STATSPACK report for

Database	DB Id	Instance	Inst Num	Startup Time	Release	RAC
	4294105894	vfml0004	1	11-Sep-18 13:10	11.2.0.3.0	NO

Host Name	Platform	CPUs	Cores	Sockets	Memory (G)
VERKFUEDB1	Microsoft Windows x86	3	3	1	9.8

Snapshot	Snap Id	Snap Time	Sessions	Curs/Sess	Comment
Begin Snap:	7	11-Sep-18 15:54:07	65	3.7	
End Snap:	8	11-Sep-18 16:08:22	63	3.7	
Elapsed:	14.25 (mins)	Av Act Sess:	1.1		
DB time:	15.77 (mins)	DB CPU:	2.83 (mins)		

Cache Sizes	Begin	End		
Buffer Cache:	848M		Std Block Size:	8K
Shared Pool:	544M		Log Buffer:	5,272K

Load Profile	Per Second	Per Transaction	Per Exec	Per Call
DB time(s):	1.1	11.5	0.00	2.49
DB CPU(s):	0.2	2.1	0.00	0.45
Redo size:	4,982.3	51,949.8		
Logical reads:	1,822.2	18,999.9		
Block changes:	11.8	123.3		
Physical reads:	37.8	394.5		
Physical writes:	1.7	17.5		
User calls:	0.4	4.6		
Parses:	0.9	9.7		
Hard parses:	0.0	0.0		
W/A MB processed:	0.1	0.6		
Logons:	0.1	0.8		
Executes:	1,095.3	11,421.0		
Rollbacks:	0.0	0.0		
Transactions:	0.1			

Instance Efficiency Indicators

Buffer Nowait %:	100.00	Redo NoWait %:	100.00
Buffer Hit %:	97.92	Optimal W/A Exec %:	100.00
Library Hit %:	100.00	Soft Parse %:	100.00
Execute to Parse %:	99.92	Latch Hit %:	100.00
Parse CPU to Parse Elapsd %:	37.50	% Non-Parse CPU:	99.98

Shared Pool Statistics	Begin	End
Memory Usage %:	76.61	76.59
% SQL with executions>1:	65.45	65.58
% Memory for SQL w/exec>1:	70.30	70.69

Top 5 Timed Events

	Avg wait	%Total Call

Event	Waits	Time (s)	(ms)	Time
db file sequential read	32,332	680	21	70.3
CPU time		171		17.6
control file sequential read	21,084	97	5	10.0
Disk file operations I/O	136	13	95	1.3
control file parallel write	298	3	9	.3

FFHost CPU (CPUs: 3 Cores: 3 Sockets: 1)
~~~~~~~~

Load Average Begin	Load Average End	User	System	Idle	WIO	WCPU
		9.33	3.12	87.54		

Instance CPU
~~~~~~~~~~~~

	% Time (seconds)
Host: Total time (s):	2,553.4
Host: Busy CPU time (s):	318.1
% of time Host is Busy:	12.5
Instance: Total CPU time (s):	171.6
% of Busy CPU used for Instance:	54.0
Instance: Total Database time (s):	986.0
%DB time waiting for CPU (Resource Mgr):	0.0

Memory Statistics	Begin	End
Host Mem (MB):	9,999.0	9,999.0
SGA use (MB):	1,895.6	1,895.6
PGA use (MB):	190.4	292.0
% Host Mem used for SGA+PGA:	20.9	21.9

Time Model System Stats DB/Inst: DB1/inst1 Snaps: 7-8
-> Ordered by % of DB time desc, Statistic name

Statistic	Time (s)	% DB time
sql execute elapsed time	945.3	99.9
DB CPU	169.9	18.0
PL/SQL execution elapsed time	62.8	6.6
parse time elapsed	0.0	.0
connection management call elapsed	0.0	.0
sequence load elapsed time	0.0	.0
repeated bind elapsed time	0.0	.0
DB time	946.1	
background elapsed time	39.9	
background cpu time	1.7	

FFForeground Wait Events DB/Inst: DB1/inst1 Snaps: 7-8
-> Only events with Total Wait Time (s) >= .001 are shown
-> ordered by Total Wait Time desc, Waits desc (idle events last)

Event	Waits	%Tim out	Total Wait Time (s)	Avg wait (ms)	Waits /txn	%Total Call Time

db file sequential read	32,295	0	679	21	393.8	70.2
control file sequential read	20,497	0	89	4	250.0	9.2
Disk file operations I/O	10	0	3	322	0.1	.3
log file sync	34	0	0	12	0.4	.0
SQL*Net message from client	109	0	30,186	######	1.3	
jobq slave wait	2,428	99	1,261	520	29.6	

Background Wait Events DB/Inst: DB1/inst1 Snaps: 7-8
-> Only events with Total Wait Time (s) >= .001 are shown
-> ordered by Total Wait Time desc, Waits desc (idle events last)

Event	Waits	%Tim out	Total Wait Time (s)	Avg wait (ms)	Waits /txn	%Total Call Time
Disk file operations I/O	126	0	10	77	1.5	1.0
control file sequential read	587	0	8	13	7.2	.8
control file parallel write	298	0	3	9	3.6	.3
enq: JS - queue lock	3	0	2	767	0.0	.2
log file parallel write	161	0	1	6	2.0	.1
db file parallel write	116	0	1	6	1.4	.1
os thread startup	36	0	0	13	0.4	.0
db file sequential read	37	0	0	13	0.5	.0
db file async I/O submit	31	0	0	1	0.4	.0
log file sync	1	0	0	1	0.0	.0
rdbms ipc message	3,745	95	9,325	2490	45.7	
DIAG idle wait	1,674	100	1,697	1014	20.4	
smon timer	3	100	900	######	0.0	
Space Manager: slave idle wa	170	99	851	5008	2.1	
pmon timer	281	100	849	3022	3.4	
Streams AQ: qmn slave idle w	30	0	841	28024	0.4	
Streams AQ: qmn coordinator	60	50	841	14012	0.7	
shared server idle wait	28	100	840	30014	0.3	
dispatcher timer	14	100	840	60015	0.2	
SQL*Net message from client	4	0	0	4	0.0	
class slave wait	3	0	0	0	0.0	

Wait Events (fg and bg) DB/Inst: DB1/inst1 Snaps: 7-8
-> s - second, cs - centisecond, ms - millisecond, us - microsecond
-> %Timeouts: value of 0 indicates value was < .5%. Value of null is truly 0
-> Only events with Total Wait Time (s) >= .001 are shown
-> ordered by Total Wait Time desc, Waits desc (idle events last)

Event	Waits	%Tim out	Total Wait Time (s)	Avg wait (ms)	Waits /txn	%Total Call Time
db file sequential read	32,332	0	680	21	394.3	70.3
control file sequential read	21,084	0	97	5	257.1	10.0
Disk file operations I/O	136	0	13	95	1.7	1.3
control file parallel write	298	0	3	9	3.6	.3
enq: JS - queue lock	3	0	2	767	0.0	.2
log file parallel write	161	0	1	6	2.0	.1
db file parallel write	116	0	1	6	1.4	.1
os thread startup	36	0	0	13	0.4	.0

log file sync	35	0	0	12	0.4	.0
db file async I/O submit	31	0	0	1	0.4	.0
SQL*Net message from client	113	0	30,186	######	1.4	
rdbms ipc message	3,745	95	9,325	2490	45.7	
DIAG idle wait	1,674	100	1,697	1014	20.4	
jobq slave wait	2,428	99	1,261	520	29.6	
smon timer	3	100	900	######	0.0	
Space Manager: slave idle wa	170	99	851	5008	2.1	
pmon timer	281	100	849	3022	3.4	
Streams AQ: qmn slave idle w	30	0	841	28024	0.4	
Streams AQ: qmn coordinator	60	50	841	14012	0.7	
shared server idle wait	28	100	840	30014	0.3	
dispatcher timer	14	100	840	60015	0.2	
class slave wait	3	0	0	0	0.0	

FFWait Event Histogram DB/Inst: DB1/inst1 Snaps: 7-8
-> Total Waits - units: K is 1000, M is 1000000, G is 1000000000
-> % of Waits - column heading: <=1s is truly <1024ms, >1s is truly >=1024ms
-> % of Waits - value: .0 indicates value was <.05%, null is truly 0
-> Ordered by Event (idle events last)

	Total	% of Waits							
Event	Waits	<1ms	<2ms	<4ms	<8ms	<16ms	<32ms	<=1s	>1s
asynch descriptor resize	36	100.0							
control file parallel writ	298	10.4	56.7	14.4	8.7	2.7	2.3	4.7	
control file sequential re	21K	77.3	8.2	2.7	1.7	1.4	6.4	2.2	
db file async I/O submit	31	77.4	3.2	9.7	6.5	3.2			
db file parallel write	116	39.7	17.2	20.7	8.6	7.8	4.3	1.7	
db file sequential read	32K	7.1	5.6	4.7	16.1	30.6	24.6	11.3	
Disk file operations I/O	136	91.2						5.9	2.9
enq: JS - queue lock	3							66.7	33.3
latch: call allocation	1	100.0							
LGWR wait for redo copy	1	100.0							
log file parallel write	161	57.8	17.4	8.7	8.1	2.5	1.9	3.7	
log file sync	35	22.9	31.4	20.0	17.1			8.6	
os thread startup	36				5.6	80.6	13.9		
SQL*Net more data to clien	1	100.0							
class slave wait	3	100.0							
DIAG idle wait	1674							92.7	7.3
dispatcher timer	14								100.0
jobq slave wait	2429	.0	.0		.1		.1	99.7	.1
pmon timer	281								100.0
rdbms ipc message	3743	.9	.3	.3	.2	.7	.7	21.5	75.4
shared server idle wait	28								100.0
smon timer	3								100.0
Space Manager: slave idle	170								100.0
SQL*Net message from clien	113	5.3	12.4	7.1	10.6	2.7		15.0	46.9
SQL*Net message to client	109	100.0							
Streams AQ: qmn coordinato	60	45.0	1.7	3.3					50.0
Streams AQ: qmn slave idle	30								100.0

