRT	348,645	151,418	1,271,789	2,283,548
SYSSUSERS	29,930	5,796	34,772	104,967
AGMISRT_DTP1_DEFAULT	0	0	0	0
AGMISRT_LB_DEFAULT	0	0	0	0
AGMISRT_S1_DEFAULT	0	0	0	0
SYSSBACKGROUND	0	0	594	1,418

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Service Wait Class Stats

- Wait Class info for services in the Service Statistics section.
- Total Waits and Time Waited displayed for the following wait classes: User I/O, Concurrency, Administrative, Network
- Time Waited (Wt Time) in seconds

Service Name	User I/O Total Wts	User I/O Wt Time	Concurcy Total Wts	Concurcy Wt Time	Admin Total Wts	Admin Wt Time	Network Total Wts	Network Wt Time
AGMISRT	29544538	181445	278609	1091	0	0	233488	0
SYSSUSERS	2440285	11713	41	640	5	1	66945	0
SYSSBACKGROUND	558801	1167	1336	22	4931737	23359	0	0

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SQL Statistics

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- [SQL ordered by CPU Time](#)
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SQL ordered by Elapsed Time

- Resources reported for PL/SQL code includes the resources used by all SQL statements called by the code.
- % Total DB Time is the Elapsed Time of the SQL statement divided into the Total Database Time multiplied by 100
- %Total - Elapsed Time as a percentage of Total DB time
- %CPU - CPU Time as a percentage of Elapsed Time
- %IO - User I/O Time as a percentage of Elapsed Time
- Captured SQL account for 74.0% of Total DB Time (s): 378,575
- Captured PL/SQL account for 23.2% of Total DB Time (s): 378,575

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Instance Activity Statistics

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- [Other Instance Activity Stats](#)
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Key Instance Activity Stats

- Ordered by statistic name

Statistic	Total	per Second	per Trans
db block changes	166,121,742	3,548.89	2,182.97
execute count	13,388,743	286.03	175.94
logons cumulative	27,918	0.60	0.37
opened cursors cumulative	13,240,041	282.85	173.98
parse count (total)	667,479	14.26	8.77
parse time elapsed	48,661	1.04	0.64
physical reads	1,307,155,107	27,924.97	17,177.03
physical writes	267,737,252	5,719.71	3,518.28
redo size	787,289,409,892	16,818,990.85	10,345,594.68
session cursor cache hits	4,223,545	90.23	55.50
session logical reads	2,389,932,623	51,056.52	31,405.57
user calls	602,399	12.87	7.92
user commits	76,044	1.62	1.00
user rollbacks	55	0.00	0.00
workarea executions - multipass	287	0.01	0.00
workarea executions - onepass	7,652	0.16	0.10
workarea executions - optimal	392,729	8.39	5.16

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Other Instance Activity Stats

- Ordered by statistic name

Statistic	Total	per Second	per Trans
Batched IO (bound) vector count	1,855	0.04	0.02
Batched IO (full) vector count	3,574	0.08	0.05
Batched IO (space) vector count	0	0.00	0.00
Batched IO block miss count	567,744	12.13	7.46
Batched IO buffer defrag count	1,867	0.04	0.02
Batched IO double miss count	9,464	0.20	0.12
Batched IO same unit count	66,296	1.42	0.87
Batched IO single block count	1,067	0.02	0.01
Batched IO slow jump count	137	0.00	0.00
Batched IO vector block count	503,270	10.75	6.61
Batched IO vector read count	4,891	0.10	0.06
Block Cleanout Optim referenced	74,493	1.59	0.98
CCursor + sql area evicted	1,385	0.03	0.02
CPU used by this session	15,727,253	335.98	206.67
CPU used when call started	15,159,964	323.86	199.21
CR blocks created	8,227	0.18	0.11
Cached Commit SCN referenced	1,770,283,637	37,818.86	23,262.90
Commit SCN cached	880,581	18.81	11.57
DBWR checkpoint buffers written	15,694,696	335.29	206.24
DBWR checkpoints	3,090	0.07	0.04
DBWR object drop buffers written	15,221	0.33	0.20
DBWR parallel query checkpoint buffers written	369,429	7.89	4.85
DBWR revisited being-written buffer	19	0.00	0.00
DBWR tablespace checkpoint buffers written	3,619	0.08	0.05
DBWR thread checkpoint buffers written	11,880,842	253.81	156.12
DBWR transaction table writes	7,365	0.16	0.10
DBWR undo block writes	6,767,669	144.58	88.93
DDL statements parallelized	5	0.00	0.00
DFO trees parallelized	1,772	0.04	0.02
DML statements parallelized	275	0.01	0.00
Effective IO time	82,290,056,499	1,757,975.77	1,081,355.29
HSC Compressed Segment Block Changes	0	0.00	0.00
HSC Heap Segment Block Changes	31,835,217	680.10	418.34
HSC IDL Compressed Blocks	42,016	0.90	0.55
Heap Segment Array Inserts	10,341,726	220.93	135.90
Heap Segment Array Updates	4,713	0.10	0.06
IMU CR rollbacks	1,406	0.03	0.02
IMU Flushes	33,654	0.72	0.44
IMU Redo allocation size	24,149,952	515.92	317.35
IMU commits	53,871	1.15	0.71
IMU contention	1,676	0.04	0.02
IMU ktichg flush	3,045	0.07	0.04
IMU pool not allocated	1,725	0.04	0.02
IMU recursive-transaction flush	39	0.00	0.00
IMU undo allocation size	126,255,792	2,697.22	1,659.10
IMU- failed to get a private strand	1,725	0.04	0.02
LOB table id lookup cache misses	2	0.00	0.00
Misses for writing mapping	0	0.00	0.00
Number of read IOs issued	23,453,533	501.04	308.20
PX local messages recv'd	82,942,068	1,771.90	1,089.92
PX local messages sent	82,942,068	1,771.90	1,089.92
Parallel operations downgraded 50 to 75 pct	7	0.00	0.00
Parallel operations downgraded 75 to 99 pct	3	0.00	0.00
Parallel operations downgraded to serial	0	0.00	0.00
Parallel operations not downgraded	1,762	0.04	0.02
Requests to/from client	294,063	6.28	3.86
RowCR - row contention	380	0.01	0.00
RowCR attempts	3,434,048	73.36	45.13
RowCR hits	3,432,768	73.33	45.11
SMON posted for dropping temp segment	0	0.00	0.00
SMON posted for undo segment recovery	0	0.00	0.00
SMON posted for undo segment shrink	15	0.00	0.00
SQL*Net roundtrips to/from client	299,329	6.39	3.93
SQL*Net roundtrips to/from dblink	0	0.00	0.00
active txn count during cleanout	24,859,619	531.08	326.67
background checkpoints completed	794	0.02	0.01
background checkpoints started	794	0.02	0.01
background timeouts	244,577	5.22	3.21
branch node splits	6,494	0.14	0.09
buffer is not pinned count	746,918,943	15,956.55	9,815.10
buffer is pinned count	103,573,838	2,212.66	1,361.04
bytes received via SQL*Net from client	97,349,774	2,079.70	1,279.25
bytes received via SQL*Net from dblink	0	0.00	0.00
bytes sent via SQL*Net to client	82,785,159	1,768.55	1,087.86
bytes sent via SQL*Net to dblink	0	0.00	0.00
calls to get snapshot scn: kcmgss	16,913,851	361.33	222.26
calls to kcmgas	2,548,718	54.45	33.49
calls to kcmgcs	29,110,738	621.90	382.54

all physical IO interconnect bytes	20,419,203,083,776	436,218,734.16	268,324,197.21
change write time	239,409	5.11	3.15
cleanout - number of ktugct calls	9,825,382	209.90	129.11
cleanouts and rollbacks - consistent read gets	3,470	0.07	0.05
cleanouts only - consistent read gets	3,929,260	83.94	51.63
cluster key scan block gets	611,325	13.06	8.03
cluster key scans	265,941	5.68	3.49
commit batch performed	0	0.00	0.00
commit batch requested	0	0.00	0.00
commit batch/immediate performed	75,022	1.60	0.99
commit batch/immediate requested	75,022	1.60	0.99
commit cleanout failures: block lost	126,539	2.70	1.66
commit cleanout failures: buffer being written	758	0.02	0.01
commit cleanout failures: callback failure	22,992	0.49	0.30
commit cleanout failures: cannot pin	5,310	0.11	0.07
commit cleanouts	9,685,906	206.92	127.28
commit cleanouts successfully completed	9,530,307	203.60	125.24
commit immediate performed	75,022	1.60	0.99
commit immediate requested	75,022	1.60	0.99
commit txn count during cleanout	5,832,534	124.60	76.64
consistent changes	314,457	6.72	4.13
consistent gets	2,117,519,320	45,236.91	27,825.85
consistent gets - examination	151,288,559	3,232.00	1,988.05
consistent gets direct	1,288,456,417	27,525.50	16,931.32
consistent gets from cache	829,062,903	17,711.40	10,894.53
consistent gets from cache (fastpath)	659,935,166	14,098.30	8,672.06
cursor authentications	6,513	0.14	0.09
data blocks consistent reads - undo records applied	30,184	0.64	0.40
db block gets	272,413,303	5,819.61	3,579.72
db block gets direct	85,713,134	1,831.10	1,126.34
db block gets from cache	186,700,169	3,988.51	2,453.39
db block gets from cache (fastpath)	45,796,173	978.35	601.80
deferred (CURRENT) block cleanout applications	1,870,462	39.96	24.58
dirty buffers inspected	2,108,111	45.04	27.70
enqueue conversions	100,069	2.14	1.31
enqueue releases	8,245,183	176.14	108.35
enqueue requests	8,251,372	176.28	108.43
enqueue timeouts	6,192	0.13	0.08
enqueue waits	7,092	0.15	0.09
exchange deadlocks	4,426	0.09	0.06
failed probes on index block reclamation	270	0.01	0.00
file io service time	1,313,539,069	28,061.35	17,260.92
frame signature mismatch	0	0.00	0.00
free buffer inspected	156,295,682	3,338.97	2,053.85
free buffer requested	195,039,578	4,166.66	2,562.97
heap block compress	173,954,428	3,716.22	2,285.90
hot buffers moved to head of LRU	5,438,259	116.18	71.46
immediate (CR) block cleanout applications	3,932,730	84.02	51.68
immediate (CURRENT) block cleanout applications	4,301,907	91.90	56.53
index crx upgrade (positioned)	598,800	12.79	7.87
index crx upgrade (prefetch)	0	0.00	0.00
index fast full scans (direct read)	2,691	0.06	0.04
index fast full scans (full)	1,723	0.04	0.02
index fast full scans (rowid ranges)	39,933	0.85	0.52
index fetch by key	78,955,250	1,686.73	1,037.53
index scans kdiixs1	9,936,625	212.28	130.57
java call heap collected bytes	1,131,398,384	24,170.25	14,867.45
java call heap collected count	14,339,002	306.33	188.43
java call heap gc count	2,764	0.06	0.04
java call heap live object count	4,890,291	104.47	64.26
java call heap live object count max	5,195,568	110.99	68.27
java call heap live size	395,603,280	8,451.34	5,198.53
java call heap live size max	423,026,632	9,037.19	5,558.90
java call heap object count	7,887,090	168.49	103.64
java call heap object count max	8,712,867	186.13	114.49
java call heap total size	2,078,801,920	44,409.78	27,317.07
java call heap total size max	2,078,801,920	44,409.78	27,317.07
java call heap used size	663,155,600	14,167.10	8,714.38
java call heap used size max	723,216,536	15,450.19	9,503.63
java session heap live object count	0	0.00	0.00
java session heap live object count max	0	0.00	0.00
java session heap live size	333,268,992	7,119.68	4,379.41
java session heap live size max	333,268,992	7,119.68	4,379.41
java session heap object count	0	0.00	0.00
java session heap object count max	0	0.00	0.00
java session heap used size	333,268,992	7,119.68	4,379.41
java session heap used size max	333,268,992	7,119.68	4,379.41
leaf node 90-10 splits	1,277,482	27.29	16.79
leaf node splits	1,652,173	35.30	21.71
lob reads	16,296	0.35	0.21
lob writes	65,723	1.40	0.86
lob writes unaligned	65,723	1.40	0.86
logical read bytes from cache	8,321,097,392,128	177,764,947.84	109,345,686.44

max of enq hold time	12,890	0.28	0.17
messages received	1,379,214	29.46	18.12
messages sent	1,379,214	29.46	18.12
min active SCN optimization applied on CR	568,084	12.14	7.47
no buffer to keep pinned count	219	0.00	0.00
no work - consistent read gets	1,930,021,843	41,231.37	25,361.99
non-idle wait count	66,051,112	1,411.06	867.96
parse count (describe)	211	0.00	0.00
parse count (failures)	3,296	0.07	0.04
parse count (hard)	23,557	0.50	0.31
parse time cpu	37,843	0.81	0.50
physical read IO requests	50,363,422	1,075.92	661.81
physical read bytes	10,708,214,636,544	228,761,319.17	140,714,262.17
physical read total IO requests	55,428,003	1,184.12	728.37
physical read total bytes	15,785,222,552,576	337,222,259.46	207,430,091.76
physical read total multi block requests	41,510,468	886.79	545.48
physical reads cache	183,048,390	3,910.49	2,405.40
physical reads cache prefetch	167,326,849	3,574.63	2,198.80
physical reads direct	1,124,106,717	24,014.47	14,771.64
physical reads direct (lob)	27,627	0.59	0.36
physical reads direct temporary tablespace	173,781,910	3,712.53	2,283.63
physical reads prefetch warmup	0	0.00	0.00
physical write IO requests	26,161,334	558.89	343.78
physical write bytes	2,193,303,568,384	46,855,898.46	28,821,713.40
physical write total IO requests	30,162,775	644.37	396.36
physical write total bytes	4,633,980,531,200	98,996,474.70	60,894,105.46
physical write total multi block requests	8,964,034	191.50	117.79
physical writes direct	246,476,146	5,265.51	3,238.89
physical writes direct (lob)	1,074	0.02	0.01
physical writes direct temporary tablespace	164,491,697	3,514.06	2,161.55
physical writes from cache	21,261,106	454.20	279.39
physical writes non checkpoint	263,417,482	5,627.43	3,461.51
pinned buffers inspected	117,554	2.51	1.54
prefetch clients - default	2	0.00	0.00
prefetch warmup blocks aged out before use	0	0.00	0.00
prefetched blocks aged out before use	5,075,365	108.43	66.69
queries parallelized	1,490	0.03	0.02
recursive aborts on index block reclamation	2	0.00	0.00
recursive calls	17,898,363	382.37	235.20
recursive cpu usage	15,568,277	332.59	204.58
redo KB read	800,758,183	17,106.73	10,522.58
redo blocks checksummed by FG (exclusive)	1,447,896,764	30,931.65	19,026.49
redo blocks written	1,586,620,109	33,895.22	20,849.42
redo buffer allocation retries	100,915	2.16	1.33
redo entries	173,384,965	3,704.05	2,278.41
redo log space requests	12,256	0.26	0.16
redo ordering marks	9,016	0.19	0.12
redo size for direct writes	674,879,024,292	14,417,549.62	8,868,434.86
redo subscn max counts	3,863,421	82.53	50.77
redo synch long waits	3,106	0.07	0.04
redo synch poll writes	164	0.00	0.00
redo synch polls	163	0.00	0.00
redo synch time	31,176	0.67	0.41
redo synch time (usec)	313,452,938	6,696.35	4,119.02
redo synch time overhead (usec)	21,693,468,245	463,441.07	285,069.03
redo synch time overhead count (<128 msec)	237	0.01	0.00
redo synch time overhead count (<2 msec)	32,561	0.70	0.43
redo synch time overhead count (<32 msec)	655	0.01	0.01
redo synch time overhead count (<8 msec)	1,631	0.03	0.02
redo synch time overhead count (>=128 msec)	1,030	0.02	0.01
redo synch writes	37,003	0.79	0.49
redo wastage	210,523,816	4,497.45	2,766.45
redo write info find	36,193	0.77	0.48
redo write info find fail	79	0.00	0.00
redo write time	812,748	17.36	10.68
redo writes	708,577	15.14	9.31
rollback changes - undo records applied	1,989	0.04	0.03
rollbacks only - consistent read gets	4,711	0.10	0.06
root node splits	190	0.00	0.00
rows fetched via callback	29,800,099	636.62	391.60
session connect time	0	0.00	0.00
shared hash latch upgrades - no wait	4,916,135	105.02	64.60
shared hash latch upgrades - wait	33,493	0.72	0.44
sorts (disk)	1,773	0.04	0.02
sorts (memory)	5,792,068	123.74	76.11
sorts (rows)	17,456,374,517	372,923.35	229,390.33
sql area evicted	24,076	0.51	0.32
sql area purged	4,826	0.10	0.06
summed dirty queue length	14,819,307	316.59	194.74
switch current to new buffer	52,018	1.11	0.68
table fetch by rowid	47,318,442	1,010.87	621.80
table fetch continued row	60,290,219	1,287.99	792.26
table scan blocks gotten	1,395,269,964	29,807.38	18,334.93

table scan rows gotten	39,257,070,354	838,655.14	515,868.41
table scans (cache partitions)	22,721	0.49	0.30
table scans (direct read)	210,044	4.49	2.76
table scans (long tables)	227,566	4.86	2.99
table scans (rowid ranges)	174,234	3.72	2.29
table scans (short tables)	8,130,677	173.70	106.84
temp space allocated (bytes)	5,242,880	112.00	68.90
total cf enq hold time	341,700	7.30	4.49
total number of cf enq holders	12,201	0.26	0.16
total number of times SMON posted	1,720	0.04	0.02
transaction rollbacks	1,253	0.03	0.02
transaction tables consistent read rollbacks	112	0.00	0.00
transaction tables consistent reads - undo records applied	26,771	0.57	0.35
undo change vector size	39,452,000,464	842,819.46	518,429.95
user logons cumulative	1,785	0.04	0.02
user logouts cumulative	1,788	0.04	0.02
write clones created in background	112,338	2.40	1.48
write clones created in foreground	3,847	0.08	0.05