FFSQL ordered by CPU DB/Inst: DB1/inst1 Snaps: 7-8
-> Total DB CPU (s): 170
-> Captured SQL accounts for 32.8% of Total DB CPU
-> SQL reported below exceeded 1.0% of Total DB CPU

```
    CPU                  CPU per             Elapsd                     Old
  Time (s)   Executions  Exec (s)  %Total   Time (s)    Buffer Gets  Hash Value
---------- ------------ ---------- ------ ---------- --------------- ----------
    165.00            0              97.1     850.39       1,402,944  255750453
Module: WebDev.WebServer40.exe
Begin "VFADMIN2_SCHEMA"."VN$PA_BUSN"."PR_CALCUL_MOVEMENT"(:v0, :
v1, :v2, :v3, :v4, :v5, :v6, :v7, :v8, :v9, :v10); End;

     26.47      168,192       0.00   15.6     699.48       1,339,694 1791586030
Module: WebDev.WebServer40.exe
SELECT * FROM VN$VI_A_TROUT_TELEM WHERE EOID_TJNCT_FROM = :B1

     19.34      745,017       0.00   11.4      20.34               0 2403185938
Module: WebDev.WebServer40.exe
SELECT USER FROM SYS.DUAL

      3.77            1       3.77    2.2      90.98         134,111  845855497
Module: SQL Developer
BEGIN statspack.snap (i_snap_level => 7); END;

      2.48            1       2.48    1.5      74.26              98  683202194
Module: SQL Developer
INSERT INTO STATS$FILESTATXS ( SNAP_ID , DBID , INSTANCE_NUMBER
, TSNAME , FILENAME , PHYRDS , PHYWRTS , SINGLEBLKRDS , READTIM
, WRITETIM , SINGLEBLKRDTIM , PHYBLKRD , PHYBLKWRT , WAIT_COUNT
, TIME , FILE# ) SELECT :B3 , :B2 , :B1 , TSNAME , FILENAME , PH

          -------------------------------------------------------------
FFSQL ordered by Elapsed time for DB: VFML0004  Instance: vfml0004  Snaps: 7 -8
-> Total DB Time (s):             946
-> Captured SQL accounts for   97.7% of Total DB Time
-> SQL reported below exceeded  1.0% of Total DB Time

  Elapsed               Elap per            CPU                        Old
  Time (s)   Executions  Exec (s)  %Total   Time (s)  Physical Reads Hash Value
---------- ------------ ---------- ------ ---------- --------------- ----------
    850.39            0              89.9     165.00          32,266  255750453
Module: WebDev.WebServer40.exe
Begin "VFADMIN2_SCHEMA"."VN$PA_BUSN"."PR_CALCUL_MOVEMENT"(:v0, :
v1, :v2, :v3, :v4, :v5, :v6, :v7, :v8, :v9, :v10); End;

    699.48      168,192       0.00   73.9      26.47          32,159 1791586030
Module: WebDev.WebServer40.exe
SELECT * FROM VN$VI_A_TROUT_TELEM WHERE EOID_TJNCT_FROM = :B1

     90.98            1      90.98    9.6       3.77              12  845855497
Module: SQL Developer
BEGIN statspack.snap (i_snap_level => 7); END;

     74.26            1      74.26    7.8       2.48               4  683202194
Module: SQL Developer
INSERT INTO STATS$FILESTATXS ( SNAP_ID , DBID , INSTANCE_NUMBER
, TSNAME , FILENAME , PHYRDS , PHYWRTS , SINGLEBLKRDS , READTIM
, WRITETIM , SINGLEBLKRDTIM , PHYBLKRD , PHYBLKWRT , WAIT_COUNT
, TIME , FILE# ) SELECT :B3 , :B2 , :B1 , TSNAME , FILENAME , PH
```

```
     20.34      745,017       0.00    2.1      19.34                0 2403185938
Module: WebDev.WebServer40.exe
SELECT USER FROM SYS.DUAL

     14.66            1      14.66    1.5       0.25                5 3683286753
Module: SQL Developer
INSERT INTO STATS$FILE_HISTOGRAM ( SNAP_ID , DBID , INSTANCE_NUM
BER , FILE# , SINGLEBLKRDTIM_MILLI , SINGLEBLKRDS ) SELECT :B3 ,
 :B2 , :B1 , FILE# , SINGLEBLKRDTIM_MILLI , SINGLEBLKRDS FROM V$
FILE_HISTOGRAM WHERE SINGLEBLKRDS > 0

         -------------------------------------------------------------
FFSQL ordered by Gets  DB/Inst: DB1/inst1  Snaps: 7-8
-> End Buffer Gets Threshold:     10000 Total Buffer Gets:       1,557,990
-> Captured SQL accounts for  100.1% of Total Buffer Gets
-> SQL reported below exceeded  1.0% of Total Buffer Gets

                                                    CPU      Elapsd     Old
  Buffer Gets    Executions  Gets per Exec  %Total Time (s)  Time (s) Hash Value
-------------- ------------ -------------- ------ -------- --------- ----------
     1,402,944            0                   90.0   165.00    850.39  255750453
Module: WebDev.WebServer40.exe
Begin "VFADMIN2_SCHEMA"."VN$PA_BUSN"."PR_CALCUL_MOVEMENT"(:v0, :
v1, :v2, :v3, :v4, :v5, :v6, :v7, :v8, :v9, :v10); End;

     1,339,694      168,192            8.0   86.0    26.47    699.48 1791586030
Module: WebDev.WebServer40.exe
SELECT * FROM VN$VI_A_TROUT_TELEM WHERE EOID_TJNCT_FROM = :B1

       134,111            1      134,111.0    8.6     3.77     90.98  845855497
Module: SQL Developer
BEGIN statspack.snap (i_snap_level => 7); END;

       117,803            1      117,803.0    7.6     0.33      0.27 2783330933
Module: SQL Developer
INSERT INTO STATS$SQL_PLAN ( PLAN_HASH_VALUE , ID , OPERATION ,
OPTIONS , OBJECT_NODE , OBJECT# , OBJECT_OWNER , OBJECT_NAME , O
BJECT_ALIAS , OBJECT_TYPE , OPTIMIZER , PARENT_ID , DEPTH , POSI
TION , SEARCH_COLUMNS , COST , CARDINALITY , BYTES , OTHER_TAG ,

        66,745       21,705            3.1    4.3     1.55      5.04 3980200043
Module: WebDev.WebServer40.exe
SELECT COUNT(*) FROM VN$TA_A_TJNCT_RESTRL WHERE EOID_TJNCT = :B3
 AND EOID_TROUT_IN = :B2 AND EOID_TROUT_OUT = :B1

         -------------------------------------------------------------
FFSQL ordered by Reads  DB/Inst: DB1/inst1  Snaps: 7-8
-> End Disk Reads Threshold:      1000  Total Disk Reads:          32,349
-> Captured SQL accounts for  100.1% of Total Disk Reads
-> SQL reported below exceeded  1.0% of Total Disk Reads

                                                    CPU      Elapsd
  Physical Rds   Executions  Rds per Exec   %Total Time (s)  Time (s) Hash Value
-------------- ------------ -------------- ------ -------- --------- ----------
        32,266            0                   99.7   165.00    850.39  255750453
Module: WebDev.WebServer40.exe
Begin "VFADMIN2_SCHEMA"."VN$PA_BUSN"."PR_CALCUL_MOVEMENT"(:v0, :
```

```
v1, :v2, :v3, :v4, :v5, :v6, :v7, :v8, :v9, :v10); End;

        32,159      168,192            0.2   99.4    26.47    699.48 1791586030
Module: WebDev.WebServer40.exe
SELECT * FROM VN$VI_A_TROUT_TELEM WHERE EOID_TJNCT_FROM = :B1

         -------------------------------------------------------------
FFSQL ordered by Executions  DB/Inst: DB1/inst1  Snaps: 7-8
-> End Executions Threshold:         0  Total Executions:         936,519
-> Captured SQL accounts for  100.1% of Total Executions
-> SQL reported below exceeded  1.0% of Total Executions

                                            CPU per    Elap per     Old
 Executions   Rows Processed   Rows per Exec    Exec (s)   Exec (s)  Hash Value
------------ --------------- ---------------- ----------- ---------- ----------
     745,017         745,017              1.0       0.00        0.00  2403185938
Module: WebDev.WebServer40.exe
SELECT USER FROM SYS.DUAL

     168,192         417,559              2.5       0.00        0.00  1791586030
Module: WebDev.WebServer40.exe
SELECT * FROM VN$VI_A_TROUT_TELEM WHERE EOID_TJNCT_FROM = :B1

      21,705          21,705              1.0       0.00        0.00  3980200043
Module: WebDev.WebServer40.exe
SELECT COUNT(*) FROM VN$TA_A_TJNCT_RESTRL WHERE EOID_TJNCT = :B3
 AND EOID_TROUT_IN = :B2 AND EOID_TROUT_OUT = :B1

         -------------------------------------------------------------
FFSQL ordered by Parse Calls  DB/Inst: DB1/inst1  Snaps: 7-8
-> End Parse Calls Threshold:      1000 Total Parse Calls:             794
-> Captured SQL accounts for   90.4% of Total Parse Calls
-> SQL reported below exceeded  1.0% of Total Parse Calls

                          % Total    Old
 Parse Calls   Executions   Parses Hash Value
------------ ------------ -------- ----------
          30           30     3.78 1825174980
delete from access$ where d_obj#=:1

          30            0     3.78 2997854589
insert into access$(d_obj#,order#,columns,types) values (:1,:2,:
3,:4)

          30           30     3.78 3067006941
delete from dependency$ where d_obj#=:1

          15           15     1.89 2042051015
Module: DBMS_SCHEDULER
insert into sys.scheduler$_event_log  (log_id, log_date, type#,
name, owner, operation, status, user_name,   client_id, guid, db
id, additional_info, destination, credential, class_id,   flags)
   values  (:1, SYSTIMESTAMP,   :2, :3, :4, :5, :6, :7, :8, :9,

          15           15     1.89 2142686507
Module: DBMS_SCHEDULER
DECLARE job BINARY_INTEGER := :job;  next_date TIMESTAMP WITH TI
```

```
ME ZONE := :mydate;  broken BOOLEAN := FALSE;  job_name VARCHAR2
(30) := :job_name;  job_subname VARCHAR2(30) := :job_subname;  j
ob_owner VARCHAR2(30) := :job_owner;  job_start TIMESTAMP WITH T

          15           15     1.89 2283271792
Module: DBMS_SCHEDULER
insert into sys.scheduler$_job_run_details  (log_id, log_date, r
eq_start_date, start_date, run_duration,   instance_id, session_
id, slave_pid, cpu_used, error#, additional_info)   values  (:1,
 SYSTIMESTAMP, :2, :3, :4, :5, :6, :7,   numtodsinterval(:8/100,

          15           43     1.89 2417075700
Module: SEVERITY EVALUATION
SELECT PARAMETER_VALUE FROM MGMT_PARAMETERS WHERE PARAMETER_NAME
 = :B1

          15           43     1.89 3061206098
select next_run_date, obj#, run_job, sch_job from (select decode
(bitand(a.flags, 16384), 0, a.next_run_date,                a.la
st_enabled_time) next_run_date,       a.obj# obj#, decode(bitand
(a.flags, 16384), 0, 0, 1) run_job, a.sch_job  sch_job  from  (s

          15           15     1.89 3415008895
Module: DBMS_SCHEDULER
update sys.scheduler$_job set  next_run_date = :1, last_end_date
 = :2, retry_count = :3, run_count = :4, running_instance = :5,
running_slave = :6, job_status = :7 where  obj# = :8

          15           15     1.89 3605870053
Module: DBMS_SCHEDULER
update obj$ set obj#=:4, type#=:5,ctime=:6,mtime=:7,stime=:8,sta
tus=:9,dataobj#=:10,flags=:11,oid$=:12,spare1=:13, spare2=:14 wh
FFSQL ordered by Parse Calls  DB/Inst: DB1/inst1  Snaps: 7-8
-> End Parse Calls Threshold:      1000 Total Parse Calls:            794
-> Captured SQL accounts for   90.4% of Total Parse Calls
-> SQL reported below exceeded  1.0% of Total Parse Calls

                         % Total    Old
 Parse Calls   Executions   Parses Hash Value
------------ ------------ -------- ----------
ere owner#=:1 and name=:2 and namespace=:3 and remoteowner is nu
ll and linkname is null and subname is null

          15           15     1.89 3684215120
Module: DBMS_SCHEDULER
DELETE FROM ORA_ASPNET_SESSIONS WHERE EXPIRES < SYS_EXTRACT_UTC(
SYSTIMESTAMP)

          15           15     1.89 4133064034
update sys.scheduler$_job set  last_start_date = :1, running_ins
tance = :2, running_slave = :3, job_status = :4 where  obj# = :5

          14           14     1.76  297937389
update sys.job$ set this_date=:1 where job=:2

          14           14     1.76  515613257
SELECT CONTEXT_TYPE_ID,CONTEXT_TYPE,TRACE_LEVEL,NULL,NULL FROM E
```

```
MDW_TRACE_CONFIG WHERE CONTEXT_TYPE = UPPER(:B1 )

          14           14     1.76  923291638
select sysdate + 1 / (24 * 60) from dual

          14           14     1.76  978935325
select /*+ rule */ c.name, u.name from con$ c, cdef$ cd, user$ u
  where c.con# = cd.con# and cd.enabled = :1 and c.owner# = u.us
er#

          14           33     1.76 1200253560
Module: EM_PING
INSERT INTO MGMT_SYSTEM_PERFORMANCE_LOG (JOB_NAME, TIME, DURATIO
N, MODULE, ACTION, IS_TOTAL, NAME, VALUE, CLIENT_DATA, HOST_URL)
 VALUES (:B9 , SYSDATE, :B8 , SUBSTR(:B7 , 1, 512), SUBSTR(:B6 ,
1,32), :B5 , SUBSTR(:B4 ,1,128), SUBSTR(:B3 ,1,128), SUBSTR(:B2

          14           14     1.76 1427980335
select u1.user#, u2.user#, u3.user#, failures, flag, interval#,
   what, nlsenv, env, field1, next_date  from sys.job$ j, sys.us
er$ u1, sys.user$ u2, sys.user$ u3  where job=:1 and (next_date
<= sysdate or :2 != 0)  and lowner = u1.name and powner = u2.nam

          14           14     1.76 1651265719
Module: EM_PING
SELECT COUNT(FAILOVER_ID) FROM MGMT_FAILOVER_TABLE WHERE SYSDATE
-LAST_TIME_STAMP < :B1 /(24*60*60)

          14           68     1.76 1667689875
Module: EM_PING
SELECT SYS_EXTRACT_UTC(SYSTIMESTAMP) FROM DUAL

          14           14     1.76 2091416805
Module: EM_PING
SELECT SYS_GUID() FROM SYS.DUAL
FFSQL ordered by Parse Calls  DB/Inst: DB1/inst1  Snaps: 7-8
-> End Parse Calls Threshold:      1000 Total Parse Calls:            794
-> Captured SQL accounts for   90.4% of Total Parse Calls
-> SQL reported below exceeded  1.0% of Total Parse Calls

                           % Total    Old
 Parse Calls   Executions   Parses Hash Value
------------ ------------ -------- ----------

          14           14     1.76 2121793883
Module: EM_PING
DELETE FROM MGMT_JOB_HISTORY H WHERE STEP_ID = :B1 AND NOT EXIST
S (SELECT 1 FROM MGMT_JOB_EXECUTION E WHERE E.STEP_ID = H.STEP_I
D AND E.STEP_STATUS = H.STEP_STATUS)

          14          560     1.76 2275360153
select /*+ connect_by_filtering */ privilege#,level from sysauth
$ connect by grantee#=prior privilege# and privilege#>0 start wi
th grantee#=:1 and privilege#>0

          14           14     1.76 2689373535
DECLARE job BINARY_INTEGER := :job; next_date DATE := :mydate;
```

```
broken BOOLEAN := FALSE; BEGIN EMD_MAINTENANCE.EXECUTE_EM_DBMS_J
OB_PROCS(); :mydate := next_date; IF broken THEN :b := 1; ELSE :
b := 0; END IF; END;

          14           14     1.76 3331018395
Module: EM_PING
UPDATE MGMT_JOB_EXECUTION SET STEP_STATUS = :B3 WHERE STEP_STATU
S = :B2 AND STEP_ID = :B1 AND START_TIME < (MGMT_JOB_ENGINE.SYSD
ATE_UTC() - (30/60/24))

          14           29     1.76 3421407497
SELECT UPPER(PARAMETER_VALUE) FROM MGMT_PARAMETERS WHERE PARAMET
ER_NAME = :B1

          14           14     1.76 3456737252
Module: EM_PING
INSERT INTO MGMT_JOB_EXECUTION (JOB_ID, EXECUTION_ID, STEP_ID, S
OURCE_STEP_ID, ORIGINAL_STEP_ID, RESTART_MODE, STEP_NAME, STEP_T
YPE, COMMAND_TYPE, ITERATE_PARAM, ITERATE_PARAM_INDEX, PARENT_ST
EP_ID, STEP_STATUS, START_TIME, TIMEZONE_REGION) VALUES (NULL, N

          14           14     1.76 3521705928
Module:
SELECT COUNT(*) FROM MGMT_PARAMETERS WHERE PARAMETER_NAME=:B1 AN
D UPPER(PARAMETER_VALUE)='TRUE'

          14           14     1.76 3525043733
Module: SEVERITY EVALUATION
SELECT target_guid   FROM mgmt_metric_dependency  WHERE can_calc
ulate = 1    AND event_metric = 1    AND disabled = 0    AND rs_
metric = 1  ORDER BY eval_order

          14           14     1.76 3840591838
select privilege# from sysauth$ where (grantee#=:1 or grantee#=1
) and privilege#>0

          14           14     1.76 3935733339
Module: EM_PING
FFSQL ordered by Parse Calls  DB/Inst: DB1/inst1  Snaps: 7-8
-> End Parse Calls Threshold:      1000 Total Parse Calls:            794
-> Captured SQL accounts for   90.4% of Total Parse Calls
-> SQL reported below exceeded  1.0% of Total Parse Calls

                           % Total    Old
 Parse Calls   Executions   Parses Hash Value
------------ ------------ -------- ----------
SELECT TO_NUMBER(PARAMETER_VALUE) FROM MGMT_PARAMETERS WHERE PAR
AMETER_NAME = :B1

          14           14     1.76 4075357577
update sys.job$ set failures=0, this_date=null, flag=:1, last_da
te=:2,  next_date = greatest(:3, sysdate),  total=total+(sysdate
-nvl(this_date,sysdate)) where job=:4

          -------------------------------------------------------------
FFSQL ordered by Sharable Memory  DB/Inst: DB1/inst1  Snaps: 7-8
-> End Sharable Memory Threshold(KB):      1024
```

```
    Max         End
 Sharable    Sharable                                          Old
Memory (KB) Memory (KB)  Parse Calls  Executions  % Total Hash Value
----------- ----------- ------------ ------------ ------- ----------
      1,623       1,623            0            0     0.3   63938453
Module: WebDev.WebServer40.exe
insert into VNV$TA_MOVP select * from VNV$VD_MOVP where EOID = 1
050111316

      1,608       1,608            0            0     0.3  643878963
Module: WebDev.WebServer40.exe
select substr(min(PROT),1,8000) from VNV$VP_MOVP where EOID = 10
50111316

      1,446       1,446            0            0     0.3 4076946240
Module: JDBC Thin Client
select object_type,owner,object_name,rank from (    select objec
t_type,owner,object_name,0 rank    from all_objects    where obj
ect_name = :NAME    and UPPER(owner) = nvl(:OWNER,UPPER(sys_cont
ext('USERENV', 'CURRENT_SCHEMA')))    and object_type not in ( '

      1,232       1,232            0            0     0.2 3126859872
Module: SQL Developer
 select * from (   SELECT o.OBJECT_NAME, o.OBJECT_ID ,'' short_n
ame, NULL partitioned,                  NULL iot_type,
o.OWNER OBJECT_OWNER, o.CREATED, o.LAST_DDL_TIME, O.GENERATED, O
.TEMPORARY, NULL EXTERNAL     FROM SYS.ALL_OBJECTS O      WHERE

      1,204       1,204            0            0     0.2 2379618310
Module: WebDev.WebServer40.exe
insert into VNV$TA_MOVB select * from VNV$VD_MOVB where EOID = 1
000135139

      1,204       1,204            0            0     0.2 1925528717
Module: WebDev.WebServer40.exe
insert into VNV$TA_MOVB select * from VNV$VD_MOVB where EOID = 1
000135140

      1,196       1,196            0            0     0.2 2965859848
Module: WebDev.WebServer40.exe
select substr(min(PROT),1,8000) from VNV$VP_MOVB where EOID = 10
00135139

      1,192       1,192            0            0     0.2 1979367732
Module: WebDev.WebServer40.exe
select substr(min(PROT),1,8000) from VNV$VP_MOVB where EOID = 10
00135140

          -------------------------------------------------------------
FFInstance Activity Stats  DB/Inst: DB1/inst1  Snaps: 7-8

Statistic                                     Total     per Second    per Trans
--------------------------------- ------------------ -------------- ------------
active txn count during cleanout                251            0.3          3.1
application wait time                             0            0.0          0.0
background timeouts                           3,544            4.2         43.2
```

Batched IO block miss count	0	0.0	0.0
Batched IO (bound) vector count	0	0.0	0.0
Batched IO buffer defrag count	0	0.0	0.0
Batched IO double miss count	0	0.0	0.0
Batched IO (full) vector count	0	0.0	0.0
Batched IO same unit count	0	0.0	0.0
Batched IO single block count	0	0.0	0.0
Batched IO vector block count	0	0.0	0.0
Batched IO vector read count	0	0.0	0.0
Block Cleanout Optim referenced	14	0.0	0.2
branch node splits	0	0.0	0.0
buffer is not pinned count	1,503,622	1,758.6	18,336.9
buffer is pinned count	30,100	35.2	367.1
bytes received via SQL*Net from c	15,460	18.1	188.5
bytes sent via SQL*Net to client	31,559	36.9	384.9
Cached Commit SCN referenced	0	0.0	0.0
calls to get snapshot scn: kcmgss	936,767	1,095.6	11,424.0
calls to kcmgas	589	0.7	7.2
calls to kcmgcs	9,343	10.9	113.9
CCursor + sql area evicted	0	0.0	0.0
cell physical IO interconnect byt	641,272,320	750,026.1	7,820,394.2
change write time	9	0.0	0.1
cleanout - number of ktugct calls	254	0.3	3.1
cleanouts only - consistent read	2	0.0	0.0
cluster key scan block gets	4,065	4.8	49.6
cluster key scans	3,969	4.6	48.4
commit batch/immediate performed	14	0.0	0.2
commit batch/immediate requested	14	0.0	0.2
commit cleanout failures: callbac	12	0.0	0.2
commit cleanout failures: cannot	0	0.0	0.0
commit cleanouts	1,136	1.3	13.9
commit cleanouts successfully com	1,124	1.3	13.7
commit immediate performed	14	0.0	0.2
commit immediate requested	14	0.0	0.2
Commit SCN cached	0	0.0	0.0
commit txn count during cleanout	77	0.1	0.9
concurrency wait time	48	0.1	0.6
consistent changes	29	0.0	0.4
consistent gets	1,547,416	1,809.8	18,870.9
consistent gets - examination	362,647	424.2	4,422.5
consistent gets direct	0	0.0	0.0
consistent gets from cache	1,547,417	1,809.8	18,870.9
consistent gets from cache (fastp	1,151,832	1,347.2	14,046.7
CPU used by this session	17,067	20.0	208.1
CPU used when call started	402	0.5	4.9
CR blocks created	15	0.0	0.2
cursor authentications	2	0.0	0.0
data blocks consistent reads - un	29	0.0	0.4
db block changes	10,112	11.8	123.3
db block gets	10,627	12.4	129.6
db block gets direct	0	0.0	0.0
db block gets from cache	10,627	12.4	129.6
db block gets from cache (fastpat	3,267	3.8	39.8