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Instance Activity Stats - Absolute Values

- Statistics with absolute values (should not be diffed)

Statistic	Begin Value	End Value
logons current	41	38
opened cursors current	102	90
session cursor cache count	1,758,722	1,837,506
session pga memory	13,178,369,712	13,355,668,232
session pga memory max	28,921,173,888	29,218,813,560
session uga memory	45,640,020,224	47,297,166,408
session uga memory max	4,188,015,120,096	4,749,607,613,112
workarea memory allocated	4,738	5,162

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Instance Activity Stats - Thread Activity

- Statistics identified by '(derived)' come from sources other than SYSSTAT

Statistic	Total	per Hour
log switches (derived)	794	61.06

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IO Stats

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- [IOStat by Filetype summary](#)
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IOStat by Function summary

- 'Data' columns suffixed with M,G,T,P are in multiples of 1024 other columns suffixed with K,M,G,T,P are in multiples of 1000
- ordered by (Data Read + Write) desc

Function Name	Reads: Data	Reqs per sec	Data per sec	Writes: Data	Reqs per sec	Data per sec	Waits: Count	Avg Tm(ms)
Direct Reads	8.2T	706.82	184.545	350.3G	53.37	7.663M	0	
RMAN	3.9T	87.45	86.552M	813M	0.33	.017M	51.7K	2.45
Others	778.7G	24.41	17.035M	825.7G	28.81	18.063M	359.1K	2.59
Direct Writes	131.6G	18.01	2.879M	1.4T	248.06	32.011M	0	
LGWR	235M	0.39	.005M	1.5T	66.98	33.106M	737.8K	10.61
Buffer Cache Reads	1.4T	346.93	30.55M	0M	0.00	0M	15.7M	3.10
DBWR	0M	0.00	0M	162.2G	246.81	3.548M	0	
Streams AQ	0M	0.00	0M	0M	0.00	0M	37	12.73
TOTAL:	14.4T	1184.00	321.566	4.2T	644.36	94.408M	16.9M	3.42

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IOStat by Filetype summary

- 'Data' columns suffixed with M,G,T,P are in multiples of 1024 other columns suffixed with K,M,G,T,P are in multiples of 1000
- Small Read and Large Read are average service times, in milliseconds

• Ordered by (Data Read + Write) desc

Filetype Name	Reads: Data	Reqs per sec	Data per sec	Writes: Data	Reqs per sec	Data per sec	Small Read	Large Read
Data File	11.4T	858.60	254.799	786.8G	364.82	17.213M	2.82	16.49
Temp File	1.6T	289.73	35.795M	1.2T	194.06	27.471M	13.80	38.84
Log File	763.7G	16.91	16.706M	1.5T	66.64	33.101M	1.40	9.82
Archive Log	641.8G	14.11	14.041M	756.1G	16.55	16.54M	7.60	24.77
Control File	10.8G	4.68	.236M	3.9G	2.28	.085M	2.16	12.09
Other	0M	0.01	0M	1M	0.01	0M	4.10	
TOTAL:	14.4T	1184.02	321.577	4.2T	644.36	94.41M	8.68	19.79

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IOStat by Function/Filetype summary

- 'Data' columns suffixed with M,G,T,P are in multiples of 1024 other columns suffixed with K,M,G,T,P are in multiples of 1000
- Ordered by (Data Read + Write) desc for each function

Function/File Name	Reads: Data	Reqs per sec	Data per sec	Writes: Data	Reqs per sec	Data per sec	Waits: Count	Avg Tm(ms)
Direct Reads	8.2T	706.82	184.545	350.3G	53.37	7.663M	0	
Direct Reads (Data File)	8.2T	706.82	184.545	350.3G	53.37	7.663M	0	
RMAN	3.9T	87.45	86.552M	813M	0.33	.017M	44.3K	2.35
RMAN (Data File)	3.2T	72.46	72.452M	0M	0.00	0M	145	1.17
RMAN (Archive Log)	641.8G	14.11	14.041M	0M	0.00	0M	2688	7.06
RMAN (Control File)	2.7G	0.88	.059M	813M	0.33	.017M	41.5K	2.05
Others	778.7G	24.41	17.035M	825.7G	28.80	18.063M	321.5K	2.28
Others (Log File)	763.7G	16.84	16.706M	0M	0.00	0M	5941	1.56
Others (Archive Log)	0M	0.00	0M	756.1G	16.55	16.54M	0	
Others (Data File)	7.2G	4.09	.156M	66.8G	10.63	1.461M	151K	2.02
Others (Control File)	7.9G	3.47	.172M	2.8G	1.62	.062M	164.6K	2.54
Direct Writes	131.6G	18.01	2.879M	1.4T	248.06	32.011M	0	
Direct Writes (Data File)	131.6G	18.01	2.879M	1.4T	248.06	32.011M	0	
LGWR	235M	0.39	.005M	1.5T	66.98	33.106M	21.2K	1.51
LGWR (Log File)	2M	0.07	0M	1.5T	66.64	33.101M	6352	1.42
LGWR (Control File)	233M	0.32	.005M	248M	0.34	.005M	14.9K	1.55
Buffer Cache Reads	1.4T	346.93	30.55M	0M	0.00	0M	15.7M	3.09
Buffer Cache Reads (Data File)	1.4T	346.93	30.55M	0M	0.00	0M	15.7M	3.09
DBWR	0M	0.00	0M	162.2G	246.81	3.548M	0	
DBWR (Data File)	0M	0.00	0M	162.2G	246.81	3.548M	0	
Streams AQ	0M	0.00	0M	0M	0.00	0M	37	12.73
Streams AQ (Data File)	0M	0.00	0M	0M	0.00	0M	37	12.73
TOTAL:	14.4T	1183.99	321.566	4.2T	644.35	94.408M	16.1M	3.07

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Tablespace IO Stats

- ordered by IOs (Reads + Writes) desc

Tablespace	Reads	Av Rds/s	Av Rd(ms)	Av Blks/Rd	1-bk Rds/s	Av 1-bk Rd(ms)	Writes	Writes avg/s	Buffer Waits	Av Buf Wt(ms)
IMD	22,450,930	480	2.83	18.77	8,645,548	64.43	3	185	618,513	1.62
TEMP_ETL	13,556,255	290	0.77	15.82	9,077,588	3.96	0	194	44,916	2.46
GMIS_ODS	15,981,287	341	2.32	60.81	4,549,962	24.19	2	97	1,580	7.01
UNDOTBS1	107,507	2	27.34	121.97	3,797,049	0.11	6	81	286,546	0.88
SYSAUX	706,341	15	6.56	21.73	28,326	11.90	2	1	0	0.00
GMIS_ODS_MIGRATION	277,497	6	20.49	127.64	793	0.02	0	0	0	0.00
USERS	172,223	4	28.06	125.34	2,250	0.07	4	0	8	1.25
GMIS_STAGING_GLOBAL	131,497	3	24.73	127.23	793	0.02	0	0	0	0.00
GMIS_ODS_ARCH	125,597	3	26.64	127.19	793	0.02	0	0	0	0.00
SYSTEM	95,557	2	9.36	23.80	16,789	1.61	4	0	5,390	1.89
TS_OWB_REPOS	24,423	1	13.72	44.84	12,210	0.33	6	0	1,000	5.38
COGNOS_STORE	29,597	1	29.10	124.58	793	0.02	0	0	0	0.00
SUI	27,297	1	29.23	124.29	793	0.02	0	0	0	0.00
RESQ	17,297	0	30.92	122.15	793	0.02	0	0	0	0.00
GMIS_STAGING	9,097	0	35.01	116.87	793	0.02	0	0	0	0.00
GMIS_STAGING_US	6,197	0	25.82	111.67	793	0.02	0	0	0	0.00
GMIS_STAGING_NONGENIUS	4,297	0	30.92	104.44	793	0.02	0	0	0	0.00
TEMP	1,889	0	6.71	14.21	1,758	0.00	4	0	0	0.00
OWBD	1,882	0	7.04	7.75	1,702	0.04	5	0	16	6.88
COGNOS_AUDIT	2,397	0	24.13	85.77	793	0.02	0	0	0	0.00
AFE	897	0	3.30	15.16	793	0.02	0	0	0	0.00
COGFINUS	897	0	3.23	15.16	793	0.02	0	0	0	0.00
DEV	897	0	3.14	15.16	793	0.02	0	0	0	0.00
ENV_CONFIG	897	0	2.91	15.16	793	0.02	0	0	0	0.00
GMISED	897	0	2.98	15.16	793	0.02	0	0	0	0.00
GMIS_ODS_IM	897	0	3.22	15.16	793	0.02	0	0	0	0.00
GMIS_ODS_INTEGRATION	897	0	3.00	15.16	793	0.02	0	0	0	0.00
GMIS_ODS_RO	897	0	3.69	15.16	793	0.02	0	0	0	0.00
GMIS_ODS_SCF	897	0	3.24	15.16	793	0.02	0	0	0	0.00
GMIS_ODS_UAT	897	0	4.33	15.16	793	0.02	0	0	0	0.00
GMIS_SCF_DATA	897	0	3.44	15.16	793	0.02	0	0	0	0.00

GMIS_STAGING_ACII	897	0	3.94	15.16	793	0.02	0	0	0	0.00
GMIS_STAGING_MIGRATION	897	0	4.18	15.16	793	0.02	0	0	0	0.00
GMIS_STAGING_SCF	897	0	4.40	15.16	793	0.02	0	0	0	0.00
GMIS_STAGING_UAT	897	0	3.95	15.16	793	0.02	0	0	0	0.00
IMD_32	897	0	4.69	15.16	793	0.02	0	0	0	0.00
IMD_IDX	897	0	4.68	15.16	793	0.02	0	0	0	0.00
SDLC	897	0	4.40	15.16	793	0.02	0	0	0	0.00

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File IO Stats

- ordered by Tablespace, File

Tablespace	Filename	Reads	Av Rds/s	Av Rd(ms)	Av Blks/Rd	1-bk Rds/s	Av 1-bk Rd(ms)	Writes	Writes avg/s	Buffer Waits	Av Buf Wt(ms)
AFE	+DATA/agmisrt/datafile/afe.367.848609405	897	0	3.30	15.16	0	0.01	793	0	0	0.00
COGFINUS	+DATA/agmisrt/datafile/cogfinus.262.848609413	897	0	3.23	15.16	0	0.09	793	0	0	0.00
COGNOS_AUDIT	+DATA/agmisrt/datafile/cognos_audit.272.848609243	2,397	0	24.13	85.77	0	0.05	793	0	0	0.00
COGNOS_STORE	+DATA/agmisrt/datafile/cognos_store.357.848607669	29,597	1	29.10	124.58	0	0.01	793	0	0	0.00
DEV	+DATA/agmisrt/datafile/dev.282.848609421	897	0	3.14	15.16	0	0.04	793	0	0	0.00
ENV_CONFIG	+DATA/agmisrt/datafile/env_config.353.848609429	897	0	2.91	15.16	0	0.01	793	0	0	0.00
GMISED	+DATA/agmisrt/datafile/gmised.288.848609439	897	0	2.98	15.16	0	0.04	793	0	0	0.00
GMIS_ODS	+DATA/agmisrt/datafile/gmis_ods.384.848586753	15,981,287	341	2.32	60.81	24	2.03	4,549,962	97	1,580	7.01
GMIS_ODS_ARCH	+DATA/agmisrt/datafile/gmis_ods_arch.364.851380715	125,597	3	26.64	127.19	0	0.01	793	0	0	0.00
GMIS_ODS_IM	+DATA/agmisrt/datafile/gmis_ods_im.267.848609445	897	0	3.22	15.16	0	0.03	793	0	0	0.00
GMIS_ODS_INTEGRATION	+DATA/agmisrt/datafile/gmis_ods_integration.286.848609455	897	0	3.00	15.16	0	0.04	793	0	0	0.00
GMIS_ODS_MIGRATION	+DATA/agmisrt/datafile/gmis_ods_migration.284.848607651	277,497	6	20.49	127.64	0	0.03	793	0	0	0.00
GMIS_ODS_RO	+DATA/agmisrt/datafile/gmis_ods_ro.378.848586779	897	0	3.69	15.16	0	0.04	793	0	0	0.00
GMIS_ODS_SCF	+DATA/agmisrt/datafile/gmis_ods_scf.361.848609463	897	0	3.24	15.16	0	0.03	793	0	0	0.00
GMIS_ODS_UAT	+DATA/agmisrt/datafile/gmis_ods_uat.377.848586787	897	0	4.33	15.16	0	0.01	793	0	0	0.00
GMIS_SCF_DATA	+DATA/agmisrt/datafile/gmis_scf_data.376.848586797	897	0	3.44	15.16	0	0.08	793	0	0	0.00
GMIS_STAGING	+DATA/agmisrt/datafile/gmis_staging.352.848609203	9,097	0	35.01	116.87	0	0.06	793	0	0	0.00
GMIS_STAGING_ACII	+DATA/agmisrt/datafile/gmis_staging_acii.375.848586805	897	0	3.94	15.16	0	0.05	793	0	0	0.00
GMIS_STAGING_GLOBAL	+DATA/agmisrt/datafile/gmis_staging_global.271.848607659	131,497	3	24.73	127.23	0	0.04	793	0	0	0.00
GMIS_STAGING_MIGRATION	+DATA/agmisrt/datafile/gmis_staging_migration.374.848586815	897	0	4.18	15.16	0	0.04	793	0	0	0.00
GMIS_STAGING_NONGENIUS	+DATA/agmisrt/datafile/gmis_staging_nongenius.379.848586779	4,297	0	30.92	104.44	0	0.03	793	0	0	0.00
GMIS_STAGING_SCF	+DATA/agmisrt/datafile/gmis_staging_scf.373.848586823	897	0	4.40	15.16	0	0.04	793	0	0	0.00
GMIS_STAGING_UAT	+DATA/agmisrt/datafile/gmis_staging_uat.372.848586833	897	0	3.95	15.16	0	0.06	793	0	0	0.00
GMIS_STAGING_US	+DATA/agmisrt/datafile/gmis_staging_us.380.848586777	6,197	0	25.82	111.67	0	0.04	793	0	0	0.00
IMD	+DATA/agmisrt/datafile/imd.285.848607635	22,450,930	480	2.83	18.77	64	2.84	8,645,548	185	618,513	1.62
IMD_32	+DATA/agmisrt/datafile/imd_32.371.848586843	897	0	4.69	15.16	0	0.09	793	0	0	0.00
IMD_IDX	+DATA/agmisrt/datafile/imd_idx.370.848586851	897	0	4.68	15.16	0	0.05	793	0	0	0.00
OWBD	+DATA/agmisrt/datafile/owbd.369.848586859	1,882	0	7.04	7.75	0	5.25	1,702	0	16	6.88
RESQ	+DATA/agmisrt/datafile/resq.268.848607675	17,297	0	30.92	122.15	0	0.03	793	0	0	0.00
SDLC	+DATA/agmisrt/datafile/sdlc.368.848586869	897	0	4.40	15.16	0	0.04	793	0	0	0.00
SUI	+DATA/agmisrt/datafile/sui.358.848607671	27,297	1	29.23	124.29	0	0.04	793	0	0	0.00
SYSAUX	+DATA/agmisrt/datafile/sysaux.273.848607663	706,341	15	6.56	21.73	12	2.17	28,326	1	0	0.00
SYSTEM	+DATA/agmisrt/datafile/system.265.848607673	95,557	2	9.36	23.80	2	4.22	16,789	0	5,390	1.89
TEMP	+DATA/agmisrt/tempfile/temp.363.848640559	1,889	0	6.71	14.21	0	3.96	1,758	0	0	0.00
TEMP_ETL	+DATA/agmisrt/tempfile/temp_etl.354.848640565	13,556,255	290	0.77	15.82	4	0.27	9,077,588	194	44,916	2.46
TS_OW_B_REPOS	+DATA/agmisrt/datafile/ts_owb_repos.381.848586777	24,423	1	13.72	44.84	0	6.19	12,210	0	1,000	5.38
UNDOTBS1	+DATA/agmisrt/datafile/undotbs1.382.848586773	107,507	2	27.34	121.97	0	5.52	3,797,049	81	286,546	0.88
USERS	+DATA/agmisrt/datafile/users.383.848586767	172,223	4	28.06	125.34	0	4.18	2,250	0	8	1.25

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Buffer Pool Statistics

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Buffer Pool Statistics

- Standard block size Pools D: default, K: keep, R: recycle
- Default Pools for other block sizes: 2k, 4k, 8k, 16k, 32k

P	Number of Buffers	Pool Hit%	Buffer Gets	Physical Reads	Physical Writes	Free Buff Wait	Writ Comp Wait	Buffer Busy Waits
D	947,788	82	1,012,494,987	183,042,763	21,261,002	0	0	958,533

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Checkpoint Activity

- Total Physical Writes: 267,737,252

MTTR Writes	Log Size Writes	Log Ckpt Writes	Other Settings Writes	Autotune Ckpt Writes	Thread Ckpt Writes
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Advisory Statistics

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Instance Recovery Stats

- B: Begin Snapshot, E: End Snapshot

	Target MTTR (s)	Estd MTTR (s)	Recovery Estd IOs	Actual RedoBlks	Target RedoBlks	Log Sz RedoBlks	Log Ckpt Timeout RedoBlks	Log Ckpt Interval RedoBlks	Opt Log Sz(M)	Estd RAC Avail Time
B	0	15	228	661	5310	6794766	5310			
E	0	15	267	2062	38529	6794766	38529			

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MTTR Advisory

No data exists for this section of the report.