FFInstance Activity Stats DB/Inst: DB1/inst1 Snaps: 7-8

Statistic	Total	per Second	per Trans

DB time	134,774	157.6	1,643.6
DBWR checkpoint buffers written	553	0.7	6.7
DBWR thread checkpoint buffers wr	553	0.7	6.7
DBWR transaction table writes	0	0.0	0.0
DBWR undo block writes	360	0.4	4.4
deferred (CURRENT) block cleanout	471	0.6	5.7
dirty buffers inspected	257	0.3	3.1
Effective IO time	0	0.0	0.0
enqueue conversions	198	0.2	2.4
enqueue releases	9,228	10.8	112.5
enqueue requests	9,223	10.8	112.5
enqueue timeouts	0	0.0	0.0
enqueue waits	3	0.0	0.0
execute count	936,519	1,095.3	11,421.0
file io service time	93,451	109.3	1,139.7
file io wait time	698,503,903	816,963.6	8,518,340.3
free buffer inspected	28,001	32.8	341.5
free buffer requested	32,844	38.4	400.5
heap block compress	21	0.0	0.3
Heap Segment Array Inserts	265	0.3	3.2
Heap Segment Array Updates	0	0.0	0.0
hot buffers moved to head of LRU	89,652	104.9	1,093.3
HSC Heap Segment Block Changes	795	0.9	9.7
immediate (CR) block cleanout app	2	0.0	0.0
immediate (CURRENT) block cleanou	491	0.6	6.0
IMU commits	78	0.1	1.0
IMU contention	1	0.0	0.0
IMU CR rollbacks	20	0.0	0.2
IMU Flushes	31	0.0	0.4
IMU Redo allocation size	59,436	69.5	724.8
IMU undo allocation size	398,160	465.7	4,855.6
in call idle wait time	1,656,816	1,937.8	20,205.1
index crx upgrade (positioned)	0	0.0	0.0
index fast full scans (full)	10	0.0	0.1
index fetch by key	6,692	7.8	81.6
index scans kdiixs1	194,651	227.7	2,373.8
leaf node splits	78	0.1	1.0
leaf node 90-10 splits	13	0.0	0.2
lob reads	0	0.0	0.0
lob writes	0	0.0	0.0
lob writes unaligned	0	0.0	0.0
logical read bytes from cache	12,763,529,216	14,928,104.4	############
logons cumulative	65	0.1	0.8
max cf enq hold time	0	0.0	0.0
messages received	298	0.4	3.6
messages sent	298	0.4	3.6
min active SCN optimization appli	29	0.0	0.4
no buffer to keep pinned count	0	0.0	0.0
no work - consistent read gets	1,176,884	1,376.5	14,352.2
non-idle wait count	54,454	63.7	664.1
non-idle wait time	79,778	93.3	972.9
Number of read IOs issued	0	0.0	0.0
opened cursors cumulative	936,240	1,095.0	11,417.6
parse count (failures)	0	0.0	0.0
parse count (hard)	0	0.0	0.0
parse count (total)	794	0.9	9.7

FFInstance Activity Stats DB/Inst: DB1/inst1 Snaps: 7-8

Statistic	Total	per Second	per Trans
parse time cpu	3	0.0	0.0
parse time elapsed	8	0.0	0.1
physical read bytes	265,003,008	309,945.0	3,231,744.0
physical read IO requests	32,349	37.8	394.5
physical read total bytes	610,443,264	713,968.7	7,444,430.1
physical read total IO requests	53,433	62.5	651.6
physical read total multi block r	0	0.0	0.0
physical reads	32,349	37.8	394.5
physical reads cache	32,349	37.8	394.5
physical reads cache prefetch	0	0.0	0.0
physical reads direct	0	0.0	0.0
physical reads direct (lob)	0	0.0	0.0
physical reads direct temporary t	0	0.0	0.0
physical reads prefetch warmup	0	0.0	0.0
physical write bytes	11,755,520	13,749.2	143,360.0
physical write IO requests	370	0.4	4.5
physical write total bytes	30,829,056	36,057.4	375,964.1
physical write total IO requests	1,539	1.8	18.8
physical write total multi block	61	0.1	0.7
physical writes	1,435	1.7	17.5
physical writes direct	0	0.0	0.0
physical writes direct (lob)	0	0.0	0.0
physical writes direct temporary	0	0.0	0.0
physical writes from cache	1,435	1.7	17.5
physical writes non checkpoint	912	1.1	11.1
pinned cursors current	0	0.0	0.0
prefetch clients - default	0	0.0	0.0
prefetch warmup blocks aged out b	94	0.1	1.2
prefetched blocks aged out before	134	0.2	1.6
process last non-idle time	0	0.0	0.0
recursive calls	1,531,577	1,791.3	18,677.8
recursive cpu usage	9,514	11.1	116.0
redo blocks checksummed by FG (ex	5,533	6.5	67.5
redo blocks written	8,645	10.1	105.4
redo entries	4,977	5.8	60.7
redo ordering marks	263	0.3	3.2
redo size	4,259,884	4,982.3	51,949.8
redo size for direct writes	0	0.0	0.0
redo subscn max counts	605	0.7	7.4
redo synch long waits	3	0.0	0.0
redo synch time	39	0.1	0.5
redo synch time (usec)	409,433	478.9	4,993.1
redo synch writes	35	0.0	0.4
redo wastage	83,716	97.9	1,020.9
redo write time	91	0.1	1.1
redo writes	161	0.2	2.0
Requests to/from client	109	0.1	1.3
rollback changes - undo records a	14	0.0	0.2
rollbacks only - consistent read	14	0.0	0.2
RowCR attempts	11	0.0	0.1
RowCR hits	11	0.0	0.1
rows fetched via callback	759	0.9	9.3
session connect time	0	0.0	0.0
session cursor cache hits	18,118	21.2	221.0

session logical reads 1,557,990 1,822.2 18,999.9
session pga memory 155,261,952 181,592.9 1,893,438.4

Instance Activity Stats DB/Inst: DB1/inst1 Snaps: 7-8

Statistic	Total	per Second	per Trans
session pga memory max	157,948,928	184,735.6	1,926,206.4
session uga memory	124,668,475,960	145,811,083.0	###########
session uga memory max	156,462,744	182,997.4	1,908,082.2
shared hash latch upgrades - no w	561	0.7	6.8
shared hash latch upgrades - wait	0	0.0	0.0
sorts (memory)	1,783	2.1	21.7
sorts (rows)	9,712	11.4	118.4
sql area evicted	0	0.0	0.0
sql area purged	0	0.0	0.0
SQL*Net roundtrips to/from client	105	0.1	1.3
summed dirty queue length	1,034	1.2	12.6
switch current to new buffer	71	0.1	0.9
table fetch by rowid	459,336	537.2	5,601.7
table fetch continued row	3	0.0	0.0
table scan blocks gotten	104,716	122.5	1,277.0
table scan rows gotten	3,831,158	4,480.9	46,721.4
table scans (direct read)	0	0.0	0.0
table scans (long tables)	0	0.0	0.0
table scans (short tables)	1,533	1.8	18.7
total cf enq hold time	141	0.2	1.7
total number of cf enq holders	9	0.0	0.1
total number of times SMON posted	0	0.0	0.0
transaction rollbacks	14	0.0	0.2
undo change vector size	1,401,296	1,638.9	17,089.0
user calls	380	0.4	4.6
user commits	82	0.1	1.0
user I/O wait time	69,362	81.1	845.9
user rollbacks	0	0.0	0.0
workarea executions - optimal	1,101	1.3	13.4
write clones created in backgroun	0	0.0	0.0

Instance Activity Stats DB/Inst: DB1/inst1 Snaps: 7-8
-> Statistics with absolute values (should not be diffed)

Statistic	Begin Value	End Value
logons current	65	63
opened cursors current	243	231
session cursor cache count	18,935	19,945

Instance Activity Stats DB/Inst: DB1/inst1 Snaps: 7-8
-> Statistics identified by '(derived)' come from sources other than SYSSTAT

Statistic	Total	per Hour
log switches (derived)	0	.00

OS Statistics DB/Inst: DB1/inst1 Snaps: 7-8

-> ordered by statistic type (CPU use, Virtual Memory, Hardware Config), Name

Statistic	Total
BUSY_TIME	31,805
IDLE_TIME	223,536
SYS_TIME	7,971
USER_TIME	23,834
PHYSICAL_MEMORY_BYTES	10,484,748,288
NUM_CPU_CORES	3
NUM_CPUS	3
NUM_CPU_SOCKETS	1

OS Statistics - detail DB/Inst: DB1/inst1 Snaps: 7-8

Snap Id	Snapshot Day Time	Load	%Busy	%User	%System	%WIO	%WCPU
7	Di 11 15:54:07						
8	Di 11 16:08:22	12.5	9.3	3.1			

FFIO Stat by Function - summary DB/Inst: DB1/inst1 Snaps: 7-8
->Data Volume values suffixed with M,G,T,P are in multiples of 1024,
other values suffixed with K,M,G,T,P are in multiples of 1000
->ordered by Data Volume (Read+Write) desc

	Read			Write			Wait	
Function	Data Volume	Requests /sec	Data Vol/sec	Data Volume	Requests /sec	Data Vol/sec	Count	Avg Tm(ms)
Others	329M	24.6	.4M	13M	1.0	.0M	21K	0.0
Buffer Cache Re	263M	39.4	.3M				34K	0.0

IO Stat by Function - detail DB/Inst: DB1/inst1 Snaps: 7-8
->ordered by Data Volume (Read+Write) desc

	Read				Write			
Function	Small Read Reqs	Large Read Reqs	Small Data Read	Large Data Read	Small Write Reqs	Large Write Reqs	Small Data Writn	Large Data Writn
Others	21K		329M		888		13M	
Buffer Cache Reads	34K		263M					