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Buffer Pool Advisory

- Only rows with estimated physical reads >0 are displayed
- ordered by Block Size, Buffers For Estimate

P	Size for Est (M)	Size Factor	Buffers (thousands)	Est Phys Read Factor	Estimated Phys Reads (thousands)	Est Phys Read Time	Est %DBtime for Rds
D	768	0.10	95	1.04	10,983	1	65844.00
D	1,536	0.20	189	1.03	10,957	1	65657.00
D	2,304	0.30	284	1.03	10,952	1	65622.00
D	3,072	0.40	378	1.03	10,949	1	65600.00
D	3,840	0.50	473	1.03	10,945	1	65574.00
D	4,608	0.60	567	1.03	10,941	1	65542.00
D	5,376	0.70	662	1.03	10,931	1	65474.00
D	6,144	0.80	756	1.03	10,885	1	65143.00
D	6,912	0.90	851	1.02	10,835	1	64789.00
D	7,680	1.00	946	1.00	10,612	1	63211.00
D	7,712	1.00	950	1.00	10,612	1	63210.00
D	8,448	1.10	1,040	1.00	10,606	1	63166.00
D	9,216	1.20	1,135	1.00	10,598	1	63107.00
D	9,984	1.29	1,229	1.00	10,592	1	63067.00
D	10,752	1.39	1,324	1.00	10,590	1	63055.00
D	11,520	1.49	1,418	1.00	10,589	1	63043.00
D	12,288	1.59	1,513	1.00	10,588	1	63041.00
D	13,056	1.69	1,608	1.00	10,588	1	63039.00
D	13,824	1.79	1,702	1.00	10,588	1	63036.00
D	14,592	1.89	1,797	1.00	10,583	1	63005.00
D	15,360	1.99	1,891	1.00	10,583	1	63005.00

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PGA Aggr Summary

- PGA cache hit % - percentage of W/A (WorkArea) data processed only in-memory

PGA Cache Hit %	W/A MB Processed	Extra W/A MB Read/Written
71.48	4,187,303	1,670,512

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PGA Aggr Target Stats

- B: Begin Snap E: End Snap (rows identified with B or E contain data which is absolute i.e. not diffed over the interval)
- Auto PGA Target - actual workarea memory target

- W/A PGA Used - amount of Workareas (manual + auto)
- %PGA W/A Mem - percentage of PGA memory allocated to workareas
- %Auto W/A Mem - percentage of workarea memory controlled by Auto Mem Mgmt
- %Man W/A Mem - percentage of workarea memory under manual control

	PGA Aggr Target(M)	Auto PGA Target(M)	PGA Mem Alloc(M)	W/A PGA Used(M)	%PGA W/A Mem	%Auto W/A Mem	%Man W/A Mem	Global Mem Bound(K)
B	2,048	1,635	336.23	0.00	0.00	0.00	0.00	212,990
E	2,048	1,645	350.71	0.00	0.00	0.00	0.00	212,990

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PGA Aggr Target Histogram

- Optimal Executions are purely in-memory operations

Low Optimal	High Optimal	Total Execs	Optimal Execs	1-Pass Execs	M-Pass Execs
2K	4K	245,710	245,710	0	0
16K	32K	32	0	32	0
64K	128K	2,323	2,322	1	0
128K	256K	44,493	44,493	0	0
256K	512K	2,985	2,977	8	0
512K	1024K	23,790	23,732	58	0
1M	2M	30,700	30,634	66	0
2M	4M	6,081	5,984	96	1
4M	8M	10,553	10,237	315	1
8M	16M	7,040	6,736	303	1
16M	32M	4,663	4,223	392	48
32M	64M	12,389	11,034	1,265	90
64M	128M	4,800	2,141	2,613	46
128M	256M	887	339	548	0
256M	512M	1,902	262	1,550	90
512M	1024M	333	140	193	0
1G	2G	692	545	137	10
2G	4G	211	207	4	0
4G	8G	32	0	32	0

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PGA Memory Advisory

- When using Auto Memory Mgmt, minimally choose a pga_aggregate_target value where Estd PGA Overallloc Count is 0

PGA Target Est (MB)	Size Factr	W/A MB Processed	Estd Extra W/A MB Read/ Written to Disk	Estd PGA Cache Hit %	Estd PGA Overallloc Count	Estd Time
260	0.13	22,558,876.70	43,723,620.76	34.00	30,417	20,175,533,232
520	0.25	22,558,876.70	38,506,597.76	37.00	5,730	18,587,539,041
1,040	0.50	22,558,876.70	21,200,710.36	52.00	404	13,319,851,194
1,560	0.75	22,558,876.70	13,312,691.27	63.00	3	10,918,840,409
2,080	1.00	22,558,876.70	4,569,276.32	83.00	0	8,257,458,208
2,496	1.20	22,558,876.70	3,911,250.08	85.00	0	8,057,163,550
2,912	1.40	22,558,876.70	3,693,846.68	86.00	0	7,990,988,772
3,328	1.60	22,558,876.70	3,609,165.50	86.00	0	7,965,212,917
3,744	1.80	22,558,876.70	3,414,460.64	87.00	0	7,905,947,282
4,160	2.00	22,558,876.70	3,356,865.05	87.00	0	7,888,415,931
6,240	3.00	22,558,876.70	3,218,009.01	88.00	0	7,846,149,951
8,320	4.00	22,558,876.70	3,095,039.01	88.00	0	7,808,719,479
12,480	6.00	22,558,876.70	3,019,166.41	88.00	0	7,785,624,841
16,640	8.00	22,558,876.70	3,012,733.02	88.00	0	7,783,666,600

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Shared Pool Advisory

- SP: Shared Pool Est LC: Estimated Library Cache Factor: Factor
- Note there is often a 1:Many correlation between a single logical object in the Library Cache, and the physical number of memory objects associated with it. Therefore comparing the number of Lib Cache objects (e.g. in v\$librarycache), with the number of Lib Cache Memory Objects is invalid.

Shared Pool Size(M)	SP Size Factr	Est LC Size (M)	Est LC Mem Obj	Est LC Time Saved (s)	Est LC Time Saved Factr	Est LC Load Time (s)	Est LC Load Time Factr	Est LC Mem Obj Hits (K)
1,088	0.89	43	2,309	4,932,461	0.92	478,402	12.49	151,677
1,120	0.92	75	3,122	5,260,625	0.98	150,238	3.92	157,096
1,152	0.95	104	4,183	5,359,381	1.00	51,482	1.34	166,341
1,184	0.97	136	5,312	5,366,679	1.00	44,184	1.15	166,968
1,216	1.00	168	6,967	5,372,563	1.00	38,300	1.00	167,450
1,248	1.03	200	7,882	5,372,857	1.00	38,006	0.99	167,489
1,280	1.05	232	8,649	5,372,972	1.00	37,891	0.99	167,499
1,312	1.08	264	9,224	5,373,066	1.00	37,797	0.99	167,506
1,344	1.11	295	10,087	5,373,174	1.00	37,689	0.98	167,514
1,376	1.13	327	10,869	5,373,236	1.00	37,627	0.98	167,519
1,408	1.16	359	11,972	5,373,295	1.00	37,568	0.98	167,524
1,440	1.18	391	12,966	5,373,335	1.00	37,528	0.98	167,527
1,472	1.21	422	13,857	5,373,412	1.00	37,451	0.98	168,029

1,504	1.24	454	14,669	5,373,446	1.00	37,417	0.98	168,032
1,600	1.32	550	16,124	5,373,550	1.00	37,313	0.97	168,041
1,728	1.42	678	18,991	5,373,728	1.00	37,135	0.97	168,053
1,856	1.53	806	22,435	5,373,913	1.00	36,950	0.96	168,063
1,984	1.63	934	26,883	5,374,007	1.00	36,856	0.96	168,071
2,112	1.74	1,062	30,271	5,374,101	1.00	36,762	0.96	168,079
2,240	1.84	1,190	33,009	5,374,178	1.00	36,685	0.96	168,086
2,368	1.95	1,317	38,476	5,374,246	1.00	36,617	0.96	168,092
2,496	2.05	1,445	44,052	5,374,306	1.00	36,557	0.95	168,096

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SGA Target Advisory

SGA Target Size (M)	SGA Size Factor	Est DB Time (s)	Est Physical Reads
2,304	0.25	4,975,597	10,983,538
3,456	0.38	4,974,602	10,983,538
4,608	0.50	4,974,602	10,957,008
5,760	0.63	4,974,602	10,948,518
6,912	0.75	4,974,602	10,945,334
8,064	0.88	4,974,105	10,884,845
9,216	1.00	4,972,613	10,612,114
10,368	1.13	4,972,116	10,612,114
11,520	1.25	4,972,116	10,597,257
12,672	1.38	4,972,116	10,591,951
13,824	1.50	4,971,618	10,588,767
14,976	1.63	4,971,618	10,588,767
16,128	1.75	4,971,618	10,587,706
17,280	1.88	4,971,618	10,583,461
18,432	2.00	4,971,618	10,583,461

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Streams Pool Advisory

Size for Est (MB)	Size Factor	Est Spill Count	Est Spill Time (s)	Est Unspill Count	Est Unspill Time (s)
32	1.00	0	0	0	0
64	2.00	0	0	0	0
96	3.00	0	0	0	0
128	4.00	0	0	0	0
160	5.00	0	0	0	0
192	6.00	0	0	0	0
224	7.00	0	0	0	0
256	8.00	0	0	0	0
288	9.00	0	0	0	0
320	10.00	0	0	0	0
352	11.00	0	0	0	0
384	12.00	0	0	0	0
416	13.00	0	0	0	0
448	14.00	0	0	0	0
480	15.00	0	0	0	0
512	16.00	0	0	0	0
544	17.00	0	0	0	0
576	18.00	0	0	0	0
608	19.00	0	0	0	0
640	20.00	0	0	0	0

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Java Pool Advisory

Java Pool Size(M)	JP Size Factr	Est LC Size (M)	Est LC Mem Obj	Est LC Time Saved (s)	Est LC Time Saved Factr	Est LC Load Time (s)	Est LC Load Time Factr	Est LC Mem Obj Hits
32	0.33	32	550	5,707	1.00	38,300	1.00	68,135
64	0.67	32	554	5,707	1.00	38,300	1.00	68,135
96	1.00	32	554	5,707	1.00	38,300	1.00	68,135
128	1.33	32	554	5,715	1.00	38,292	1.00	68,210
160	1.67	32	554	5,715	1.00	38,292	1.00	68,210
192	2.00	32	554	5,715	1.00	38,292	1.00	68,210
224	2.33	32	554	5,715	1.00	38,292	1.00	68,210
256	2.67	32	554	5,715	1.00	38,292	1.00	68,210
288	3.00	32	554	5,715	1.00	38,292	1.00	68,210
320	3.33	32	554	5,715	1.00	38,292	1.00	68,210
352	3.67	32	554	5,715	1.00	38,292	1.00	68,210
384	4.00	32	554	5,715	1.00	38,292	1.00	68,210

Wait Statistics

- [Buffer Wait Statistics](#)
- [Enqueue Activity](#)

Buffer Wait Statistics

- ordered by wait time desc, waits desc

Class	Waits	Total Wait Time (s)	Avg Time (ms)
data block	620,510	1,009	2
undo header	286,461	253	1
file header block	47,596	114	2
segment header	1,572	10	6
1st level bmb	1,222	7	5
extent map	39	0	8
2nd level bmb	247	0	1
bitmap index block	235	0	0
undo block	45	0	0

Enqueue Activity

- only enqueues with waits are shown
- Enqueue stats gathered prior to 10g should not be compared with 10g data
- ordered by Wait Time desc, Waits desc

Enqueue Type (Request Reason)	Requests	Succ Gets	Failed Gets	Waits	Wt Time (s)	Av Wt Time(ms)
WF-AWR Flush	906	887	19	2	103	51,610.00
RO-Multiple Object Reuse (fast object reuse)	21,570	21,570	0	2,082	67	32.24
KO-Multiple Object Checkpoint (fast object checkpoint)	1,370	1,370	0	136	23	171.84
TM-DML	658,021	658,019	0	5	23	4,532.00
TX-Transaction (index contention)	4,755	4,755	0	728	16	22.01
HW-Segment High Water Mark	155,387	155,381	6	1,074	7	6.38
CF-Controlfile Transaction	42,419	42,398	21	58	5	78.79
TX-Transaction (row lock contention)	360	360	0	188	4	20.05
CR-Reuse Block Range (block range reuse ckpt)	11,866	11,866	0	396	3	8.61
TX-Transaction (allocate ITL entry)	190	190	0	176	2	9.60
TC-Tablespace Checkpoint	6	6	0	2	2	770.00
PS-PX Process Reservation	108,756	103,120	5,873	1,845	1	0.70
TX-Transaction	2,327,315	2,327,354	0	201	1	6.32
FB-Format Block	303,215	303,217	0	189	1	3.65
PR-Process Startup	2,929	2,929	0	4	0	30.00
PV-KSV slave startup (syncstart)	388	388	0	1	0	20.00
SQ-Sequence Cache	369,041	369,041	0	3	0	0.00
JS-Job Scheduler (queue lock)	226,094	226,094	0	2	0	0.00

Undo Statistics

- [Undo Segment Summary](#)
- [Undo Segment Stats](#)

Undo Segment Summary

- Min/Max TR (mins) - Min and Max Tuned Retention (minutes)
- STO - Snapshot Too Old count, OOS - Out of Space count
- Undo segment block stats:
- uS - unexpired Stolen, uR - unexpired Released, uU - unexpired reUsed
- eS - expired Stolen, eR - expired Released, eU - expired reUsed

Undo TS#	Num Undo Blocks (K)	Number of Transactions	Max Qry Len (s)	Max Tx Concurrency	Min/Max TR (mins)	STO/ OOS	uS/uR/uU/ eS/eR/eU
2	6,759.52	2,327,151	4,679	53	480/480	0/0	0/0/0/0/0

Undo Segment Stats

- Most recent 35 Undostat rows, ordered by Time desc

End Time	Num Undo Blocks	Number of Transactions	Max Qry Len (s)	Max Tx Concy	Tun Ret (mins)	STO/ OOS	uS/uR/uU/ eS/eR/eU
20-Aug 04:55	11	176	723	1	480	0/0	0/0/0/0/0
20-Aug 04:45	233	692	1,326	3	480	0/0	0/0/0/0/0

20-Aug 04:35	466,270	159,204	725	13	480	0/0	0/0/0/0/0
20-Aug 04:25	138,891	47,296	703	5	480	0/0	0/0/0/0/0
20-Aug 04:15	512,361	176,787	726	17	480	0/0	0/0/0/0/0
20-Aug 04:05	318,485	107,627	1,621	5	480	0/0	0/0/0/0/0
20-Aug 03:55	264,430	90,265	1,599	6	480	0/0	0/0/0/0/0
20-Aug 03:45	457,399	160,378	999	14	480	0/0	0/0/0/0/0
20-Aug 03:35	579,949	199,454	731	12	480	0/0	0/0/0/0/0
20-Aug 03:25	167,315	62,778	880	20	480	0/0	0/0/0/0/0
20-Aug 03:15	525	16,773	731	3	480	0/0	0/0/0/0/0
20-Aug 03:05	142	344	1,335	4	480	0/0	0/0/0/0/0
20-Aug 02:55	19,738	494	1,542	2	480	0/0	0/0/0/0/0
20-Aug 02:45	19,229	244	1,337	2	480	0/0	0/0/0/0/0
20-Aug 02:35	34,639	2,605	735	4	480	0/0	0/0/0/0/0
20-Aug 02:25	49,366	11,938	1,210	10	480	0/0	0/0/0/0/0
20-Aug 02:15	966	2,550	738	6	480	0/0	0/0/0/0/0
20-Aug 02:05	521	4,326	135	11	480	0/0	0/0/0/0/0
20-Aug 01:55	647	1,899	1,343	5	480	0/0	0/0/0/0/0
20-Aug 01:45	236	2,177	4,679	8	480	0/0	0/0/0/0/0
20-Aug 01:35	1,108	5,965	4,076	18	480	0/0	0/0/0/0/0
20-Aug 01:25	94	432	3,475	6	480	0/0	0/0/0/0/0
20-Aug 01:15	144	643	2,874	6	480	0/0	0/0/0/0/0
20-Aug 01:05	182	857	2,272	4	480	0/0	0/0/0/0/0
20-Aug 00:55	128	445	1,671	6	480	0/0	0/0/0/0/0
20-Aug 00:45	104	846	1,345	7	480	0/0	0/0/0/0/0
20-Aug 00:35	130,404	46,555	1,009	5	480	0/0	0/0/0/0/0
20-Aug 00:25	521	700	506	4	480	0/0	0/0/0/0/0
20-Aug 00:15	223	965	881	3	480	0/0	0/0/0/0/0
20-Aug 00:05	233	651	1,849	7	480	0/0	0/0/0/0/0
19-Aug 23:55	19	358	1,248	3	480	0/0	0/0/0/0/0
19-Aug 23:45	507	1,030	2,356	7	480	0/0	0/0/0/0/0
19-Aug 23:35	341	3,141	1,755	5	480	0/0	0/0/0/0/0
19-Aug 23:25	39,091	13,662	1,154	6	480	0/0	0/0/0/0/0

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Latch Statistics

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Latch Activity

- "Get Requests", "Pct Get Miss" and "Avg Slps/Miss" are statistics for willing-to-wait latch get requests
- "NoWait Requests", "Pct NoWait Miss" are for no-wait latch get requests
- "Pct Misses" for both should be very close to 0.0

Latch Name	Get Requests	Pct Get Miss	Avg Slps /Miss	Wait Time (s)	NoWait Requests	Pct NoWait Miss
AQ deq hash table latch	26	0.00		0	0	
AQ dequeue txn counter latch	37,740	0.00		0	0	
ASM Keyed state latch	9,431	0.05	0.00	0	0	
ASM allocation	65,765	0.00		0	0	
ASM db client latch	38,491	0.00		0	0	
ASM map headers	64,141	0.00	0.00	0	0	
ASM map load waiting list	17,373	0.00		0	0	
ASM map operation freelist	228,933	5.16	0.01	1	0	
ASM map operation hash table	201,687,095	0.00	0.01	0	0	
ASM network background latch	131,212	0.00		0	0	
ASM network state latch	42,695	0.00		0	0	
AWR Alerted Metric Element list	396,132	0.00		0	0	
Change Notification Hash table latch	31,403	0.10	0.00	0	0	
Consistent RBA	709,562	0.00	0.00	0	0	
DML lock allocation	25,061,356	0.00	0.01	0	0	
Event Group Locks	34,879	0.41	0.00	0	0	
FAL Queue	3,485	0.00		0	0	
FIB s.o chain latch	17,428	0.00		0	0	
FOB s.o list latch	256,598	0.83	0.01	0	0	
File State Object Pool Parent Latch	26	0.00		0	0	
I/O Statistics latch	26	0.00		0	0	
IPC stats buffer allocation latch	26	0.00		0	0	
In memory undo latch	854,853	0.02	0.51	0	139,744	0.00
JOX JIT latch	1	0.00		0	1	0.00
JOX SGA heap latch	363,313	0.06	0.00	0	0	
JS Sh mem access	136	1.47	1.00	0	0	
JS broadcast autostart latch	1	0.00		0	0	
JS mem alloc latch	76	0.00		0	0	
JS queue access latch	102	0.00		0	0	
JS queue state obj latch	452,188	0.00		0	0	

S slv state obj latch	1,605	0.19	0.00	0	0	0
KFC FX Hash Latch	26	0.00		0	0	
KFC Hash Latch	26	0.00		0	0	
KFCL LE Freelist	26	0.00		0	0	
KFK SGA Libload latch	92,720	0.00		0	0	
KFMD SGA	1,904	1.10	0.05	0	0	
KGNFS-NFS:SHM structure	26	0.00		0	0	
KGNFS-NFS:SVR LIST	26	0.00		0	0	
KJC message pool free list	26	0.00		0	0	
KJCT flow control latch	26	0.00		0	0	
KMG MMAN ready and startup request latch	23,612	0.00		0	0	
KMG resize request state object freelist	690	0.58	0.00	0	0	
KSFQ	32	0.00		0	0	
KTF sga latch	283	0.00		0	14,649	0.00
KWQMN job cache list latch	2,370	0.04	0.00	0	0	
KWQP Prop Status	52	0.00		0	0	
KWQS pqsubs latch	156	0.00		0	0	
KWQS pqueue ctx latch	15,982	0.01	0.00	0	0	
Locator state objects pool parent latch	26	0.00		0	0	
Lsod array latch	112,289	0.00	0.00	0	0	
MQL Tracking Latch	0			0	933	0.00
Memory Management Latch	9,977	0.00		0	23,300	0.00
Memory Queue	26	0.00		0	0	
Memory Queue Message Subscriber #1	26	0.00		0	0	
Memory Queue Message Subscriber #2	26	0.00		0	0	
Memory Queue Message Subscriber #3	26	0.00		0	0	
Memory Queue Message Subscriber #4	26	0.00		0	0	
Memory Queue Subscriber	26	0.00		0	0	
MinActiveScn Latch	520	0.00		0	0	
Mutex	26	0.00		0	0	
Mutex Stats	26	0.00		0	0	
OS process	33,536	0.00		0	0	
OS process allocation	114,184	0.01	0.00	0	0	
OS process: request allocation	9,431	0.11	0.00	0	0	
PL/SQL warning settings	164,371	0.05	0.00	0	0	
PX hash array latch	26	0.00		0	0	
QMT	26	0.00		0	0	
Real-time plan statistics latch	133,233	3.17	0.24	9	1	0.00
Reserved Space Latch	3,176	0.00		0	0	
Result Cache: RC Latch	63,893	0.00	0.00	0	0	
Result Cache: SO Latch	4	0.00		0	0	
SGA IO buffer pool latch	182,641	0.00		0	725,847	0.00
SGA blob parent	26	0.00		0	0	
SGA bucket locks	26	0.00		0	0	
SGA heap locks	26	0.00		0	0	
SGA pool locks	26	0.00		0	0	
SQL memory manager latch	3,654	44.47	0.95	3	15,504	0.01
SQL memory manager workarea list latch	1,556,805	0.22	0.00	0	0	
Shared B-Tree	24,633	0.00		0	0	
Streams Generic	26	0.00		0	0	
Testing	26	0.00		0	0	
Token Manager	26	0.00		0	0	
WCR: sync	26	0.00		0	0	
Write State Object Pool Parent Latch	26	0.00		0	0	
X\$KSFQP	707,276	0.00		0	0	
XDB NFS Security Latch	26	0.00		0	0	
XDB unused session pool	26	0.00		0	0	
XDB used session pool	26	0.00		0	0	
active checkpoint queue latch	692,862	0.00	0.00	0	1	0.00
active service list	382,355	2.62	0.02	0	57,122	0.00
alert log latch	1,588	0.00		0	0	
archive control	5,518	0.00		0	0	
archive process latch	11,282	0.48	0.91	0	0	
begin backup scn array	5,603,748	0.03	0.00	0	0	
buffer pool	3,741	0.00		0	0	
business card	26	0.00		0	0	
cache buffer handles	4,918,012	0.02	0.00	0	0	
cache buffers chains	2,487,411,575	0.06	0.01	14	405,748,768	0.00
cache buffers lru chain	26,454,718	0.10	0.02	1	416,103,646	0.24
cache table scan latch	0			0	11,536,820	0.66
call allocation	122,357	12.43	0.22	3	0	
cas latch	26	0.00		0	0	
change notification client cache latch	26	0.00		0	0	
channel handle pool latch	11,166	0.08	0.00	0	0	
channel operations parent latch	358,718	0.01	0.00	0	0	
checkpoint queue latch	55,351,431	0.00	0.01	0	21,530,404	0.01
client/application info	210,900	0.35	0.00	0	0	
compile environment latch	30,142	0.12	0.00	0	0	
corrupted undo seg latch	7,220	0.01	0.00	0	0	
cp cmon/server latch	26	0.00		0	0	
cp pool latch	26	0.00		0	0	
cp server hash latch	26	0.00		0	0	
cp sga latch	823	0.00		0	0	

map freelist lock	26	0.00		0	0	
database property service latch	14	0.00		0	0	
deferred cleanup latch	823	0.00		0	0	
device information	72	0.00		0	0	
direct msg latch	4,931,733	0.00	0.00	0	0	
dml lock allocation	2,161	0.97	0.00	0	0	
done queue latch	1,268,090	0.00		0	2,330,223	0.00
dummy allocation	60,365	7.59	0.01	0	0	
eighth spare latch - X parent	26	0.00		0	0	
eleventh spare latch - children	26	0.00		0	0	
enqueue freelist latch	26	0.00		0	9,736,504	0.01
enqueue hash chains	16,639,470	0.06	0.01	0	90	0.00
enqueues	21	0.00		0	0	
error message lists	52,394	5.23	0.00	0	0	
fifteenth spare latch - children	26	0.00		0	0	
file cache latch	187,578	0.01	0.00	0	0	
first Audit Vault latch	1,616	0.00		0	0	
flashback copy	26	0.00		0	0	
fourteenth spare latch - children	26	0.00		0	0	
fourth Audit Vault latch	26	0.00		0	0	
gc element	26	0.00		0	0	
gcs commit scn state	26	0.00		0	0	
gcs partitioned table hash	26	0.00		0	0	
gcs pcm hashed value bucket hash	26	0.00		0	0	
gcs resource freelist	26	0.00		0	0	
gcs resource hash	26	0.00		0	0	
gcs resource scan list	26	0.00		0	0	
gcs resource validate list	26	0.00		0	0	
gcs shadows freelist	26	0.00		0	0	
ges domain table	26	0.00		0	0	
ges enqueue table freelist	26	0.00		0	0	
ges group table	26	0.00		0	0	
ges process hash list	26	0.00		0	0	
ges process parent latch	26	0.00		0	0	
ges resource hash list	26	0.00		0	0	
ges resource scan list	26	0.00		0	0	
ges resource table freelist	26	0.00		0	0	
ges value block free list	26	0.00		0	0	
global KZLD latch for mem in SGA	1,616	0.00		0	0	
global ctx hash table latch	806	0.00		0	0	
global tx hash mapping	35	0.00		0	1	0.00
granule operation	26	0.00		0	0	
hash table column usage latch	14,376	0.01	0.00	0	42,965,479	0.01
hash table modification latch	7,371	0.00		0	0	
heartbeat check	26	0.00		0	0	
i/o slave adaptor	88	1.14	0.00	0	0	
internal temp table object number allocation latch	237	0.00		0	0	
interrupt manipulation	212,924	2.49	0.00	0	0	
intra txn parallel recovery	26	0.00		0	0	
io pool granule metadata list	26	0.00		0	0	
job workq parent latch	170	0.00		0	144	0.00
job_queue_processes free list latch	307	0.00		0	0	
job_queue_processes parameter latch	10,330	0.00		0	0	
k2q lock allocation	26	0.00		0	0	
kcbtsemkid latch	794	0.00		0	0	
kdlx hb parent latch	26	0.00		0	0	
kgb parent	26	0.00		0	0	
kgnfs mount latch	26	0.00		0	0	
kokc descriptor allocation latch	806	0.00		0	0	
krbmrosl	7,056	0.00		0	0	
ksfv messages	6,198,865	0.00		0	0	
ksfv subheap	1,902	0.00		0	0	
ksim group membership cache	26	0.00		0	0	
kss move lock	802	0.00		0	0	
ksuosstats global area	4,757	0.00		0	0	
ksv allocation latch	2,375	0.00		0	0	
ksv class latch	246,033	0.46	0.02	0	0	
ksv instance latch	360	0.00		0	0	
ksv msg queue latch	15,917	0.13	0.00	0	15,871	0.00
ksz_so allocation latch	9,431	0.23	0.00	0	0	
ktm global data	7,181	0.00		0	0	
kwqbsn:qsga	5,025	0.00		0	0	
lgwr LWN SCN	722,126	0.01	0.00	0	0	
list of block allocation	580,946	1.03	0.10	1	0	
loader state object freelist	489,080	0.20	0.00	0	0	
lob segment dispenser latch	26	0.00		0	0	
lob segment hash table latch	182	0.00		0	0	
lob segment query latch	26	0.00		0	0	
lock DBA buffer during media recovery	26	0.00		0	0	
logical standby cache	26	0.00		0	0	
logminer context allocation	52	0.00		0	0	
logminer local	26	0.00		0	0	
logminer work area	26	0.00		0	0	

longop free list parent	62,920	0.00		0	22,702,489	0.00
managed standby latch	2,700	0.00		0	0	
mapped buffers lru chain	26	0.00		0	0	
message pool operations parent latch	12,108	0.03	0.00	0	0	
messages	4,191,531	0.07	0.00	0	0	
mostly latch-free SCN	736,067	0.22	0.00	0	0	
msg queue latch	9,863,460	0.00	0.02	0	0	
multiblock read objects	24,470,068	0.08	0.00	0	0	
name-service namespace bucket	26	0.00		0	0	
ncodef allocation latch	823	0.00		0	0	
nineth spare latch - X parent	26	0.00		0	0	
object queue header heap	166,056	0.00	0.00	0	169,683	0.00
object queue header operation	455,888,371	0.01	0.06	3	439,368	0.02
object stats modification	68,665	0.06	0.00	0	1	0.00
parallel query alloc buffer	984,984	8.57	0.03	329	0	
parallel query stats	30,651	7.72	0.02	0	0	
parameter list	16,625	0.00		0	0	
parameter table management	322,285	4.97	0.00	0	0	
peshm	56	0.00		0	0	
pesom_free_list	658,777	0.00	0.00	0	0	
pesom_hash_node	1,153,117	0.29	0.00	0	0	
pesom_heap_alloc	3,369	0.21	0.00	0	0	
post/wait queue	442,725	1.74	0.00	0	468,334	0.15
process allocation	13,843	0.17	0.29	0	4,710	0.08
process group creation	9,431	0.27	0.00	0	0	
process queue	623,030	0.45	0.03	0	0	
process queue reference	2,554,482,826	0.00	0.01	1	107,029,701	3.13
qmn task queue latch	6,801	0.07	0.00	0	0	
query server freelists	585,014	11.78	0.01	1	0	
query server process	27,562	3.35	1.27	80	2,250	0.00
queued dump request	155	0.00		0	0	
queuing load statistics	26	0.00		0	0	
recovery domain hash list	26	0.00		0	0	
redo allocation	3,644,066	3.21	0.01	2	173,299,674	0.36
redo copy	26	0.00		0	173,406,020	0.07
redo writing	3,068,158	0.02	0.01	0	0	
reservation so alloc latch	1,588	0.00		0	0	
resmgr group change latch	28,350	0.52	0.00	0	0	
resmgr:active threads	63,986	0.00	1.00	0	5,040	0.00
resmgr:actses change group	27,974	0.00		0	0	
resmgr:actses change state	3,360	0.00		0	0	
resmgr:free threads list	60,481	7.73	0.00	0	0	
resmgr:method mem alloc latch	20	0.00		0	0	
resmgr:plan CPU method	26	0.00		0	0	
resmgr:resource group CPU method	106	0.00		0	0	
resmgr:schema config	6,104	0.00		0	240	0.00
resmgr:session queuing	26	0.00		0	0	
rm cas latch	26	0.00		0	0	
row cache objects	38,180,226	0.28	0.00	1	6,985	2.13
rules engine rule set statistics	2,600	0.00		0	0	
second Audit Vault latch	26	0.00		0	0	
segmented array pool	17,428	0.00		0	0	
sequence cache	22,882,503	0.28	0.00	0	0	
session allocation	188,061	0.15	0.00	0	127,229	0.03
session idle bit	1,413,663	0.03	0.00	0	0	
session queue latch	4,931,833	0.00		0	0	
session state list latch	63,390	5.74	0.00	0	0	
session switching	5,565	0.05	0.33	0	2	0.00
session timer	15,659	0.00		0	0	
seventh spare latch - X parent	26	0.00		0	0	
shared pool	4,351,451	8.69	0.01	8	2,477	0.12
shared pool sim alloc	448	0.00		0	0	
shared pool simulator	68,982	0.00		0	0	
sim partition latch	26	0.00		0	0	
simulator hash latch	363,005,175	0.01	0.04	28	0	
simulator lru latch	18,557,149	0.03	0.08	7	325,161,611	0.27
sixth spare latch - X parent	26	0.00		0	0	
sort extent pool	1,802,617	0.20	0.04	1	0	
space background state object latch	312	0.00		0	0	
space background task latch	186,418	5.80	0.11	0	32,906	0.22
state object free list	52	0.00		0	0	
statistics aggregation	30,576	0.00		0	0	
tablespace key chain	26	0.00		0	0	
temp lob duration state obj allocation	1,041	0.10	0.00	0	0	
temporary table state object allocation	7,485	7.16	0.00	0	0	
tenth spare latch - X parent	26	0.00		0	0	
test excl. parent IO	26	0.00		0	0	
test excl. parent2 IO	26	0.00		0	0	
thirteenth spare latch - children	26	0.00		0	0	
threshold alerts latch	3,889	0.00		0	0	
transaction allocation	1,983,309	0.00	0.02	0	0	
transaction branch allocation	15,661	0.00		0	0	
twelfth spare latch - children	26	0.00		0	0	

twenty-fifth spare latch - S par	26	0.00	0	0		
twenty-first spare latch - S par	26	0.00	0	0		
twenty-fourth spare latch - S par	26	0.00	0	0		
twenty-second spare latch - S par	26	0.00	0	0		
twenty-third spare latch - S par	26	0.00	0	0		
undo global data	43,474,821	1.12	0.01	4	601	0.00
virtual circuit buffers	26	0.00	0	0		
virtual circuit holder	26	0.00	0	0		
virtual circuit queues	26	0.00	0	0		
write info latch	0		0	709,370	0.00	