FFTablespace IO Stats DB/Inst: DB1/inst1 Snaps: 7-8
->ordered by IOs (Reads + Writes) desc

Tablespace

	Reads	Av Reads/s	Av Rd(ms)	Av Blks/Rd	Writes	Av Writes/s	Buffer Waits	Av Buf Wt(ms)
VFTS_RD1	28,701	34	19.7	1.0	0	0	0	0.0
VFTS_RI1								

```
         4,422        5   26.3     1.0             0        0           0    0.0
STATSPACK
             3        0   16.7     1.0           241        0           0    0.0
SYSAUX
            41        0   12.4     1.0            87        0           0    0.0
UNDOTBS1
             0        0    0.0                    25        0           0    0.0
SYSTEM
             0        0    0.0                     5        0           0    0.0
VFTS_ED1
             0        0    0.0                     3        0           0    0.0
VFTS_WD1
             0        0    0.0                     3        0           0    0.0
VFTS_SD1
             0        0    0.0                     2        0           0    0.0
VFTS_AD1
             0        0    0.0                     1        0           0    0.0
USERS
             1        0  180.0     1.0             0        0           0    0.0
          -------------------------------------------------------------
FFFile IO Stats  DB/Inst: DB1/inst1  Snaps: 7-8
->Mx Rd Bkt: Max bucket time for single block read
->ordered by Tablespace, File

Tablespace               Filename
------------------------ ----------------------------------------------------
                       Av   Mx                                                Av
                Av     Rd   Rd    Av                    Av        Buffer BufWt
         Reads Reads/s (ms)  Bkt Blks/Rd       Writes Writes/s      Waits  (ms)
-------------- ------- ----- --- ------- ------------ -------- ---------- ------
STATSPACK                G:\DATA_G\ORADATA\VFML0004\STATSPACK01.DBF
             3        0  16.7  64     1.0          241        0          0

SYSAUX                   F:\DATA_F\ORADATA\VFML0004\SYSAUX01.DBF
            41        0  12.4  64     1.0           87        0          0

SYSTEM                   F:\DATA_F\ORADATA\VFML0004\SYSTEM01.DBF
             0        0                               5        0          0

UNDOTBS1                 F:\DATA_F\ORADATA\VFML0004\UNDOTBS103.DBF
             0        0                              17        0          0
                         F:\DATA_F\ORADATA\VFML0004\UNDOTBS104.DBF
             0        0                               6        0          0
                         F:\DATA_F\ORADATA\VFML0004\UNDOTBS106.DBF
             0        0                               2        0          0

USERS                    G:\DATA_G\ORADATA\VFML0004\USERS07.DBF
             1        0 ##### ###     1.0             0        0          0

VFTS_AD1                 G:\DATA_G\ORADATA\VFML0004\VFTS_AD101.DBF
             0        0                               1        0          0

VFTS_ED1                 G:\DATA_G\ORADATA\VFML0004\VFTS_ED101.DBF
             0        0                               1        0          0
                         G:\DATA_G\ORADATA\VFML0004\VFTS_ED105.DBF
             0        0                               2        0          0
```

```
VFTS_RD1                 G:\DATA_G\ORADATA\VFML0004\VFTS_RD101.DBF
        28,701      34  19.7 ###     1.0            0        0          0

VFTS_RI1                 H:\DATA_H\ORADATA\VFML0004\VFTS_RI101.DBF
         4,422       5  26.3 ###     1.0            0        0          0

VFTS_SD1                 G:\DATA_G\ORADATA\VFML0004\VFTS_SD101.DBF
             0       0                                2        0          0

VFTS_WD1                 G:\DATA_G\ORADATA\VFML0004\VFTS_WD101.DBF
             0       0                                3        0          0

          -------------------------------------------------------------
FFFile Read Histogram Stats  DB/Inst: DB1/inst1  Snaps: 7-8
->Number of single block reads in each time range
->Tempfiles are not included
->ordered by Tablespace, File

Tablespace               Filename
------------------------ ----------------------------------------------------
    0 - 2 ms     2 - 4 ms    4 - 8 ms     8 - 16 ms   16 - 32 ms       32+ ms
------------ ------------ ----------- ------------ ------------ ------------
SYSAUX                   F:\DATA_F\ORADATA\VFML0004\SYSAUX01.DBF
          12            3            8            3           11            4

STATSPACK                G:\DATA_G\ORADATA\VFML0004\STATSPACK01.DBF
           1            0            1            0            1            1

USERS                    G:\DATA_G\ORADATA\VFML0004\USERS07.DBF
           0            0            0            0            0            1

VFTS_RD1                 G:\DATA_G\ORADATA\VFML0004\VFTS_RD101.DBF
       3,724        1,452        5,046        9,304        6,103        3,111

VFTS_RI1                 H:\DATA_H\ORADATA\VFML0004\VFTS_RI101.DBF
         355           60          165          559        1,856          504

          -------------------------------------------------------------
FFInstance Recovery Stats  DB/Inst: DB1/inst1  Snaps: 7-8
-> B: Begin snapshot,  E: End snapshot

  Targt Estd                                    Log File  Log Ckpt    Log Ckpt
  MTTR  MTTR   Recovery   Actual    Target      Size     Timeout    Interval
   (s)   (s)   Estd IOs  Redo Blks Redo Blks Redo Blks  Redo Blks  Redo Blks
- ----- ----- ---------- --------- --------- ---------- --------- ------------
B     0     0       1135     10374     10329   21233664     10329
E     0     0        518     10554     10572   21233664     10572
          -------------------------------------------------------------

Memory Dynamic Components  DB/Inst: DB1/inst1  Snaps: 7-8
->  Op - memory resize Operation
->  Cache:    D: Default,  K: Keep,  R:  Recycle
->   Mode:  DEF: DEFerred mode,  IMM: IMMediate mode

                       Begin Snap End Snap   Op    Last Op
Cache                    Size (M) Size (M)  Count  Type/Mode   Last Op Time
---------------------- ---------- -------- ------- ---------- --------------
```

```
D:buffer cache                848               0 INITIA/
java pool                     224               0 STATIC
large pool                    272               0 STATIC
PGA Target                    992               0 STATIC
shared pool                   544               0 STATIC
          -------------------------------------------------------------
```

Buffer Pool Advisory DB/Inst: DB1/inst1 End Snap: 8
-> Only rows with estimated physical reads >0 are displayed
-> ordered by Pool, Block Size, Buffers For Estimate

P	Size for Est (M)	Size Factr	Buffers (thousands)	Est Phys Read Factr	Estimated Phys Reads (thousands)	Est Phys Read Time	Est % dbtime for Rds
D	80	.1	10	2.6	318	3,143	164.4
D	160	.2	20	2.2	269	2,647	138.4
D	240	.3	30	2.0	238	2,331	121.9
D	320	.4	39	1.7	207	2,021	105.7
D	400	.5	49	1.2	146	1,399	73.2
D	480	.6	59	1.1	134	1,275	66.7
D	560	.7	69	1.0	121	1,150	60.1
D	640	.8	79	1.0	120	1,139	59.6
D	720	.8	89	1.0	120	1,136	59.4
D	800	.9	99	1.0	120	1,136	59.4
D	848	1.0	104	1.0	120	1,136	59.4
D	880	1.0	108	1.0	120	1,136	59.4
D	960	1.1	118	1.0	120	1,136	59.4
D	1,040	1.2	128	1.0	120	1,136	59.4
D	1,120	1.3	138	1.0	120	1,136	59.4
D	1,200	1.4	148	1.0	120	1,136	59.4
D	1,280	1.5	158	1.0	120	1,136	59.4
D	1,360	1.6	168	1.0	120	1,136	59.4
D	1,440	1.7	177	1.0	120	1,136	59.4
D	1,520	1.8	187	1.0	120	1,136	59.4
D	1,600	1.9	197	1.0	120	1,136	59.4

```
          -------------------------------------------------------------
```

Buffer Pool Statistics DB/Inst: DB1/inst1 Snaps: 7-8
-> Standard block size Pools D: default, K: keep, R: recycle
-> Default Pools for other block sizes: 2k, 4k, 8k, 16k, 32k
-> Buffers: the number of buffers. Units of K, M, G are divided by 1000

P	Buffers	Pool Hit%	Buffer Gets	Physical Reads	Physical Writes	Free Buffer Waits	Writ Comp Wait	Buffer Busy Waits
D	104K	98	1,555,539	32,312	1,435	0	0	0

```
          -------------------------------------------------------------
```

PGA Aggr Target Stats DB/Inst: DB1/inst1 Snaps: 7-8
-> B: Begin snap   E: End snap (rows identified with B or E contain data
   which is absolute i.e. not diffed over the interval)
-> PGA cache hit % - percentage of W/A (WorkArea) data processed only in-memory
-> Auto PGA Target - actual workarea memory target
-> W/A PGA Used   - amount of memory used for all 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 Cache Hit %	W/A MB Processed	Extra W/A MB Read/Written
100.0	51	0

	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	990	804	190.4	0.0	.0	.0	.0	102,400
E	990	709	292.0	0.0	.0	.0	.0	102,400

PGA Aggr Target Histogram DB/Inst: DB1/inst1 Snaps: 7-8
-> Optimal Executions are purely in-memory operations

Low Optimal	High Optimal	Total Execs	Optimal Execs	1-Pass Execs	M-Pass Execs
2K	4K	1,052	1,052	0	0
64K	128K	6	6	0	0
256K	512K	1	1	0	0
512K	1024K	32	32	0	0
1M	2M	4	4	0	0
2M	4M	2	2	0	0
4M	8M	2	2	0	0

PGA Memory Advisory DB/Inst: DB1/inst1 End Snap: 8
-> When using Auto Memory Mgmt, minimally choose a pga_aggregate_target value
where Estd PGA Overalloc Count is 0

PGA Aggr Target Est (MB)	Size Factr	W/A MB Processed	Estd Extra W/A MB Read/Written to Disk	Estd Time to Process Bytes (s)	Estd PGA Cache Hit %	Estd PGA Overalloc Count
124	0.1	2,324	7	1.6	100.0	14
248	0.3	2,324	4	1.6	100.0	4
495	0.5	2,324	0	1.6	100.0	2
743	0.8	2,324	0	1.6	100.0	1
990	1.0	2,324	0	1.6	100.0	1
1,188	1.2	2,324	0	1.6	100.0	1
1,386	1.4	2,324	0	1.6	100.0	1
1,584	1.6	2,324	0	1.6	100.0	1
1,782	1.8	2,324	0	1.6	100.0	1
1,980	2.0	2,324	0	1.6	100.0	1
2,970	3.0	2,324	0	1.6	100.0	0
3,960	4.0	2,324	0	1.6	100.0	0
5,940	6.0	2,324	0	1.6	100.0	0
7,920	8.0	2,324	0	1.6	100.0	0

FFProcess Memory Summary Stats DB/Inst: DB1/inst1 Snaps: 7-8
-> 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
-> Num Procs or Allocs: For Begin/End snapshot lines, it is the number of
   processes. For Category lines, it is the number of allocations
-> ordered by Begin/End snapshot, Alloc (MB) desc