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Latch Sleep Breakdown

- ordered by misses desc

Latch Name	Get Requests	Misses	Sleeps	Spin Gets
cache buffers chains	2,487,411,575	1,398,162	14,845	1,389,251
undo global data	43,474,821	487,675	3,034	486,785
shared pool	4,351,451	377,976	5,002	373,427
redo allocation	3,644,066	116,906	956	116,248
process queue reference	2,554,482,826	111,139	750	110,519
row cache objects	38,180,226	107,497	510	107,065
parallel query alloc buffer	984,984	84,380	2,790	81,663
query server freelists	585,014	68,922	370	68,567
object queue header operation	455,888,371	64,380	3,742	60,766
sequence cache	22,882,503	63,591	237	63,377
simulator hash latch	363,005,175	31,012	1,348	29,911
cache buffers lru chain	26,454,718	26,696	493	26,210
multiblock read objects	24,470,068	18,979	84	18,896
call allocation	122,357	15,211	3,333	12,291
ASM map operation freelist	228,933	11,804	88	11,720
space background task latch	186,418	10,817	1,171	9,679
active service list	382,355	10,006	240	9,770
enqueue hash chains	16,639,470	9,796	119	9,712
post/wait queue	442,725	7,688	2	7,686
simulator lru latch	18,557,149	6,078	495	5,633
list of block allocation	580,946	5,988	618	5,920
ASM map operation hash table	201,687,095	5,430	67	5,366
resmgr:free threads list	60,481	4,678	21	4,657
dummy allocation	60,365	4,581	27	4,554
Real-time plan statistics latch	133,233	4,225	1,031	3,317
session state list latch	63,390	3,638	5	3,633
sort extent pool	1,802,617	3,547	132	3,440
SQL memory manager workarea list latch	1,556,805	3,474	2	3,472
pesom_hash_node	1,153,117	3,329	7	3,323
process queue	623,030	2,825	78	2,749
messages	4,191,531	2,750	2	2,748
error message lists	52,394	2,742	3	2,739
checkpoint queue latch	55,351,431	2,434	28	2,406
parallel query stats	30,651	2,365	59	2,306
FOB s.o list latch	256,598	2,126	11	2,116
begin backup scn array	5,603,748	1,826	7	1,819
SQL memory manager latch	3,654	1,625	1,548	91
mostly latch-free SCN	736,067	1,604	7	1,597
kvs class latch	246,033	1,130	20	1,110
loader state object freelist	489,080	960	4	956
query server process	27,562	924	1,178	0
cache buffer handles	4,918,012	815	1	814
redo writing	3,068,158	711	6	705
session idle bit	1,413,663	456	1	455
msg queue latch	9,863,460	210	4	206
In memory undo latch	854,853	201	103	99
DML lock allocation	25,061,356	117	1	116
transaction allocation	1,983,309	64	1	63
archive process latch	11,282	54	49	5
process allocation	13,843	24	7	17
KFMD SGA	1,904	21	1	20
session switching	5,565	3	1	2
JS Sh mem access	136	2	2	0
resmgr:active threads	63,986	1	1	0

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Latch Miss Sources

- only latches with sleeps are shown
- ordered by name, sleeps desc

Latch Name	Where	NoWait Misses	Sleeps	Waiter Sleeps
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ASM map operation freelist	kffmTranslate2	0	79	73
ASM map operation freelist	kffmTranslate1	0	9	15
ASM map operation hash table	kffmTranslate	0	39	31
ASM map operation hash table	kffmDoDone_1	0	27	35
ASM map operation hash table	kffmUnidentify	0	1	3
DML lock allocation	ktaidm	0	1	1
FOB s.o list latch	ksfd_allfob	0	10	10
FOB s.o list latch	ksfd_fobd	0	1	1
In memory undo latch	ktiFlush: child	0	87	28
In memory undo latch	ktbchg2ro	0	19	7
In memory undo latch	kticmt: child	0	17	3
In memory undo latch	ktichg: child	0	3	47
JS Sh mem access	jsksGetShMemLatch	0	2	2
KFMD SGA	kfmdSlvJoin_LU	0	1	1
PC and Classifier lists for WLM	No latch	0	133	0
Real-time plan statistics latch	keswxAddNewPlanEntry	0	1,031	1,031
SQL memory manager latch	qesmmIQueryRefreshBound	0	1,548	1,548
SQL memory manager workarea list latch	qesmmIRegisterWorkArea:1	0	1	1
SQL memory manager workarea list latch	qesmmIRegisterWorkArea:2	0	1	0
active service list	kswslogon: session logout	0	263	263
active service list	kswsgsnp: get service name ptr	0	11	5
active service list	kswslogon: session login	0	11	16
active service list	kswsigsn: get service name	0	2	1
active service list	kswssetsvc: PX session switch service	0	1	3
archive process latch	kcrrsarc	0	49	0
begin backup scn array	get begin backup scn for file	0	7	7
cache buffer handles	kcbzfs	0	1	1
cache buffers chains	kcbgtr: fast path	0	6,596	7,677
cache buffers chains	kcbzwb	0	2,416	1,770
cache buffers chains	kcbgtr: fast path (cr pin)	0	1,777	2,050
cache buffers chains	kcbgtr_2	0	1,081	657
cache buffers chains	kcbchg1: clear MS bit	0	996	566
cache buffers chains	kcbgcur_4	0	599	987
cache buffers chains	kcbchg1: mod cur pin	0	465	168
cache buffers chains	kcbgcur_2	0	382	327
cache buffers chains	kcbchg1: mod cr pin	0	297	141
cache buffers chains	kcbrls_2	0	192	235
cache buffers chains	kcbget: release excl	0	176	11
cache buffers chains	kcbgcur: fast path (shr)	0	172	314
cache buffers chains	kcbrls: fast release	0	137	161
cache buffers chains	kcbgtr: kslbegin excl	0	100	211
cache buffers chains	kcbnlc	0	47	62
cache buffers chains	kcbzgb: scan from tail. nowait	0	47	0
cache buffers chains	kcbbic2	0	45	13
cache buffers chains	kcbbxsv	0	44	16
cache buffers chains	kcbzibmlt: multi-block read: nowait	0	38	0
cache buffers chains	kcbget: pin buffer	0	32	36
cache buffers chains	kcbget: exchange	0	30	29
cache buffers chains	kcbgtr: kslbegin shared	0	29	25
cache buffers chains	kcbnew: new latch again	0	27	0
cache buffers chains	kcbget: release shr	0	20	2
cache buffers chains	kcbget: fast path	0	12	26
cache buffers chains	kcbget: fast exchange	0	10	7
cache buffers chains	kcbrib1	0	9	85
cache buffers chains	kcbgtr_1	0	6	6
cache buffers chains	kcbbic1	0	3	0
cache buffers chains	kcbrls_1	0	3	12
cache buffers chains	kcbzib: finish processing buffer	0	2	0
cache buffers chains	kcbzibmlt: finish free bufs	0	1	21
cache buffers lru chain	kcbzgws	0	471	0
cache buffers lru chain	kcbzar: KSLNBEGIN	0	12	0
cache buffers lru chain	kcoo_link_q	0	3	8
cache buffers lru chain	kcbzgm	0	3	0
cache buffers lru chain	kcb_mv_to_req	0	1	9
cache buffers lru chain	kcbbic2	0	1	356
cache buffers lru chain	kcbbwlr	0	1	83
cache buffers lru chain	kcbzgb	0	1	6
call allocation	ksuxds	0	3,256	3,284
call allocation	ksudlc : rec call	0	31	23
call allocation	kxfpRecvSessStats	0	24	10
call allocation	ksuprc	0	8	4
call allocation	ksudlp: top call	0	7	6
call allocation	ksuinfos_modact	0	6	6
call allocation	ksucrp: top call	0	1	9
checkpoint queue latch	kcbklbc_cql	0	25	0
checkpoint queue latch	kcbbwthc: thread checkpoint buffers	0	3	10
client/application info	ksuinfos_modact	0	1	0
dummy allocation	ktcscnfy	0	21	21
dummy allocation	ktcdod	0	6	6
enqueue hash chains	ksqgtl3	0	50	79
enqueue hash chains	ksqrcl	0	44	8
enqueue hash chains	ksqcmi: get hash chain latch after wait	0	19	11
enqueue hash chains	ksqcmi: kslgpl	0	5	20

enqueue hash chains	ksqcnl	0	1	1
error message lists	kxfpqidqr: KSLBEGIN	0	2	1
error message lists	kxfpqsnd	0	1	2
ksv class latch	ksvclsl: rdp - recycle	0	19	1
ksv class latch	ksvclsl: run	0	1	0
lgwr LWN SCN	kcs023	0	3	0
list of block allocation	ktlabl	0	618	618
loader state object freelist	kcbllgs	0	3	3
loader state object freelist	kcbllfs	0	1	1
messages	ksaamb: after wakeup	0	2	0
mostly latch-free SCN	kclsclu3	0	4	7
msg queue latch	ksfvrdp:seq	0	4	0
multiblock read objects	kcbzibmlt	0	48	31
multiblock read objects	kcbzibmlt: normal mbr free	0	36	53
object queue header operation	kcbo_write_q	0	1,696	6
object queue header operation	kcbo_service_ockpt	0	1,371	1
object queue header operation	kcbo_unlink_q	0	259	773
object queue header operation	kcbo_switch_cq	0	225	219
object queue header operation	kcbo_ivbo	0	123	25
object queue header operation	kcbo_link_q	0	115	2,615
object queue header operation	kcbo_switch_mq_bg	0	60	150
object queue header operation	kcbo_switch_q_bg	0	42	102
object queue header operation	kcbo_unlink_q_bg	0	12	5
object queue header operation	kcbw_make_free_nowait	0	6	0
object queue header operation	kcbo_link_q:reget	0	3	0
object queue header operation	kcbo_sw_buf	0	1	2
parallel query alloc buffer	kxfpbalo	0	2,686	2,685
parallel query alloc buffer	kxfpbfre	0	104	105
parallel query stats	kxfprst: KSLBEGIN:1	0	59	59
pesom_hash_node	pesomopn_Open_And_Pin_Object#1	0	7	7
post/wait queue	ksliwat:remove	0	1	1
post/wait queue	kslpstevent:get	0	1	0
process allocation	ksufap: active procs	0	4	0
process allocation	ksucrp:1	0	3	0
process queue	kxfpqsnd: KSLBEGIN	0	42	78
process queue	kxfpqidqr: KSLBEGIN	0	36	0
process queue reference	kxfpqsnd	0	742	0
process queue reference	kxfpqidqr2	0	3	688
process queue reference	kxfpnuldq	0	2	45
process queue reference	kxfprigdb: KSLBEGIN	0	2	1
process queue reference	kxfprifdb1: KSLBEGIN	0	1	11
query server freelists	kxfpobadf	0	329	329
query server freelists	kxfpobrmf	0	41	41
query server process	kxfpg1srv	0	1,178	1,178
redo allocation	kcrfw_redo_gen: redo allocation 1	0	873	0
redo allocation	kcrfw_redo_gen: redo allocation 3	0	36	554
redo allocation	kcrfw_redo_gen: redo allocation 2	0	32	0
redo allocation	kcrfw_redo_write: before write	0	8	169
redo allocation	kcrfw_redo_gen: redo allocation 0	0	5	0
redo allocation	kcrfw_post: more space	0	2	232
redo writing	kcrfws: in loop	0	2	3
redo writing	kcrfw_cal_target_rba	0	1	0
redo writing	kcrfw_post: after write	0	1	0
redo writing	kcrfw_post: rba scn pair	0	1	0
redo writing	kcrfwfl: stop redo 2	0	1	0
resmgr:active threads	kgksimsetup1	0	1	0
resmgr:free threads list	kskthrcrate	0	21	21
resmgr:resource group CPU method	kgkprpicknext	0	142	143
resmgr:resource group CPU method	kgkpraddtorl	0	6	7
resmgr:resource group CPU method	kgkpgcremovefri	0	5	3
row cache objects	kqreqd: reget	0	183	17
row cache objects	kqrpre: find obj	0	115	326
row cache objects	kqreqd	0	37	75
row cache objects	kqrso	0	9	3
row cache objects	kqrcmt: while loop	0	5	1
row cache objects	kqrcmt: clear flag	0	1	3
row cache objects	kqrpre: init complete	0	1	4
row cache objects	kqrpup	0	1	0
sequence cache	kdnssd	0	107	4
sequence cache	kdnnxt: cached seq	0	97	2
sequence cache	kdnss	0	30	203
sequence cache	kdnwor	0	3	28
session idle bit	ksupuc: clear busy	0	1	0
session state list latch	kpseqd	0	4	1
session state list latch	kpseqa	0	1	4
session switching	kskexeall	0	1	1
shared pool	kgghalo	0	4,123	4,057
shared pool	kgghfre	0	685	683
shared pool	kgghfrunp: clatch: wait	0	97	81
shared pool	kgghfrunp: alloc: wait	0	83	55
shared pool	kgghfrunp: clatch: nowait	0	61	0
shared pool	kgghalp	0	42	87

shared pool	kghupr1	0	34	107
shared pool	kgh: quiesce pick heap	0	22	0
shared pool	kgh_next_free	0	6	1
shared pool	kgh: add new extent	0	2	4
shared pool	kgh_heap_sizes	0	2	5
shared pool	kghasp	0	2	3
shared pool	kghnospc request bits	0	1	0
simulator hash latch	kcbs_lookup_setid: lookup dba	0	1,220	1,311
simulator hash latch	kcbsacc: lookup dba	0	83	18
simulator hash latch	kcbs_get_or_extract_simbufseq	0	36	12
simulator hash latch	kcbsacc: remove dba	0	6	7
simulator hash latch	kcbsacc: insert dba	0	3	0
simulator lru latch	kcbs_shrink_pool	0	116	0
simulator lru latch	kcbs_lookup_setid	0	85	0
simulator lru latch	kcbs_simulate: simulate set	0	84	0
simulator lru latch	kcbs_free_granule_sim_buffers	0	82	1
simulator lru latch	kcbs_reset_pool	0	55	0
simulator lru latch	kcbs_simbufseq	0	53	193
simulator lru latch	kcbs_resize_pool : interpolation	0	11	0
simulator lru latch	kcbs_grow_pool	0	6	0
simulator lru latch	kcbs_lookup_setid_wait	0	3	301
sort extent pool	ktstaddextent1	0	82	85
sort extent pool	ktstdt: dealloc sort extent	0	17	3
sort extent pool	ktstallobj1	0	11	17
sort extent pool	ktstdt: return extent	0	10	13
sort extent pool	ktatobjstats	0	7	11
sort extent pool	ktstcrtojb	0	5	3
space background task latch	ktsj_grab_task	0	1,037	1,171
space background task latch	ktsj_detach_task	0	1	0
transaction allocation	ktcxbr	0	1	1
undo global data	ktudba: KSLBEGIN	0	2,834	2,812
undo global data	ktusmupst: KSLBEGIN	0	162	162
undo global data	ktubnd:child	0	20	41
undo global data	ktudnx:child	0	18	19

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Mutex Sleep Summary

- ordered by number of sleeps desc

Mutex Type	Location	Sleeps	Wait Time (ms)
Cursor Pin	kkslce [KKSCHLPIN2]	60,372	0
Library Cache	kgllkd1 85	4,610	0
Library Cache	kgldgn2 106	3,945	0
Library Cache	kgllkc1 57	3,646	0
Library Cache	kglget2 2	2,052	0
Library Cache	kglpnal1 90	1,954	0
Library Cache	kglpin1 4	1,811	0
Cursor Pin	kksfbc [KKSCHLFP2]	1,765	0
Library Cache	kglpnd1 95	1,321	0
Library Cache	kgldgn1 62	1,254	0
Cursor Pin	kksLockDelete [KKSCHLPIN6]	1,007	0
Library Cache	kglget1 1	107	0
Library Cache	kglobpn1 71	66	0
Library Cache	kgldgc1 102	54	0
Library Cache	kglini1 32	48	0
Cursor Parent	kkscsAddChildNode [KKSPTLOC34]	46	0
Library Cache	kgldtin1 44	44	0
Library Cache	kgldtin1 42	31	0
Cursor Parent	kkscsPruneChild [KKSPTLOC35]	24	0
Library Cache	kgllal3 111	23	0
Library Cache	kglUpgradeLock 119	19	0
Library Cache	kgldgh1 64	19	0
Library Cache	kgllka3 82	16	0
Library Cache	kgllid2 112	11	0
Library Cache	kgllal1 109	10	0
Library Cache	kglobld1 75	5	0
Library Cache	kglGetHandleReference 124	3	0
Cursor Pin	kksfbc [KKSCHLPIN1]	3	0
Cursor Parent	kksfbc [KKSPTLOC2]	2	0
Library Cache	kglReleaseHandleReference 125	1	0
Library Cache	kglic1 49	1	0
Library Cache	kgllfcl1 79	1	0
Cursor Parent	kkscsAddChildNodeToNewChild [KKSPTLOC33]	1	0
hash table	kkshGetNextChild [KKSCHKLOC1]	1	0

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Parent Latch Statistics

No data exists for this section of the report.