	Category	Alloc (MB)	Used (MB)	Freeabl (MB)	Avg Alloc (MB)	Std Dev Alloc (MB)	Max Alloc (MB)	Hist Max Alloc (MB)	Num Procs or Allocs
B	--------	190.4	97.2	74.6	2.8	3.3	17	79	67
	Other	101.9			1.5	1.2	6	44	67
	Freeable	74.6	.0		1.5	2.4	10		49
	PL/SQL	12.0	11.3		.2	1.3	10	10	65
	SQL	1.9	.4		.0	.1	0	34	49
E	--------	292.1	201.8	72.2	4.5	15.0	121	121	65
	PL/SQL	118.3	117.4		1.9	14.7	117	117	63
	Other	99.8			1.5	1.2	6	44	65
	Freeable	72.2	.0		1.6	2.5	10		45
	SQL	1.8	.3		.0	.1	0	34	45

Top Process Memory (by component) DB/Inst: DB1/inst1 Snaps: 7-8
-> ordered by Begin/End snapshot, Alloc (MB) desc

	PId	Category	Alloc (MB)	Used (MB)	Freeabl (MB)	Max Alloc (MB)	Hist Max Alloc (MB)
B	10	DBW0 --------	16.8	6.2	10.4	16.8	16.8
		Freeable	10.4	.0		10.4	
		Other	6.5			6.5	6.5
		PL/SQL	.0	.0		.0	.0
	11	LGWR --------	15.5	4.8	10.4	15.5	15.5
		Freeable	10.4	.0		10.4	
		Other	5.1			5.1	5.1
		PL/SQL	.0	.0		.0	.0
	57	SHAD --------	14.9	14.6	.0	14.9	14.9
		PL/SQL	10.5	10.5		10.5	10.5
		Other	4.0			4.0	4.0
		SQL	.3	.0		.3	3.5
	22	CJQ0 --------	11.5	1.4	9.8	11.5	11.5
		Freeable	9.8	.0		9.8	
		Other	1.6			1.6	1.6
		PL/SQL	.0	.0		.0	.0
		SQL	.0	.0		.0	5.5
	35	SHAD --------	8.9	2.1	5.8	8.9	12.6
		Freeable	5.8	.0		5.8	
		Other	2.8			2.8	2.8
		PL/SQL	.2	.2		.2	2.0
		SQL	.1	.1		.1	6.9
	8	DIA0 --------	6.3	5.8	.2	6.3	6.3
		Other	6.1			6.1	6.1
		Freeable	.2	.0		.2	
		PL/SQL	.0	.0		.0	.0
	21	Q001 --------	4.7	3.9	.3	4.7	4.7
		Other	4.4			4.4	4.4

	Freeable	.3	.0		.3	
	PL/SQL	.0	.0		.0	.0
	SQL	.0	.0		.0	.1
13	SMON --------	4.6	1.0	2.2	4.6	4.6
	Other	2.4			2.4	2.4
	Freeable	2.2	.0		2.2	
	PL/SQL	.0	.0		.0	.0
	SQL	.0	.0		.0	2.1
15	MMON --------	4.6	2.0	2.3	4.6	4.6
	Freeable	2.3	.0		2.3	
	Other	2.2			2.2	2.2
	PL/SQL	.1	.1		.1	.1
	SQL	.0	.0		.0	1.1
31	SHAD --------	3.3	2.4	.3	3.3	4.8
	Other	2.7			2.7	2.7
	Freeable	.3	.0		.3	
	PL/SQL	.2	.0		.2	.2
	SQL	.0	.0		.0	2.6
65	SHAD --------	3.3	2.2	.1	3.3	5.3
	Other	2.9			2.9	2.9
	PL/SQL	.2	.0		.2	.2
	Freeable	.1	.0		.1	
	SQL	.0	.0		.0	2.6
29	SHAD --------	2.7	1.6	.4	2.7	6.7
	Other	2.1			2.1	2.7

Top Process Memory (by component) DB/Inst: DB1/inst1 Snaps: 7-8
-> ordered by Begin/End snapshot, Alloc (MB) desc

	PId	Category	Alloc (MB)	Used (MB)	Freeabl (MB)	Max Alloc (MB)	Hist Max Alloc (MB)
B	29	Freeable	.4	.0		.4	
		PL/SQL	.2	.0		.2	.2
		SQL	.0	.0		.0	3.5
	30	SHAD --------	2.7	1.3	.9	2.7	24.1
		Other	1.7			1.7	6.9
		Freeable	.9	.0		.9	
		SQL	.1	.0		.1	16.2
		PL/SQL	.0	.0		.0	.1
	32	SHAD --------	2.7	1.3	.9	2.7	4.4
		Other	1.7			1.7	1.7
		Freeable	.9	.0		.9	
		SQL	.1	.0		.1	2.6
		PL/SQL	.0	.0		.0	.1
	34	SHAD --------	2.7	1.5	.9	2.7	16.0
		Other	1.5			1.5	9.0
		Freeable	.9	.0		.9	
		SQL	.1	.0		.1	5.7
		PL/SQL	.1	.1		.1	.4
	28	SHAD --------	2.6	1.3	.8	2.6	10.8
		Other	1.6			1.6	3.9
		Freeable	.8	.0		.8	
		SQL	.1	.0		.1	6.0
		PL/SQL	.0	.0		.0	.1
	61	SHAD --------	2.5	1.2	1.2	2.5	2.5
		Other	1.2			1.2	1.2

		Freeable	1.2	.0		1.2	
		PL/SQL	.0	.0		.0	.1
		SQL	.0	.0		.0	1.1
	25	SHAD --------	2.4	1.3	1.0	2.4	78.9
		Other	1.4			1.4	43.9
		Freeable	1.0	.0		1.0	
		SQL	.1	.0		.1	33.9
		PL/SQL	.0	.0		.0	.0
	24	SHAD --------	2.4	1.3	.2	2.4	4.3
		Other	2.1			2.1	2.1
		Freeable	.2	.0		.2	
		PL/SQL	.0	.0		.0	.1
		SQL	.0	.0		.0	2.6
	33	SHAD --------	2.4	1.4	.9	2.4	12.5
		Other	1.5			1.5	7.1
		Freeable	.9	.0		.9	
		SQL	.0	.0		.0	4.5
		PL/SQL	.0	.0		.0	.0
E	57	SHAD --------	121.4	121.0	.0	121.4	121.4
		PL/SQL	116.8	116.5		116.8	116.8
		Other	4.3			4.3	4.3
		SQL	.3	.0		.3	3.5
	10	DBW0 --------	16.8	6.2	10.4	16.8	16.8
		Freeable	10.4	.0		10.4	
		Other	6.5			6.5	6.5
		PL/SQL	.0	.0		.0	.0
	11	LGWR --------	15.5	4.8	10.4	15.5	15.5
		Freeable	10.4	.0		10.4	

Top Process Memory (by component) DB/Inst: DB1/inst1 Snaps: 7-8
-> ordered by Begin/End snapshot, Alloc (MB) desc

	PId	Category	Alloc (MB)	Used (MB)	Freeabl (MB)	Max Alloc (MB)	Hist Max Alloc (MB)
E	11	Other	5.1			5.1	5.1
		PL/SQL	.0	.0		.0	.0
	22	CJQ0 --------	11.5	1.4	9.8	11.5	11.5
		Freeable	9.8	.0		9.8	
		Other	1.6			1.6	1.6
		PL/SQL	.0	.0		.0	.0
		SQL	.0	.0		.0	5.5
	35	SHAD --------	8.6	2.1	5.8	8.6	12.6
		Freeable	5.8	.0		5.8	
		Other	2.5			2.5	2.5
		PL/SQL	.2	.2		.2	2.0
		SQL	.1	.1		.1	6.9
	8	DIA0 --------	6.3	5.8	.2	6.3	6.3
		Other	6.1			6.1	6.1
		Freeable	.2	.0		.2	
		PL/SQL	.0	.0		.0	.0
	21	Q001 --------	4.7	3.9	.3	4.7	4.7
		Other	4.4			4.4	4.4
		Freeable	.3	.0		.3	
		PL/SQL	.0	.0		.0	.0
		SQL	.0	.0		.0	.1
	13	SMON --------	4.6	1.0	2.4	4.6	4.6

	Freeable	2.4	.0		2.4	
	Other	2.2			2.2	2.2
	PL/SQL	.0	.0		.0	.0
	SQL	.0	.0		.0	2.1
15	MMON --------	4.6	2.0	2.3	4.6	4.6
	Freeable	2.3	.0		2.3	
	Other	2.2			2.2	2.2
	PL/SQL	.1	.1		.1	.1
	SQL	.0	.0		.0	1.1
31	SHAD --------	3.3	2.4	.3	3.3	4.8
	Other	2.7			2.7	2.7
	Freeable	.3	.0		.3	
	PL/SQL	.2	.0		.2	.2
	SQL	.0	.0		.0	2.6
65	SHAD --------	3.3	2.2	.1	3.3	5.3
	Other	2.9			2.9	2.9
	PL/SQL	.2	.0		.2	.2
	Freeable	.1	.0		.1	
	SQL	.0	.0		.0	2.6
29	SHAD --------	2.7	1.6	.4	2.7	6.7
	Other	2.1			2.1	2.7
	Freeable	.4	.0		.4	
	PL/SQL	.2	.0		.2	.2
	SQL	.0	.0		.0	3.5
30	SHAD --------	2.7	1.3	.9	2.7	24.1
	Other	1.7			1.7	6.9
	Freeable	.9	.0		.9	
	SQL	.1	.0		.1	16.2
	PL/SQL	.0	.0		.0	.1
32	SHAD --------	2.7	1.3	.9	2.7	4.4
	Other	1.7			1.7	1.7

Top Process Memory (by component) DB/Inst: DB1/inst1 Snaps: 7-8
-> ordered by Begin/End snapshot, Alloc (MB) desc