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Child Latch Statistics

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Segment Statistics

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Segments by Logical Reads

- Total Logical Reads: 2,389,932,623
- Captured Segments account for 75.4% of Total

Owner	Tablespace Name	Object Name	Subobject Name	Obj. Type	Logical Reads	%Total
IM_STG_01	IMD	GG_STG_F_POLICY_FACTS		TABLE	318,167,216	13.31
IM_DWH_01	IMD	GG_TEMP_FOR_SUMMARY_TABLES		TABLE	120,596,832	5.05
** MISSING **	TEMP_ETL	** MISSING: 6388377/9234816	** MISSING **	UNDEFINED	115,851,824	4.85
IM_DWH_01	IMD	GG_F_POLICY_FACTS		TABLE	84,620,720	3.54
IM_DWH_01	IMD	GG_F_CO_RI_FACTS		TABLE	45,442,544	1.90

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Segments by Physical Reads

- Total Physical Reads: 1,307,155,107
- Captured Segments account for 52.5% of Total

Owner	Tablespace Name	Object Name	Subobject Name	Obj. Type	Physical Reads	%Total
IM_DWH_01	IMD	GG_TEMP_FOR_SUMMARY_TABLES		TABLE	45,992,045	3.52
IM_STG_01	IMD	GG_STG_F_POLICY_FACTS		TABLE	30,134,575	2.31
GMIS_ODS	GMIS_ODS	ACT_F_PREMIUMSUMMARY	SYS_P6735	TABLE PARTITION	19,476,481	1.49
GMIS_ODS	GMIS_ODS	ESTIMATEDPREMIUM		TABLE	18,716,476	1.43
GMIS_ODS	GMIS_ODS	ACT_F_CLAIMSUMMARY	SYS_P6982	TABLE PARTITION	15,147,739	1.16

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Segments by Physical Read Requests

- Total Physical Read Requests: 50,363,422
- Captured Segments account for 59.4% of Total

Owner	Tablespace Name	Object Name	Subobject Name	Obj. Type	Phys Read Requests	%Total
IM_DWH_01	IMD	GG_TEMP_FOR_SUMMARY_TABLES		TABLE	2,880,915	5.72
IM_DWH_01	IMD	GG_TEMP_D_POLICY_01		TABLE	2,425,289	4.82
IM_STG_01	IMD	GG_STG_F_POLICY_FACTS		TABLE	1,927,641	3.83
IM_DWH_01	IMD	COM_D_POLICY		TABLE	1,198,116	2.38
IM_STG_01	IMD	GG_INW_OUTW_POLICY		TABLE	944,854	1.88

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Segments by UnOptimized Reads

- Total UnOptimized Read Requests: 50,363,422
- Captured Segments account for 59.4% of Total

Owner	Tablespace Name	Object Name	Subobject Name	Obj. Type	UnOptimized Reads	%Total
IM_DWH_01	IMD	GG_TEMP_FOR_SUMMARY_TABLES		TABLE	2,880,915	5.72
IM_DWH_01	IMD	GG_TEMP_D_POLICY_01		TABLE	2,425,289	4.82
IM_STG_01	IMD	GG_STG_F_POLICY_FACTS		TABLE	1,927,641	3.83

IM_DWH_01	IMD	COM_D_POLICY		TABLE	1,198,116	2.38
IM_STG_01	IMD	GG_INW_OUTW_POLICY		TABLE	944,854	1.88

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Segments by Optimized Reads

No data exists for this section of the report.

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Segments by Direct Physical Reads

- Total Direct Physical Reads: 1,124,106,717
- Captured Segments account for 47.5% of Total

Owner	Tablespace Name	Object Name	Subobject Name	Obj. Type	Direct Reads	%Total
IM_DWH_01	IMD	GG_TEMP_FOR_SUMMARY_TABLES		TABLE	41,390,004	3.68
GMIS_ODS	GMIS_ODS	ESTIMATEDPREMIUM		TABLE	18,709,601	1.66
GMIS_ODS	GMIS_ODS	ACT_F_PREMIUMSUMMARY	SYS_P6735	TABLE PARTITION	17,960,770	1.60
GMIS_ODS	GMIS_ODS	ACT_F_CLAIMSUMMARY	SYS_P6982	TABLE PARTITION	14,530,306	1.29
GMIS_ODS	GMIS_ODS	ACT_F_PREMIUMSUMMARY	SYS_P6771	TABLE PARTITION	12,520,915	1.11

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Segments by Physical Writes

- Total Physical Writes: 267,737,252
- Captured Segments account for 33.6% of Total

Owner	Tablespace Name	Object Name	Subobject Name	Obj. Type	Physical Writes	%Total
GMIS_ODS	GMIS_ODS	PK_ACT_F_PREMIUMSUMMARY		INDEX	5,285,739	1.97
IM_DWH_01	IMD	GG_TEMP_D_POLICY_01		TABLE	4,352,709	1.63
GMIS_ODS	GMIS_ODS	PK_ACT_F_CLAIMSUMMARY		INDEX	3,680,552	1.37
IM_STG_01	IMD	GG_STG_F_POLICY_FACTS		TABLE	2,410,792	0.90
IM_DWH_01	IMD	GG_TEMP_FOR_SUMMARY_TABLES_01		TABLE	2,306,806	0.86

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Segments by Physical Write Requests

- Total Physical Write Requestss: 26,161,334
- Captured Segments account for 46.5% of Total

Owner	Tablespace Name	Object Name	Subobject Name	Obj. Type	Phys Write Requests	%Total
IM_DWH_01	IMD	GG_TEMP_D_POLICY_01		TABLE	3,627,933	13.87
GMIS_ODS	GMIS_ODS	PK_ACT_F_PREMIUMSUMMARY		INDEX	1,447,864	5.53
IM_DWH_01	IMD	GG_TEMP_F_JOURNAL_CASH_TRANS		TABLE	1,100,127	4.21
GMIS_ODS	GMIS_ODS	PK_ACT_F_CLAIMSUMMARY		INDEX	984,887	3.76
GMIS_ODS	GMIS_ODS	IX_ACT_PRMSUM_COMPANY		INDEX	222,715	0.85

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Segments by Direct Physical Writes

- Total Direct Physical Writes: 246,476,146
- Captured Segments account for 31.1% of Total

Owner	Tablespace Name	Object Name	Subobject Name	Obj. Type	Direct Writes	%Total
GMIS_ODS	GMIS_ODS	PK_ACT_F_PREMIUMSUMMARY		INDEX	5,268,496	2.14
GMIS_ODS	GMIS_ODS	PK_ACT_F_CLAIMSUMMARY		INDEX	3,665,733	1.49
IM_DWH_01	IMD	GG_TEMP_FOR_SUMMARY_TABLES_01		TABLE	2,301,697	0.93
IM_DWH_01	IMD	GG_TEMP_FOR_SUMMARY_TABLES		TABLE	2,299,778	0.93
IM_STG_01	IMD	GG_STG_F_POLICY_FACTS		TABLE	2,130,802	0.86

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Segments by Table Scans

- Total Table Scans: 229,289
- Captured Segments account for 24.5% of Total

Owner	Tablespace Name	Object Name	Subobject Name	Obj. Type	Table Scans	%Total
GMIS_ODS	GMIS_ODS	ESTIMATEDPREMIUM		TABLE	4,990	2.18
IM_STG_01	IMD	GG_STG_D_POLICY		TABLE	4,294	1.87
IM_STG_01	IMD	GG_STG_F_OUTW_BOOKED_TRANS		TABLE	3,722	1.62
IM_DWH_01	IMD	GG_TEMP_FOR_SUMMARY_TABLES		TABLE	3,152	1.37

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Segments by DB Blocks Changes

- % of Capture shows % of DB Block Changes for each top segment compared
- with total DB Block Changes for all segments captured by the Snapshot

Owner	Tablespace Name	Object Name	Subobject Name	Obj. Type	DB Block Changes	% of Capture
IM_STG_01	IMD	GG_STG_F_POLICY_FACTS		TABLE	10,064,496	13.45
IM_DWH_01	IMD	GG_TEMP_F_JOURNAL_CASH_TRANS		TABLE	7,332,144	9.80
IM_DWH_01	IMD	GG_TEMP_D_POLICY_01		TABLE	5,070,880	6.78
IM_DWH_01	IMD	COM_D_POLICY		TABLE	4,617,808	6.17
IM_DWH_01	IMD	GG_S_AC_RI_PORTFOLIO_FACTS		TABLE	2,840,704	3.80

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Segments by Row Lock Waits

- % of Capture shows % of row lock waits for each top segment compared
- with total row lock waits for all segments captured by the Snapshot

Owner	Tablespace Name	Object Name	Subobject Name	Obj. Type	Row Lock Waits	% of Capture
IM_DWH_01	IMD	GG_TEMP_POLICY_PLACING_P_IX01		INDEX	464	10.02
GMIS_ODS	GMIS_ODS	IX_ACT_F_PREMIUM_SYSCMPBRH	SYS_P6668	INDEX PARTITION	302	6.52
GMIS_ODS	GMIS_ODS	IX_ACT_F_PREMIUM_SYSCMPBRH	SYS_P6716	INDEX PARTITION	220	4.75
IM_DWH_01	IMD	GG_TEMP_F_FACTS_03_IX01		INDEX	218	4.71
GMIS_ODS	GMIS_ODS	IX_ACT_F_PREMIUM_SYSCMPBRH	SYS_P6708	INDEX PARTITION	192	4.15

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Segments by ITL Waits

- % of Capture shows % of ITL waits for each top segment compared
- with total ITL waits for all segments captured by the Snapshot

Owner	Tablespace Name	Object Name	Subobject Name	Obj. Type	ITL Waits	% of Capture
IM_DWH_01	IMD	GG_TEMP_POLICY_PLACING_P_IX01		INDEX	129	67.89
IM_DWH_01	IMD	GG_TEMP_F_FACTS_03_IX01		INDEX	45	23.68
SYS	SYSAUX	WRH\$_SERVICE_STAT_PK	WRH\$_SERVIC_3959815449_0	INDEX PARTITION	5	2.63
SYS	SYSTEM	SEG\$		TABLE	4	2.11
OWBSYS	TS_OWB_REPOS	AP_UK_NAME		INDEX	1	0.53

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Segments by Buffer Busy Waits

- % of Capture shows % of Buffer Busy Waits for each top segment compared
- with total Buffer Busy Waits for all segments captured by the Snapshot

Owner	Tablespace Name	Object Name	Subobject Name	Obj. Type	Buffer Busy Waits	% of Capture
IM_DWH_01	IMD	GG_TEMP_POLICY_PLACING_P_IX01		INDEX	18,105	59.83
IM_DWH_01	IMD	GG_TEMP_F_FACTS_03_IX01		INDEX	6,934	22.91
SYS	SYSTEM	SEQ\$		TABLE	4,121	13.62
OWBSYS	TS_OWB_REPOS	OWB\$WB_RT_AUDIT_PARAMS		TABLE	471	1.56
SYS	SYSTEM	SEG\$		TABLE	323	1.07

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Dictionary Cache Stats

- "Pct Misses" should be very low (< 2% in most cases)
- "Final Usage" is the number of cache entries being used

Cache	Get Requests	Pct Miss	Scan Reqs	Pct Miss	Mod Reqs	Final Usage
dc_awr_control	1,181	0.25	0		53	1
dc_constraints	3,820	34.37	0		3,754	2
dc_files	108	33.33	0		0	36
dc_global_oids	5,318	0.83	0		0	45
dc_histogram_data	498,207	0.72	0		23,649	4,318
dc_histogram_defs	1,201,378	3.21	0		26,972	14,060
dc_object_grants	13,714	0.28	0		0	31
dc_objects	720,140	0.82	0		3,164	2,369
dc_profiles	3,384	0.00	0		0	2
dc_rollback_segments	318,872	0.00	0		2	452
dc_segments	301,661	1.23	0		6,985	1,358

_sequences	369,042	0.01	0	369,042	10
dc_table_scns	224	100.00	0	0	0
dc_tablespace	4,162,639	0.00	0	0	39
dc_users	5,269,544	0.01	0	0	124
global database name	36,387	0.00	0	0	1
sch_lj_objs	18	22.22	0	0	0
sch_lj_oids	22	40.91	0	0	4

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Library Cache Activity

- "Pct Misses" should be very low

Namespace	Get Requests	Pct Miss	Pin Requests	Pct Miss	Reloads	Invali- dations
ACCOUNT_STATUS	4,848	0.23	0		0	0
APP CONTEXT	838	0.00	15,165	0.00	0	0
BODY	24,315	1.64	455,313	0.17	381	0
CLUSTER	3,079	0.16	3,113	0.58	13	0
DBLINK	5,216	0.06	0		0	0
DIRECTORY	1	100.00	2	100.00	0	0
EDITION	5,170	0.00	6,921	0.09	6	0
INDEX	6,736	7.44	6,531	13.31	82	0
JAVA DATA	1,263	0.08	1,260	0.40	3	0
JAVA RESOURCE	1,680	0.12	1,680	0.12	0	0
OBJECT ID	425	100.00	0		0	0
QUEUE	1,850	0.11	56,760	0.01	0	0
SCHEMA	6,116	0.16	0		0	0
SQL AREA	174,956	3.69	13,162,240	-4.09	14,330	8,706
SQL AREA BUILD	19,976	52.43	0		0	0
SQL AREA STATS	12,658	60.86	12,658	60.86	0	0
SUBSCRIPTION	867	0.12	867	0.12	0	0
TABLE/PROCEDURE	3,327,040	0.06	11,561,387	0.13	11,702	0
TEMPORARY INDEX	20	100.00	20	100.00	0	0
TEMPORARY TABLE	50	30.00	50	100.00	35	0
TRIGGER	9,159	0.03	11,847	0.95	108	0

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Memory Statistics

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Memory Dynamic Components

- Min/Max sizes since instance startup
- Oper Types/Modes: INItializing,GROw,SHRink,STAtic,IMMediate,DEFerred
- ordered by Component

Component	Begin Snap Size (Mb)	Current Size (Mb)	Min Size (Mb)	Max Size (Mb)	Oper Count	Last Op Typ/Mod
ASM Buffer Cache	0.00	0.00	0.00	0.00	0	STA/
DEFAULT 16K buffer cache	0.00	0.00	0.00	0.00	0	STA/
DEFAULT 2K buffer cache	0.00	0.00	0.00	0.00	0	STA/
DEFAULT 32K buffer cache	0.00	0.00	0.00	0.00	0	STA/
DEFAULT 4K buffer cache	0.00	0.00	0.00	0.00	0	STA/
DEFAULT 8K buffer cache	0.00	0.00	0.00	0.00	0	STA/
DEFAULT buffer cache	7,520.00	7,712.00	5,248.00	8,128.00	156	SHR/DEF
KEEP buffer cache	0.00	0.00	0.00	0.00	0	STA/
PGA Target	2,080.00	2,080.00	2,080.00	2,080.00	0	STA/
RECYCLE buffer cache	0.00	0.00	0.00	0.00	0	STA/
SGA Target	9,216.00	9,216.00	9,216.00	9,216.00	0	STA/
Shared IO Pool	0.00	0.00	0.00	0.00	0	STA/
java pool	96.00	96.00	96.00	96.00	0	SHR/DEF
large pool	96.00	96.00	96.00	2,592.00	126	SHR/DEF
shared pool	1,408.00	1,216.00	800.00	1,472.00	30	GRO/DEF
streams pool	32.00	32.00	32.00	32.00	0	STA/

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Memory Resize Operations Summary

- Resizes, Grows, Shrinks - Operations captured by AWR if there are operations on the same component for the same operation_type, target_size, and with the same start_time only one operation is captured

ordered by Component

Component	Min Size (Mb)	Max Size (Mb)	Avg Size (Mb)	Re- Sizes	Grows	Shrinks
DEFAULT buffer cache	5,248.00	7,776.00	6,957.77	151	27	124
large pool	96.00	2,592.00	990.15	121	110	11
shared pool	1,152.00	1,472.00	1,240.53	30	14	16

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Memory Resize Ops

- Oper Types/Modes: INitializing,GROw,SHRink,STatic/IMMEDIATE,DEFerred Delta : change in size of the component Target Delta: displayed only if final size <> target_size
- Status: COMplete/CANcelled/INActive/PENding/ERRor
- ordered by start_time desc,component

Start	Ela (s)	Component	Oper Typ/Mod	Init Size (M)	Delta	Target Delta	Final (M)	Sta
08/20 04:57:01	1	bufcache	SHR/DEF	7,744	-32		7,712	COM
08/20 04:57:01	1	shared	GRO/DEF	1,184	32		1,216	COM
08/20 03:27:23	0	bufcache	GRO/DEF	7,648	96		7,744	COM
08/20 03:27:23	0	large	SHR/DEF	192	-96		96	COM
08/20 03:25:52	0	bufcache	GRO/DEF	7,104	544		7,648	COM
08/20 03:25:52	0	large	SHR/DEF	736	-544		192	COM
08/20 03:24:22	0	bufcache	GRO/DEF	5,248	1,856		7,104	COM
08/20 03:24:22	0	large	SHR/DEF	2,592	-1,856		736	COM
08/20 03:23:30	0	bufcache	SHR/IMM	5,760	-32		5,728	COM
08/20 03:23:30	0	bufcache	SHR/IMM	5,728	-32		5,696	COM
08/20 03:23:30	0	bufcache	SHR/IMM	5,696	-32		5,664	COM
08/20 03:23:30	0	bufcache	SHR/IMM	5,664	-32		5,632	COM
08/20 03:23:30	0	bufcache	SHR/IMM	5,632	-32		5,600	COM
08/20 03:23:30	0	bufcache	SHR/IMM	5,600	-32		5,568	COM
08/20 03:23:30	0	bufcache	SHR/IMM	5,568	-32		5,536	COM
08/20 03:23:30	0	bufcache	SHR/IMM	5,536	-32		5,504	COM
08/20 03:23:30	0	bufcache	SHR/IMM	5,504	-32		5,472	COM
08/20 03:23:30	0	bufcache	SHR/IMM	5,472	-32		5,440	COM
08/20 03:23:30	0	bufcache	SHR/IMM	5,440	-32		5,408	COM
08/20 03:23:30	0	bufcache	SHR/IMM	5,408	-32		5,376	COM
08/20 03:23:30	0	bufcache	SHR/IMM	5,376	-32		5,344	COM
08/20 03:23:30	0	bufcache	SHR/IMM	5,344	-32		5,312	COM
08/20 03:23:30	0	bufcache	SHR/IMM	5,312	-32		5,280	COM
08/20 03:23:30	0	bufcache	SHR/IMM	5,280	-32		5,248	COM
08/20 03:23:30	0	large	GRO/IMM	2,560	32		2,592	COM
08/20 03:23:30	0	large	GRO/IMM	2,528	32		2,560	COM
08/20 03:23:30	0	large	GRO/IMM	2,496	32		2,528	COM
08/20 03:23:30	0	large	GRO/IMM	2,464	32		2,496	COM
08/20 03:23:30	0	large	GRO/IMM	2,432	32		2,464	COM
08/20 03:23:30	0	large	GRO/IMM	2,400	32		2,432	COM
08/20 03:23:30	0	large	GRO/IMM	2,368	32		2,400	COM
08/20 03:23:30	0	large	GRO/IMM	2,336	32		2,368	COM
08/20 03:23:30	0	large	GRO/IMM	2,304	32		2,336	COM
08/20 03:23:30	0	large	GRO/IMM	2,272	32		2,304	COM
08/20 03:23:30	0	large	GRO/IMM	2,240	32		2,272	COM
08/20 03:23:30	0	large	GRO/IMM	2,208	32		2,240	COM
08/20 03:23:30	0	large	GRO/IMM	2,176	32		2,208	COM
08/20 03:23:30	0	large	GRO/IMM	2,144	32		2,176	COM
08/20 03:23:30	0	large	GRO/IMM	2,112	32		2,144	COM
08/20 03:23:30	0	large	GRO/IMM	2,080	32		2,112	COM
08/20 03:23:29	0	bufcache	SHR/IMM	6,048	-32		6,016	COM
08/20 03:23:29	0	bufcache	SHR/IMM	6,016	-32		5,984	COM
08/20 03:23:29	0	bufcache	SHR/IMM	5,984	-32		5,952	COM
08/20 03:23:29	0	bufcache	SHR/IMM	5,952	-32		5,920	COM
08/20 03:23:29	0	bufcache	SHR/IMM	5,920	-32		5,888	COM
08/20 03:23:29	0	bufcache	SHR/IMM	5,888	-32		5,856	COM
08/20 03:23:29	0	bufcache	SHR/IMM	5,856	-32		5,824	COM
08/20 03:23:29	0	bufcache	SHR/IMM	5,824	-32		5,792	COM
08/20 03:23:29	1	bufcache	SHR/IMM	5,792	0	-32	5,792	COM
08/20 03:23:29	1	large	GRO/IMM	2,048	32		2,080	COM
08/20 03:23:29	0	large	GRO/IMM	2,016	32		2,048	COM
08/20 03:23:29	0	large	GRO/IMM	1,984	32		2,016	COM
08/20 03:23:29	0	large	GRO/IMM	1,952	32		1,984	COM
08/20 03:23:29	0	large	GRO/IMM	1,920	32		1,952	COM
08/20 03:23:29	0	large	GRO/IMM	1,888	32		1,920	COM
08/20 03:23:29	0	large	GRO/IMM	1,856	32		1,888	COM
08/20 03:23:29	0	large	GRO/IMM	1,824	32		1,856	COM
08/20 03:23:29	0	large	GRO/IMM	1,792	32		1,824	COM
08/20 03:23:28	0	bufcache	SHR/IMM	6,432	-32		6,400	COM
08/20 03:23:28	0	bufcache	SHR/IMM	6,400	-32		6,368	COM
08/20 03:23:28	0	bufcache	SHR/IMM	6,368	-32		6,336	COM
08/20 03:23:28	0	bufcache	SHR/IMM	6,336	-32		6,304	COM
08/20 03:23:28	0	bufcache	SHR/IMM	6,304	0	-32	6,304	COM
08/20 03:23:28	0	bufcache	SHR/IMM	6,272	-32		6,240	COM
08/20 03:23:28	0	bufcache	SHR/IMM	6,240	-32		6,208	COM
08/20 03:23:28	0	bufcache	SHR/IMM	6,208	-32		6,176	COM
08/20 03:23:28	0	bufcache	SHR/IMM	6,176	-32		6,144	COM

08/20 03:23:28	0 bufcache	SHR/IMM	6,144	-32	6,112	COM	
08/20 03:23:28	0 bufcache	SHR/IMM	6,112	-32	6,080	COM	
08/20 03:23:28	1 bufcache	SHR/IMM	6,080	-32	6,048	COM	
08/20 03:23:28	1 large	GRO/IMM	1,760	32	1,792	COM	
08/20 03:23:28	0 large	GRO/IMM	1,728	32	1,760	COM	
08/20 03:23:28	0 large	GRO/IMM	1,696	32	1,728	COM	
08/20 03:23:28	0 large	GRO/IMM	1,664	32	1,696	COM	
08/20 03:23:28	0 large	GRO/IMM	1,632	32	1,664	COM	
08/20 03:23:28	0 large	GRO/IMM	1,600	32	1,632	COM	
08/20 03:23:28	0 large	GRO/IMM	1,568	32	1,600	COM	
08/20 03:23:28	0 large	GRO/IMM	1,536	32	1,568	COM	
08/20 03:23:28	0 large	GRO/IMM	1,504	32	1,536	COM	
08/20 03:23:28	0 large	GRO/IMM	1,472	32	1,504	COM	
08/20 03:23:28	0 large	GRO/IMM	1,440	32	1,472	COM	
08/20 03:23:28	0 large	GRO/IMM	1,408	32	1,440	COM	
08/20 03:23:27	0 bufcache	SHR/IMM	6,912	-32	6,880	COM	
08/20 03:23:27	0 bufcache	SHR/IMM	6,880	-32	6,848	COM	
08/20 03:23:27	0 bufcache	SHR/IMM	6,848	-32	6,816	COM	
08/20 03:23:27	0 bufcache	SHR/IMM	6,816	-32	6,784	COM	
08/20 03:23:27	0 bufcache	SHR/IMM	6,784	-32	6,752	COM	
08/20 03:23:27	0 bufcache	SHR/IMM	6,752	-32	6,720	COM	
08/20 03:23:27	0 bufcache	SHR/IMM	6,720	-32	6,688	COM	
08/20 03:23:27	0 bufcache	SHR/IMM	6,688	-32	6,656	COM	
08/20 03:23:27	0 bufcache	SHR/IMM	6,656	-32	6,624	COM	
08/20 03:23:27	0 bufcache	SHR/IMM	6,624	-32	6,592	COM	
08/20 03:23:27	0 bufcache	SHR/IMM	6,592	-32	6,560	COM	
08/20 03:23:27	0 bufcache	SHR/IMM	6,560	-32	6,528	COM	
08/20 03:23:27	0 bufcache	SHR/IMM	6,528	-32	6,496	COM	
08/20 03:23:27	0 bufcache	SHR/IMM	6,496	-32	6,464	COM	
08/20 03:23:27	0 bufcache	SHR/IMM	6,464	-32	6,432	COM	
08/20 03:23:27	0 large	GRO/IMM	1,376	32	1,408	COM	
08/20 03:23:27	0 large	GRO/IMM	1,344	32	1,376	COM	
08/20 03:23:27	0 large	GRO/IMM	1,312	32	1,344	COM	
08/20 03:23:27	0 large	GRO/IMM	1,280	32	1,312	COM	
08/20 03:23:27	0 large	GRO/IMM	1,248	32	1,280	COM	
08/20 03:23:27	0 large	GRO/IMM	1,216	32	1,248	COM	
08/20 03:23:27	0 large	GRO/IMM	1,184	32	1,216	COM	
08/20 03:23:27	0 large	GRO/IMM	1,152	32	1,184	COM	
08/20 03:23:27	0 large	GRO/IMM	1,120	32	1,152	COM	
08/20 03:23:27	0 large	GRO/IMM	1,088	32	1,120	COM	
08/20 03:23:27	0 large	GRO/IMM	1,056	32	1,088	COM	
08/20 03:23:27	0 large	GRO/IMM	1,024	32	1,056	COM	
08/20 03:23:27	0 large	GRO/IMM	992	32	1,024	COM	
08/20 03:23:27	0 large	GRO/IMM	960	32	992	COM	
08/20 03:23:27	0 large	GRO/IMM	928	32	960	COM	
08/20 03:23:26	0 bufcache	SHR/IMM	7,648	-32	7,616	COM	
08/20 03:23:26	0 bufcache	SHR/IMM	7,616	-32	7,584	COM	
08/20 03:23:26	0 bufcache	SHR/IMM	7,584	-32	7,552	COM	
08/20 03:23:26	0 bufcache	SHR/IMM	7,552	-32	7,520	COM	
08/20 03:23:26	0 bufcache	SHR/IMM	7,520	-32	7,488	COM	
08/20 03:23:26	0 bufcache	SHR/IMM	7,488	-32	7,456	COM	
08/20 03:23:26	0 bufcache	SHR/IMM	7,456	-32	7,424	COM	
08/20 03:23:26	0 bufcache	SHR/IMM	7,424	-32	7,392	COM	
08/20 03:23:26	0 bufcache	SHR/IMM	7,392	-32	7,360	COM	
08/20 03:23:26	0 bufcache	SHR/IMM	7,360	-32	7,328	COM	
08/20 03:23:26	0 bufcache	SHR/IMM	7,328	-32	7,296	COM	
08/20 03:23:26	0 bufcache	SHR/IMM	7,296	-32	7,264	COM	
08/20 03:23:26	0 bufcache	SHR/IMM	7,264	-32	7,232	COM	
08/20 03:23:26	0 bufcache	SHR/IMM	7,232	-32	7,200	COM	
08/20 03:23:26	0 bufcache	SHR/IMM	7,200	0	-32	7,200	COM
08/20 03:23:26	0 bufcache	SHR/IMM	7,168	-32	7,136	COM	
08/20 03:23:26	0 bufcache	SHR/IMM	7,136	-32	7,104	COM	
08/20 03:23:26	0 bufcache	SHR/IMM	7,104	-32	7,072	COM	
08/20 03:23:26	0 bufcache	SHR/IMM	7,072	-32	7,040	COM	
08/20 03:23:26	0 bufcache	SHR/IMM	7,040	-32	7,008	COM	
08/20 03:23:26	0 bufcache	SHR/IMM	7,008	-32	6,976	COM	
08/20 03:23:26	0 bufcache	SHR/IMM	6,976	-32	6,944	COM	
08/20 03:23:26	1 bufcache	SHR/IMM	6,944	-32	6,912	COM	
08/20 03:23:26	1 large	GRO/IMM	896	32	928	COM	
08/20 03:23:26	0 large	GRO/IMM	864	32	896	COM	
08/20 03:23:26	0 large	GRO/IMM	832	32	864	COM	
08/20 03:23:26	0 large	GRO/IMM	800	32	832	COM	
08/20 03:23:26	0 large	GRO/IMM	768	32	800	COM	
08/20 03:23:26	0 large	GRO/IMM	736	32	768	COM	
08/20 03:23:26	0 large	GRO/IMM	704	32	736	COM	
08/20 03:23:26	0 large	GRO/IMM	672	32	704	COM	
08/20 03:23:26	0 large	GRO/IMM	640	32	672	COM	
08/20 03:23:26	0 large	GRO/IMM	608	32	640	COM	
08/20 03:23:26	0 large	GRO/IMM	576	32	608	COM	
08/20 03:23:26	0 large	GRO/IMM	544	32	576	COM	
08/20 03:23:26	0 large	GRO/IMM	512	32	544	COM	
08/20 03:23:26	0 large	GRO/IMM	480	32	512	COM	

08/20 03:23:26	0 large	GRO/IMM	448	32	480	COM
08/20 03:23:26	0 large	GRO/IMM	416	32	448	COM
08/20 03:23:26	0 large	GRO/IMM	384	32	416	COM
08/20 03:23:26	0 large	GRO/IMM	352	32	384	COM
08/20 03:23:26	0 large	GRO/IMM	320	32	352	COM
08/20 03:23:26	0 large	GRO/IMM	288	32	320	COM
08/20 03:23:26	0 large	GRO/IMM	256	32	288	COM
08/20 03:23:26	0 large	GRO/IMM	224	32	256	COM
08/20 03:23:26	0 large	GRO/IMM	192	32	224	COM
08/20 03:23:25	0 bufcache	SHR/IMM	7,744	-32	7,712	COM
08/20 03:23:25	0 bufcache	SHR/IMM	7,712	-32	7,680	COM
08/20 03:23:25	1 bufcache	SHR/IMM	7,680	-32	7,648	COM
08/20 03:23:25	1 large	GRO/IMM	160	32	192	COM
08/20 03:23:25	0 large	GRO/IMM	128	32	160	COM
08/20 03:23:25	0 large	GRO/IMM	96	32	128	COM
08/20 02:28:21	0 bufcache	SHR/IMM	7,776	-32	7,744	COM
08/20 02:28:21	0 shared	GRO/IMM	1,152	32	1,184	COM
08/20 02:28:20	0 bufcache	GRO/DEF	7,744	32	7,776	COM
08/20 02:28:20	0 shared	SHR/DEF	1,184	-32	1,152	COM
08/20 02:09:20	0 bufcache	SHR/IMM	7,776	-32	7,744	COM
08/20 02:09:20	0 bufcache	GRO/DEF	7,744	32	7,776	COM
08/20 02:09:20	0 shared	SHR/DEF	1,184	-32	1,152	COM
08/20 02:09:20	0 shared	GRO/IMM	1,152	32	1,184	COM
08/20 02:04:17	0 bufcache	GRO/DEF	7,712	32	7,744	COM
08/20 02:04:17	0 large	SHR/DEF	128	-32	96	COM
08/20 02:01:34	1 bufcache	SHR/IMM	7,744	-32	7,712	COM
08/20 02:01:34	1 large	GRO/IMM	96	32	128	COM
08/20 02:00:17	0 bufcache	SHR/IMM	7,776	-32	7,744	COM
08/20 02:00:17	0 shared	GRO/IMM	1,152	32	1,184	COM
08/20 02:00:16	1 bufcache	GRO/DEF	7,744	32	7,776	COM
08/20 02:00:16	1 shared	SHR/DEF	1,184	-32	1,152	COM
08/20 01:41:46	0 bufcache	GRO/DEF	7,712	32	7,744	COM
08/20 01:41:46	0 shared	SHR/DEF	1,216	-32	1,184	COM
08/20 01:41:16	0 bufcache	GRO/DEF	7,648	64	7,712	COM
08/20 01:41:16	0 large	SHR/DEF	160	-64	96	COM
08/20 01:35:16	0 bufcache	GRO/DEF	7,616	32	7,648	COM
08/20 01:35:16	0 large	SHR/DEF	192	-32	160	COM
08/20 01:29:18	0 bufcache	SHR/IMM	7,680	-32	7,648	COM
08/20 01:29:18	0 bufcache	SHR/IMM	7,648	-32	7,616	COM
08/20 01:29:18	0 large	GRO/IMM	160	32	192	COM
08/20 01:29:18	0 large	GRO/IMM	128	32	160	COM
08/20 01:29:15	0 bufcache	SHR/IMM	7,712	-32	7,680	COM
08/20 01:29:15	0 large	GRO/IMM	96	32	128	COM
08/20 00:35:41	3 bufcache	SHR/DEF	7,744	-32	7,712	COM
08/20 00:35:41	3 shared	GRO/DEF	1,184	32	1,216	COM
08/20 00:31:13	0 bufcache	SHR/IMM	7,776	-32	7,744	COM
08/20 00:31:13	0 shared	GRO/IMM	1,152	32	1,184	COM
08/20 00:31:11	0 bufcache	GRO/DEF	7,744	32	7,776	COM
08/20 00:31:11	0 shared	SHR/DEF	1,184	-32	1,152	COM
08/20 00:26:39	0 bufcache	SHR/IMM	7,776	-32	7,744	COM
08/20 00:26:39	0 shared	GRO/IMM	1,152	32	1,184	COM
08/20 00:26:38	0 bufcache	GRO/DEF	7,744	32	7,776	COM
08/20 00:26:38	0 shared	SHR/DEF	1,184	-32	1,152	COM
08/20 00:20:08	0 bufcache	GRO/DEF	7,712	32	7,744	COM
08/20 00:20:08	0 shared	SHR/DEF	1,216	-32	1,184	COM
08/19 23:29:37	0 bufcache	SHR/IMM	7,744	-32	7,712	COM
08/19 23:29:37	0 shared	GRO/IMM	1,184	32	1,216	COM
08/19 23:29:36	1 bufcache	GRO/DEF	7,712	32	7,744	COM
08/19 23:29:36	1 shared	SHR/DEF	1,216	-32	1,184	COM
08/19 23:25:06	0 bufcache	GRO/DEF	7,648	64	7,712	COM
08/19 23:25:06	0 shared	SHR/DEF	1,280	-64	1,216	COM
08/19 23:14:36	2 bufcache	SHR/DEF	7,680	-32	7,648	COM
08/19 23:14:36	2 shared	GRO/DEF	1,248	32	1,280	COM
08/19 22:47:30	1 bufcache	SHR/DEF	7,712	-32	7,680	COM
08/19 22:47:30	1 shared	GRO/DEF	1,216	32	1,248	COM
08/19 22:42:30	0 bufcache	GRO/DEF	7,648	64	7,712	COM
08/19 22:42:30	0 shared	SHR/DEF	1,280	-64	1,216	COM
08/19 22:13:59	0 bufcache	GRO/DEF	7,616	32	7,648	COM
08/19 22:13:59	0 large	SHR/DEF	128	-32	96	COM
08/19 22:12:59	0 bufcache	GRO/DEF	7,552	64	7,616	COM
08/19 22:12:59	0 shared	SHR/DEF	1,344	-64	1,280	COM
08/19 21:55:25	0 bufcache	GRO/DEF	7,456	96	7,552	COM
08/19 21:55:25	0 large	SHR/DEF	224	-96	128	COM
08/19 21:54:28	0 bufcache	SHR/IMM	7,584	-32	7,552	COM
08/19 21:54:28	0 bufcache	SHR/IMM	7,552	-32	7,520	COM
08/19 21:54:28	0 bufcache	SHR/IMM	7,520	-32	7,488	COM
08/19 21:54:28	0 bufcache	SHR/IMM	7,488	-32	7,456	COM
08/19 21:54:28	0 large	GRO/IMM	192	32	224	COM
08/19 21:54:28	0 large	GRO/IMM	160	32	192	COM
08/19 21:54:28	0 large	GRO/IMM	128	32	160	COM
08/19 21:54:28	0 large	GRO/IMM	96	32	128	COM
08/19 21:50:24	0 bufcache	GRO/DEF	7,552	32	7,584	COM
08/19 21:50:24	0 large	SHR/DEF	128	-32	96	COM