	PId	Category	Alloc (MB)	Used (MB)	Freeabl (MB)	Max Alloc (MB)	Hist Max Alloc (MB)
E	32	Freeable	.9	.0		.9	
		SQL	.1	.0		.1	2.6
		PL/SQL	.0	.0		.0	.1
	34	SHAD --------	2.7	1.5	.9	2.7	16.0
		Other	1.5			1.5	9.0
		Freeable	.9	.0		.9	
		SQL	.1	.0		.1	5.7
		PL/SQL	.1	.1		.1	.4
	28	SHAD --------	2.6	1.3	.8	2.6	10.8
		Other	1.6			1.6	3.9
		Freeable	.8	.0		.8	
		SQL	.1	.0		.1	6.0
		PL/SQL	.0	.0		.0	.1
	61	SHAD --------	2.5	1.2	1.2	2.5	2.5
		Other	1.2			1.2	1.2
		Freeable	1.2	.0		1.2	
		PL/SQL	.0	.0		.0	.1
		SQL	.0	.0		.0	1.1
	25	SHAD --------	2.4	1.3	1.0	2.4	78.9

```
         Other              1.4                        1.4       43.9
         Freeable           1.0      .0                1.0
         SQL                 .1      .0                 .1       33.9
         PL/SQL              .0      .0                 .0         .0
      24 SHAD --------      2.4     1.3       .2        2.4        4.3
         Other              2.1                        2.1        2.1
         Freeable            .2      .0                 .2
         PL/SQL              .0      .0                 .0         .1
         SQL                 .0      .0                 .0        2.6
      33 SHAD --------      2.4     1.2       .9        2.4       12.5
         Other              1.5                        1.5        7.1
         Freeable            .9      .0                 .9
         SQL                 .0      .0                 .0        4.5
         PL/SQL              .0      .0                 .0         .0
          -------------------------------------------------------------
FFEnqueue activity  DB/Inst: DB1/inst1  Snaps: 7-8
-> 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)
------------ ------------ ----------- ----------- ------------ --------------
JS-Job Scheduler (queue lock)
       3,683        3,683           0           3            2         718.67
          -------------------------------------------------------------

FFUndo Segment Summary  DB/Inst: DB1/inst1  Snaps: 7-8
-> 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   Num Undo       Number of  Max Qry     Max Tx Min/Max   STO/  uS/uR/uU/
 TS# Blocks (K)    Transactions  Len (s)      Concy TR (mins) OOS   eS/eR/eU
---- ---------- --------------- -------- ---------- --------- ----- -----------
   2         .4             437      918          3 19,3/29,3 0/0   0/0/0/0/0/0
          -------------------------------------------------------------



Undo Segment Stats  DB/Inst: DB1/inst1  Snaps: 7-8
-> Most recent 35 Undostat rows, ordered by End Time desc

                Num Undo    Number of Max Qry  Max Tx Tun Ret STO/  uS/uR/uU/
End Time          Blocks Transactions Len (s)   Concy  (mins) OOS   eS/eR/eU
------------ ----------- ------------ ------- ------- ------- ----- -----------
11-Sep 16:10         177          129     918       3      29 0/0   0/0/0/0/0/0
11-Sep 16:00         255          308     313       3      19 0/0   0/0/0/0/0/0
          -------------------------------------------------------------
FFLatch Activity  DB/Inst: DB1/inst1  Snaps: 7-8
->"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	Get Requests	Pct Get Miss	Avg Slps /Miss	Wait Time (s)	NoWait Requests	Pct NoWait Miss
active checkpoint queue	397	0.0		0	0	
active service list	2,212	0.1	0.0	0	3,313	0.0
AQ deq hash table latch	1	0.0		0	0	
ASM db client latch	579	0.0		0	0	
ASM map operation hash t	1	0.0		0	0	
ASM network state latch	13	0.0		0	0	
AWR Alerted Metric Eleme	25,941	0.0		0	0	
buffer pool	1	0.0		0	0	
business card	1	0.0		0	0	
cache buffer handles	290	0.0		0	0	
cache buffers chains	2,814,510	0.0		0	32,857	0.0
cache buffers lru chain	1,604	0.0		0	34,248	0.0
call allocation	278	4.0	0.1	0	0	
cas latch	1	0.0		0	0	
change notification clie	1	0.0		0	0	
Change Notification Hash	282	0.0		0	0	
channel handle pool latc	79	0.0		0	0	
channel operations paren	4,204	0.0		0	0	
checkpoint queue latch	17,233	0.0		0	767	0.0
client/application info	246	0.0		0	0	
compile environment latc	65	0.0		0	0	
Consistent RBA	161	0.0		0	0	
corrupted undo seg latch	56	0.0		0	0	
cp cmon/server latch	1	0.0		0	0	
cp pool latch	1	0.0		0	0	
cp server hash latch	1	0.0		0	0	
cp sga latch	13	0.0		0	0	
cvmap freelist lock	1	0.0		0	0	
deferred cleanup latch	13	0.0		0	0	
dml lock allocation	13	0.0		0	0	
DML lock allocation	994	0.0		0	0	
done queue latch	1	0.0		0	0	
dummy allocation	133	0.0		0	0	
enqueue freelist latch	1	0.0		0	16,879	0.0
enqueue hash chains	18,651	0.0		0	0	
enqueues	40	0.0		0	0	
Event Group Locks	102	0.0		0	0	
fifth spare latch	1	0.0		0	0	
file cache latch	118	0.0		0	0	
File State Object Pool P	1	0.0		0	0	
flashback copy	1	0.0		0	0	
FOB s.o list latch	272	0.0		0	0	
fourth Audit Vault latch	1	0.0		0	0	
gc element	1	0.0		0	0	
gcs commit scn state	1	0.0		0	0	
gcs partitioned table ha	1	0.0		0	0	
gcs pcm hashed value buc	1	0.0		0	0	
gcs resource freelist	1	0.0		0	0	
gcs resource hash	1	0.0		0	0	
gcs resource scan list	1	0.0		0	0	

FFLatch Activity DB/Inst: DB1/inst1 Snaps: 7-8
->"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	Get Requests	Pct Get Miss	Avg Slps /Miss	Wait Time (s)	NoWait Requests	Pct NoWait Miss
gcs shadows freelist	1	0.0		0	0	
ges domain table	1	0.0		0	0	
ges enqueue table freeli	1	0.0		0	0	
ges group table	1	0.0		0	0	
ges process hash list	1	0.0		0	0	
ges process parent latch	1	0.0		0	0	
ges resource hash list	1	0.0		0	0	
ges resource scan list	1	0.0		0	0	
ges resource table freel	1	0.0		0	0	
ges value block free lis	1	0.0		0	0	
global tx hash mapping	1	0.0		0	0	
granule operation	1	0.0		0	0	
hash table modification	10	0.0		0	0	
heartbeat check	1	0.0		0	0	
In memory undo latch	1,610	0.0		0	375	0.0
intra txn parallel recov	1	0.0		0	0	
io pool granule metadata	1	0.0		0	0	
I/O Staticstics latch	1	0.0		0	0	
IPC stats buffer allocat	1	0.0		0	0	
job workq parent latch	30	0.0		0	29	0.0
job_queue_processes free	88	0.0		0	0	
job_queue_processes para	226	0.0		0	0	
JS mem alloc latch	30	0.0		0	0	
JS queue access latch	31	0.0		0	0	
JS queue state obj latch	7,366	0.0		0	0	
JS Sh mem access	31	0.0		0	0	
JS slv state obj latch	71	0.0		0	0	
kdlx hb parent latch	1	0.0		0	0	
KFC FX Hash Latch	1	0.0		0	0	
KFC Hash Latch	1	0.0		0	0	
KFCL LE Freelist	1	0.0		0	0	
kgb parent	1	0.0		0	0	
kgnfs mount latch	1	0.0		0	0	
KGNFS-NFS:SHM structure	1	0.0		0	0	
KGNFS-NFS:SVR LIST	1	0.0		0	0	
KJC message pool free li	1	0.0		0	0	
KJCT flow control latch	1	0.0		0	0	
KMG MMAN ready and start	282	0.0		0	0	
kokc descriptor allocati	68	0.0		0	0	
ksfv messages	1	0.0		0	0	
ksim group membership ca	1	0.0		0	0	
kss move lock	7	0.0		0	0	
ksuosstats global area	78	0.0		0	0	
ksv allocation latch	25	0.0		0	0	
ksv class latch	13	0.0		0	0	
ksv msg queue latch	1	0.0		0	0	
ksz_so allocation latch	74	0.0		0	0	
KTF sga latch	4	0.0		0	237	0.0
ktm global data	11	0.0		0	0	
kwqbsn:qsga	33	0.0		0	0	

Latch Activity DB/Inst: DB1/inst1 Snaps: 7-8
->"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	Get Requests	Pct Get Miss	Avg Slps /Miss	Wait Time (s)	NoWait Requests	Pct NoWait Miss
KWQP Prop Status	1	0.0		0	0	
KWQS pqueue ctx latch	10	0.0		0	0	
k2q lock allocation	1	0.0		0	0	
lgwr LWN SCN	369	0.0		0	0	
list of block allocation	110	0.0		0	0	
lob segment dispenser la	1	0.0		0	0	
lob segment hash table l	5	0.0		0	0	
lob segment query latch	1	0.0		0	0	
Locator state objects po	1	0.0		0	0	
lock DBA buffer during m	1	0.0		0	0	
logical standby cache	1	0.0		0	0	
logminer context allocat	1	0.0		0	0	
logminer work area	1	0.0		0	0	
longop free list parent	1	0.0		0	0	
Lsod array latch	1	0.0		0	0	
mapped buffers lru chain	1	0.0		0	0	
Memory Management Latch	1	0.0		0	282	0.0
Memory Queue	1	0.0		0	0	
Memory Queue Message Sub	1	0.0		0	0	
Memory Queue Message Sub	1	0.0		0	0	
Memory Queue Message Sub	1	0.0		0	0	
Memory Queue Message Sub	1	0.0		0	0	
Memory Queue Subscriber	1	0.0		0	0	
message pool operations	1	0.0		0	0	
messages	7,997	0.1	0.0	0	0	
MinActiveScn Latch	10	0.0		0	0	
mostly latch-free SCN	369	0.0		0	0	
MQL Tracking Latch	0			0	17	0.0
msg queue latch	1	0.0		0	0	
Mutex	1	0.0		0	0	
Mutex Stats	1	0.0		0	0	
name-service namespace b	1	0.0		0	0	
ncodef allocation latch	13	0.0		0	0	
object queue header heap	1,195	0.0		0	477	0.0
object queue header oper	54,927	0.0		0	0	
object stats modificatio	332	0.0		0	0	
OS process	331	0.0		0	0	
OS process allocation	1,856	0.0		0	0	
OS process: request allo	74	0.0		0	0	
parallel query alloc buf	113	0.0		0	0	
parallel query stats	1	0.0		0	0	
parameter list	66	0.0		0	0	
parameter table manageme	499	0.0		0	0	
peshm	1	0.0		0	0	
pesom_free_list	1	0.0		0	0	
pesom_hash_node	1	0.0		0	0	
PL/SQL warning settings	124	0.0		0	0	

post/wait queue 370 0.0 0 295 0.0
process allocation 110 0.0 0 36 0.0
process group creation 74 0.0 0 0

FFLatch Activity DB/Inst: DB1/inst1 Snaps: 7-8
->"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	Get Requests	Pct Get Miss	Avg Slps /Miss	Wait Time (s)	NoWait Requests	Pct NoWait Miss
process queue	1	0.0		0	0	
process queue reference	1	0.0		0	0	
PX hash array latch	1	0.0		0	0	
qmn task queue latch	120	0.0		0	0	
QMT	1	0.0		0	0	
query server freelists	1	0.0		0	0	
queued dump request	3	0.0		0	0	
queuing load statistics	1	0.0		0	0	
recovery domain hash lis	1	0.0		0	0	
redo allocation	6,748	0.0		0	0	
redo copy	1	0.0		0	4,986	0.0
redo writing	1,549	0.0		0	0	
resmgr group change latc	43	0.0		0	0	
resmgr:active threads	133	0.0		0	0	
resmgr:actses change gro	33	0.0		0	0	
resmgr:actses change sta	1	0.0		0	0	
resmgr:free threads list	132	2.3	0.0	0	0	
resmgr:plan CPU method	1	0.0		0	0	
resmgr:resource group CP	1	0.0		0	0	
resmgr:schema config	1	0.0		0	0	
resmgr:session queuing	1	0.0		0	0	
rm cas latch	1	0.0		0	0	
row cache objects	13,279	0.0		0	0	
rules engine rule set st	100	0.0		0	0	
second Audit Vault latch	1	0.0		0	0	
second spare latch	1	0.0		0	0	
sequence cache	137	0.0		0	0	
session allocation	231	0.0		0	102	0.0
session idle bit	796	0.0		0	0	
session queue latch	1	0.0		0	0	
session state list latch	134	0.0		0	0	
session switching	52	0.0		0	0	
session timer	282	0.0		0	0	
SGA blob parent	1	0.0		0	0	
SGA bucket locks	1	0.0		0	0	
SGA heap locks	1	0.0		0	0	
SGA IO buffer pool latch	11	0.0		0	11	0.0
SGA pool locks	1	0.0		0	0	
Shared B-Tree	64	0.0		0	0	
shared pool	195,450	0.0	0.0	0	0	
shared pool sim alloc	1	0.0		0	0	
shared pool simulator	3	0.0		0	0	
sim partition latch	1	0.0		0	0	
simulator hash latch	78,389	0.0		0	0	