08/19 21:35:51	0 bufcache	SHR/DEF	7,616	-64		7,552	COM
08/19 21:35:51	0 shared	GRO/DEF	1,280	64		1,344	COM
08/19 21:21:20	0 bufcache	GRO/DEF	7,552	64		7,616	COM
08/19 21:21:20	0 shared	SHR/DEF	1,344	-64		1,280	COM
08/19 21:12:47	0 bufcache	SHR/DEF	7,616	-64		7,552	COM
08/19 21:12:47	0 shared	GRO/DEF	1,280	64		1,344	COM
08/19 21:10:47	0 bufcache	GRO/DEF	7,552	64		7,616	COM
08/19 21:10:47	0 shared	SHR/DEF	1,344	-64		1,280	COM
08/19 21:05:47	0 bufcache	SHR/DEF	7,616	-64		7,552	COM
08/19 21:05:47	0 shared	GRO/DEF	1,280	64		1,344	COM
08/19 20:58:13	0 bufcache	GRO/DEF	7,552	64		7,616	COM
08/19 20:58:13	0 shared	SHR/DEF	1,344	-64		1,280	COM
08/19 20:53:43	0 bufcache	GRO/DEF	7,488	64		7,552	COM
08/19 20:53:43	0 shared	SHR/DEF	1,408	-64		1,344	COM
08/19 20:49:12	1 bufcache	GRO/DEF	7,424	64		7,488	COM
08/19 20:49:12	1 shared	SHR/DEF	1,472	-64		1,408	COM
08/19 20:48:12	0 bufcache	GRO/DEF	6,752	672		7,424	COM
08/19 20:48:12	0 large	SHR/DEF	800	-672		128	COM
08/19 20:47:28	0 bufcache	SHR/IMM	6,944	-32		6,912	COM
08/19 20:47:28	0 bufcache	SHR/IMM	6,912	-32		6,880	COM
08/19 20:47:28	0 bufcache	SHR/IMM	6,880	-32		6,848	COM
08/19 20:47:28	0 bufcache	SHR/IMM	6,848	-32		6,816	COM
08/19 20:47:28	0 bufcache	SHR/IMM	6,816	-32		6,784	COM
08/19 20:47:28	0 bufcache	SHR/IMM	6,784	-32		6,752	COM
08/19 20:47:28	0 large	GRO/IMM	768	32		800	COM
08/19 20:47:28	0 large	GRO/IMM	736	32		768	COM
08/19 20:47:28	0 large	GRO/IMM	704	32		736	COM
08/19 20:47:28	0 large	GRO/IMM	672	32		704	COM
08/19 20:47:28	0 large	GRO/IMM	640	32		672	COM
08/19 20:47:28	0 large	GRO/IMM	608	32		640	COM
08/19 20:47:27	0 bufcache	SHR/IMM	7,168	-32		7,136	COM
08/19 20:47:27	0 bufcache	SHR/IMM	7,136	-32		7,104	COM
08/19 20:47:27	0 bufcache	SHR/IMM	7,104	-32		7,072	COM
08/19 20:47:27	0 bufcache	SHR/IMM	7,072	-32		7,040	COM
08/19 20:47:27	0 bufcache	SHR/IMM	7,040	-32		7,008	COM
08/19 20:47:27	0 bufcache	SHR/IMM	7,008	-32		6,976	COM
08/19 20:47:27	1 bufcache	SHR/IMM	6,976	-32		6,944	COM
08/19 20:47:27	1 large	GRO/IMM	576	32		608	COM
08/19 20:47:27	0 large	GRO/IMM	544	32		576	COM
08/19 20:47:27	0 large	GRO/IMM	512	32		544	COM
08/19 20:47:27	0 large	GRO/IMM	480	32		512	COM
08/19 20:47:27	0 large	GRO/IMM	448	32		480	COM
08/19 20:47:27	0 large	GRO/IMM	416	32		448	COM
08/19 20:47:27	0 large	GRO/IMM	384	32		416	COM
08/19 20:47:26	0 bufcache	SHR/IMM	7,328	-32		7,296	COM
08/19 20:47:26	0 bufcache	SHR/IMM	7,296	-32		7,264	COM
08/19 20:47:26	0 bufcache	SHR/IMM	7,264	-32		7,232	COM
08/19 20:47:26	0 bufcache	SHR/IMM	7,232	-32		7,200	COM
08/19 20:47:26	0 bufcache	SHR/IMM	7,200	0	-32	7,200	COM
08/19 20:47:26	0 large	GRO/IMM	352	32		384	COM
08/19 20:47:26	0 large	GRO/IMM	320	32		352	COM
08/19 20:47:26	0 large	GRO/IMM	288	32		320	COM
08/19 20:47:26	0 large	GRO/IMM	256	32		288	COM
08/19 20:47:26	0 large	GRO/IMM	224	32		256	COM
08/19 20:47:25	0 bufcache	SHR/IMM	7,456	-32		7,424	COM
08/19 20:47:25	0 bufcache	SHR/IMM	7,424	0	-32	7,424	COM
08/19 20:47:25	0 bufcache	SHR/IMM	7,392	-32		7,360	COM
08/19 20:47:25	1 bufcache	SHR/IMM	7,360	-32		7,328	COM
08/19 20:47:25	1 large	GRO/IMM	192	32		224	COM
08/19 20:47:25	0 large	GRO/IMM	160	32		192	COM
08/19 20:47:25	0 large	GRO/IMM	128	32		160	COM
08/19 20:47:25	0 large	GRO/IMM	96	32		128	COM
08/19 19:15:06	0 bufcache	GRO/DEF	7,392	64		7,456	COM
08/19 19:15:06	0 large	SHR/DEF	160	-64		96	COM
08/19 19:09:32	0 bufcache	SHR/IMM	7,456	-32		7,424	COM
08/19 19:09:32	0 bufcache	SHR/IMM	7,424	-32		7,392	COM
08/19 19:09:32	0 large	GRO/IMM	128	32		160	COM
08/19 19:09:32	0 large	GRO/IMM	96	32		128	COM
08/19 16:13:22	0 bufcache	SHR/DEF	7,520	-64		7,456	COM
08/19 16:13:22	0 shared	GRO/DEF	1,408	64		1,472	COM

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Process Memory Summary

- B: Begin Snap E: End Snap
- All rows below contain absolute values (i.e. not diffed over the interval)
- Max Alloc is Maximum PGA Allocation size at snapshot time
- Hist Max Alloc is the Historical Max Allocation for still-connected processes
- ordered by Begin/End snapshot, Alloc (MB) desc

Category	Alloc (MB)	Used (MB)	Avg Alloc (MB)	Std Dev Alloc (MB)	Max Alloc (MB)	Hist Max Alloc (MB)	Num Proc	Num Alloc
B Other	299.63		7.31	11.58	43	61	41	41
Freeable	31.19	0.00	1.30	1.52	7		24	24
PL/SQL	4.85	1.00	0.12	0.30	1	5	41	41
SQL	0.58	0.16	0.03	0.04	0	190	22	18
E Other	290.25		7.64	12.01	43	43	38	38
Freeable	56.44	0.00	2.97	8.76	39		19	19
PL/SQL	3.72	1.04	0.10	0.25	1	1	38	38
SQL	0.33	0.06	0.02	0.02	0	190	19	15

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SGA Memory Summary

SGA regions	Begin Size (Bytes)	End Size (Bytes) (if different)
Database Buffers	7,885,291,520	8,086,618,112
Fixed Size	2,261,368	
Redo Buffers	21,692,416	
Variable Size	1,711,279,752	1,509,953,160

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SGA breakdown difference

- ordered by Pool, Name
- N/A value for Begin MB or End MB indicates the size of that Pool/Name was insignificant, or zero in that snapshot

Pool	Name	Begin MB	End MB	% Diff
java	JOXLE	29.78	29.79	0.04
java	free memory	65.05	65.04	-0.02
java	joxs heap	1.17	1.17	0.00
large	PX msg pool	7.81	7.81	0.00
large	free memory	87.81	87.81	0.00
shared	ASH buffers	24.00	24.00	0.00
shared	KGH: NO ACCESS	468.58	820.37	75.07
shared	KGLH0	153.30	70.11	-54.26
shared	KGLHD	30.99		-100.00
shared	KQR M PO	19.45		-100.00
shared	SQLA	272.76	76.65	-71.90
shared	db_block_hash_buckets	44.50	44.50	0.00
shared	event statistics per sess	22.88	22.88	0.00
shared	free memory	386.85	534.84	38.25
shared	ksunfy : SSO free list	21.76	21.76	0.00
shared	private strands	25.98	25.98	0.00
shared	state objects	94.34	94.34	0.00
streams	KTG hash buckets	0.63	0.63	0.00
streams	free memory	31.37	31.37	0.00
	buffer_cache	7,520.00	7,712.00	2.55
	fixed_sga	2.16	2.16	0.00
	log_buffer	20.69	20.69	0.00

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Streams Statistics

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Streams CPU/IO Usage

- Streams processes ordered by CPU Time, descending

Session Type	First Logon	CPU time(s)	User IO Wait time(s)	SYS IO Wait time(s)
QMON Slaves	0708 04:54:20	1.35	0.49	0.00
QMON Coordinator	0708 04:54:10	0.43	0.00	0.00

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Streams Capture

No data exists for this section of the report.

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Streams Capture Rate

No data exists for this section of the report.

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Streams Apply

No data exists for this section of the report.

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Streams Apply Rate

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Buffered Queues

No data exists for this section of the report.

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Buffered Queue Subscribers

No data exists for this section of the report.

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Rule Set

No data exists for this section of the report.

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Persistent Queues

- Ordered by Queue Name
- * indicates queue (re)started between Begin/End snaps
- %Exp Msgs - % of msgs enqueued with expiry
- %Delay Msgs - % of msgs enqueued with delay
- %Tranf Time - % of Enqueue time spent in transformation
- %Eval Time - % of Enqueue time spent in rule evaluation

Queue Name	Enq Msgs	Deq Msgs	%Exp Msgs	%Delay Msgs	Enq Time(s)	Deq Time(s)	%Transf Time	%Eval Time
OWBSYS.WB_RT_NOTIFY_QUEUE(2065270)	1,668	873	100.00	0.00	1.87	3,705.07	0.00	0.00
OWBSYS.WB_RT_SERVICE_QUEUE(2065294)	834	834	100.00	0.00	1.18	836.87	0.00	0.00
SYS.ALERT_QUEUE(12603)	0	0			0.00	0.00		
SYS.AQ\$_ALERT_QT_E(12602)	0	0			0.00	0.00		

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Persistent Queues Rate

- Ordered by Queue Name
- * indicates queue (re)started between Begin/End snaps

Queue Name	Enqueue Msgs/sec	Dequeue Msgs/sec	Avg Enqueue sec / msg	Avg Dequeue sec / msg
OWBSYS.WB_RT_NOTIFY_QUEUE(2065270)	0.04	0.02	0.00	4.24
OWBSYS.WB_RT_SERVICE_QUEUE(2065294)	0.02	0.02	0.00	1.00
SYS.ALERT_QUEUE(12603)	0.00	0.00		
SYS.AQ\$_ALERT_QT_E(12602)	0.00	0.00		

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Persistent Queue Subscribers

- Ordered by Queue Name, Subscriber Name
- * indicates Subscriber activity (re)started between Begin/End snaps

Subscriber/Queue	Enqueue Msgs	Dequeue Msgs	Expire Msgs	Enqueue Msgs/sec	Dequeue Msgs/sec	Expire Msgs/sec
HAE_SUB(1)/SYS.ALERT_QUEUE	0	0	0			

LMUCR803_MUC__3872_AGMISMD(22)/SYS.ALERT_QUE	0	0	0	0.00	0.00	0.00
LMUCR803_MUC__3872_AGMISMD(23)/SYS.ALERT_QUE	0	0	0	0.00	0.00	0.00
LMUCR804_MUC__3872_AGMISMT(24)/SYS.ALERT_QUE	0	0	0	0.00	0.00	0.00
LMUCR859_MUC__3872_AGMISMP(44)/SYS.ALERT_QUE	0	0	0	0.00	0.00	0.00
LMUCR893_MUC__3872_AGMISRT(45)/SYS.ALERT_QUE	0	0	0	0.00	0.00	0.00

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Resource Limit Stats

No data exists for this section of the report.

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Shared Server Statistics

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Shared Servers Activity

- Values represent averages for all samples

Avg Total Connections	Avg Active Connections	Avg Total Shared Svrs	Avg Active Shared Svrs	Avg Total Dispatchers	Avg Active Dispatchers
0	0	0	0	0	0

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Shared Servers Rates

Common Queue Per Sec	Disp Queue Per Sec	Server Msgs/Sec	Server KB/Sec	Common Queue Total	Disp Queue Total	Server Total Msgs	Server Total(KB)
0	0	0	0.00	0	0	0	0

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Shared Servers Utilization

No data exists for this section of the report.

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Shared Servers Common Queue

No data exists for this section of the report.

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Shared Servers Dispatchers

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init.ora Parameters

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init.ora Parameters

Parameter Name	Begin value	End value (if different)
audit_file_dest	/u01/app/oracle/admin/AGMISRT/adump	
audit_sys_operations	TRUE	
audit_syslog_level	LOCAL3.INFO	
audit_trail	OS	
backup_tape_io_slaves	TRUE	
compatible	11.2.0.0.0	
control_file_record_keep_time	90	
control_files	+RECO/agmisrt/controlfile/current.5043.848586521, +DATA/agmisrt/controlfile/current.385.848586521	
core_dump_dest	/u01/app/oracle/diag/rdbms/agmisrt/AGMISRT/cdump	

db_block_size	8192	
db_create_file_dest	+DATA	
db_create_online_log_dest_1	+RECO	
db_create_online_log_dest_2	+DATA	
db_domain		
db_file_multiblock_read_count	16	
db_flashback_retention_target	2880	
db_name	AGMISRT	
db_recovery_file_dest	+RECO	
db_recovery_file_dest_size	1073741824000	
diagnostic_dest	/u01/app/oracle	
event		
gcs_server_processes	0	
large_pool_size	100663296	
local_listener	(ADDRESS=(PROTOCOL=TCP)(HOST=10.8.1.8)(PORT=1521))	
log_archive_format	%d_%T_%S_%r.arc	
log_buffer	14221312	
memory_max_target	16106127360	
memory_target	11844714496	
open_cursors	1000	
optimizer_dynamic_sampling	2	
optimizer_mode	ALL_ROWS	
os_authent_prefix		
pga_aggregate_target	2147483648	
plsql_warnings	DISABLE:ALL	
processes	1200	
query_rewrite_enabled	TRUE	
remote_login_passwordfile	EXCLUSIVE	
result_cache_max_size	48332800	
service_names	AGMISRT_LB_DEFAULT, AGMISRT_S1_DEFAULT, AGMISRT_DTP1_DEFAULT	
sessions	1824	
sga_max_size	9663676416	
sga_target	9663676416	
skip_unusable_indexes	TRUE	
spfile	+DATA/agmisrt/spfileagmisrt.ora	
timed_statistics	TRUE	
undo_retention	28800	
undo_tablespace	UNDOTBS1	
workarea_size_policy	AUTO	

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init.ora Multi-Valued Parameters

- This section only displays parameters that have more one value
- '(NULL)' indicates a missing parameter value
- A blank in the End Snapshot indicates the same value as the BeginSnapshot

Parameter Name	Begin value	End value (if different)
control_files	+DATA/agmisrt/controlfile/current.385.848586521 +RECO/agmisrt/controlfile/current.5043.848586521	
service_names	AGMISRT_DTP1_DEFAULT AGMISRT_LB_DEFAULT AGMISRT_S1_DEFAULT	

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Dynamic Remastering Stats

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End of Report