```
simulator lru latch                     1    0.0             0       74,314    0.0
sort extent pool                       20    0.0             0            0
space background task la              910    0.0             0          564    0.0
SQL memory manager latch                1    0.0             0          278    0.0
SQL memory manager worka           19,426    0.0             0            0
Streams Generic                         1    0.0             0            0
```

FFLatch Activity DB/Inst: DB1/inst1 Snaps: 7-8

```
->"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	Get Requests	Pct Get Miss	Avg Slps /Miss	Wait Time (s)	NoWait Requests	Pct NoWait Miss
tablespace key chain	1	0.0		0	0	
test excl. parent l0	1	0.0		0	0	
test excl. parent2 l0	1	0.0		0	0	
Testing	1	0.0		0	0	
third spare latch	1	0.0		0	0	
threshold alerts latch	93	0.0		0	0	
Token Manager	1	0.0		0	0	
transaction allocation	262	0.0		0	0	
undo global data	1,615	0.0		0	0	
virtual circuit buffers	1	0.0		0	0	
virtual circuit holder	1	0.0		0	0	
virtual circuit queues	1	0.0		0	0	
WCR: sync	1	0.0		0	0	
Write State Object Pool	1	0.0		0	0	
XDB NFS Security Latch	1	0.0		0	0	
XDB unused session pool	1	0.0		0	0	
XDB used session pool	1	0.0		0	0	

FFLatch Sleep breakdown DB/Inst: DB1/inst1 Snaps: 7-8

```
-> ordered by misses desc
```

Latch Name	Get Requests	Misses	Sleeps	Spin Gets
call allocation	278	11	1	10

FFLatch Miss Sources DB/Inst: DB1/inst1 Snaps: 7-8

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

Latch Name	Where	NoWait Misses	Sleeps	Waiter Sleeps
call allocation	ksuxds	0	1	0

FFSegments by Logical Reads DB/Inst: DB1/inst1 Snaps: 7-8

```
-> End Segment Logical Reads Threshold:     10000
-> Pct Total shows % of logical reads for each top segment compared with total
   logical reads for all segments captured by the Snapshot
```

		Subobject	Obj.	Logical	Pct

Owner	Tablespace	Object Name	Name	Type	Reads	Total
SYS	SYSTEM	CDEF$		TABLE	2,364,240	44.3
SYS	SYSTEM	TAB$		TABLE	1,420,896	26.6
VFADMIN2_S	VFTS_RI1	VN$IX_A_TROUT_TELEM_		INDEX	924,032	17.3
VFADMIN2_S	VFTS_RD1	VN$TA_A_TROUT_TELEM		TABLE	418,416	7.8
PERFSTAT	STATSPACK	STATS$SQL_PLAN		TABLE	112,112	2.1

Segments by Physical Reads DB/Inst: DB1/inst1 Snaps: 7-8
-> End Segment Physical Reads Threshold: 1000

Owner	Tablespace	Object Name	Subobject Name	Obj. Type	Physical Reads	Pct Total
VFADMIN2_S	VFTS_RD1	VN$TA_A_TROUT_TELEM		TABLE	28,825	83.6
VFADMIN2_S	VFTS_RI1	VN$IX_A_TROUT_TELEM_		INDEX	3,347	9.7
SYS	SYSTEM	TAB$		TABLE	1,656	4.8
SYS	SYSTEM	CDEF$		TABLE	228	.7
VFADMIN2_S	VFTS_RD1	VN$TA_A_TJNCT_RESTRL		TABLE	199	.6

FFDictionary Cache Stats DB/Inst: DB1/inst1 Snaps: 7-8
->"Pct Misses" should be very low (< 2% in most cases)
->"Final Usage" is the number of cache entries being used in End Snapshot

Cache	Get Requests	Pct Miss	Scan Reqs	Pct Miss	Mod Reqs	Final Usage
dc_awr_control	17	0.0	0		2	1
dc_global_oids	78	0.0	0		0	128
dc_objects	469	0.0	0		15	2,981
dc_profiles	44	0.0	0		0	1
dc_rollback_segments	115	0.0	0		0	13
dc_sequences	1	0.0	0		1	16
dc_tablespaces	613	0.0	0		0	40
dc_users	2,610	0.0	0		0	292
global database name	597	0.0	0		0	1
outstanding_alerts	37	0.0	0		0	38
sch_lj_oids	30	0.0	0		0	3

Library Cache Activity DB/Inst: DB1/inst1 Snaps: 7-8
->"Pct Misses" should be very low

Namespace	Get Requests	Pct Miss	Pin Requests	Pct Miss	Reloads	Invali-dations
BODY	240	0.0	503	0.0	0	0
EDITION	32	0.0	61	0.0	0	0
QUEUE	14	0.0	41	0.0	0	0
SCHEMA	29	0.0	0		0	0
SQL AREA	386	0.0	935,654	-0.0	0	0
SUBSCRIPTION	2	0.0	2	0.0	0	0
TABLE/PROCEDURE	233	0.0	879	0.0	0	0
TRIGGER	44	0.0	52	0.0	0	0

FFRule Sets DB/Inst: DB1/inst1 Snaps: 7-8
-> * indicates Rule Set activity (re)started between Begin/End snaps
-> Top 25 ordered by Evaluations desc

Rule	*	Eval/sec	Reloads/sec	No-SQL Eval %	SQL Eval %
SYS.ALERT_QUE_R		0	0	0	0

FFShared Pool Advisory DB/Inst: DB1/inst1 End Snap: 8
-> SP: Shared Pool Est LC: Estimated Library Cache Factr: 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
352	.6	36	2,382	6,976	1.0	41	1.2	1,661,634
384	.7	68	3,870	6,984	1.0	33	1.0	1,662,012
400	.7	84	4,719	6,984	1.0	33	1.0	1,662,068
416	.8	100	5,587	6,984	1.0	33	1.0	1,662,068
432	.8	101	5,663	6,984	1.0	33	1.0	1,662,068
448	.8	101	5,663	6,984	1.0	33	1.0	1,662,068
464	.9	101	5,663	6,984	1.0	33	1.0	1,662,068
480	.9	101	5,663	6,984	1.0	33	1.0	1,662,068
496	.9	101	5,663	6,984	1.0	33	1.0	1,662,068
512	.9	101	5,663	6,984	1.0	33	1.0	1,662,068
528	1.0	101	5,663	6,984	1.0	33	1.0	1,662,068
544	1.0	101	5,663	6,984	1.0	33	1.0	1,662,416
560	1.0	101	5,663	6,984	1.0	33	1.0	1,662,421
576	1.1	101	5,663	6,984	1.0	33	1.0	1,662,421
592	1.1	101	5,663	6,984	1.0	33	1.0	1,662,421
608	1.1	101	5,663	6,984	1.0	33	1.0	1,662,421
624	1.1	101	5,663	6,984	1.0	33	1.0	1,662,421
640	1.2	101	5,663	6,984	1.0	33	1.0	1,662,421
656	1.2	101	5,663	6,984	1.0	33	1.0	1,662,421
672	1.2	101	5,663	6,984	1.0	33	1.0	1,662,421
688	1.3	101	5,663	6,984	1.0	33	1.0	1,662,421
736	1.4	101	5,663	6,984	1.0	33	1.0	1,662,421
800	1.5	101	5,663	6,984	1.0	33	1.0	1,662,421
864	1.6	101	5,663	6,984	1.0	33	1.0	1,662,421
928	1.7	101	5,663	6,984	1.0	33	1.0	1,662,421
992	1.8	101	5,663	6,984	1.0	33	1.0	1,662,421
1,056	1.9	101	5,663	6,984	1.0	33	1.0	1,662,421
1,120	2.1	101	5,663	6,984	1.0	33	1.0	1,662,421

FFSGA Memory Summary DB/Inst: DB1/inst1 Snaps: 7-8

SGA regions	Begin Size (Bytes)	End Size (Bytes) (if different)
Database Buffers	889,192,448	

```
Fixed Size                                 2,256,504
Redo Buffers                               5,672,960
Variable Size                          1,090,519,432
                                 -------------------- --------------------
sum                                    1,987,641,344
          ------------------------------------------------------------


SGA breakdown difference  DB/Inst: DB1/inst1  Snaps: 7-8
-> Top 35 rows by size, ordered by Pool, Name (note rows with null values for
   Pool column, or Names showing free memory are always shown)
-> Null 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 p free memory                             224.0          224.0     0.00
large  free memory                             272.0          272.0     0.00
shared ASH buffers                               6.0            6.0     0.00
shared db_block_hash_buckets                     5.6            5.6     0.00
shared dbktb: trace buffer                      23.4           23.4     0.00
shared enqueue                                   5.7            5.7     0.00
shared event statistics per sess                28.7           28.7     0.00
shared FileOpenBlock                            15.2           15.2     0.00
shared free memory                             127.2          127.4     0.10
shared KGLHD                                     7.6            7.6     0.00
shared KGLH0                                    37.5           37.5     0.01
shared KGLS                                     15.4           15.4     0.00
shared ksunfy : SSO free list                   26.8           26.8     0.00
shared KTI-UNDO                                 17.0           17.0     0.00
shared PLDIA                                     9.1            9.1     0.00
shared PLMCD                                     7.6            7.6     0.00
shared private strands                          17.0           17.0     0.00
shared procs: ksunfy                             6.2            6.2     0.00
shared row cache                                 7.2            7.2     0.00
shared SQLA                                     62.8           62.8     0.00
shared transaction                               6.2            6.2     0.00
shared VIRTUAL CIRCUITS                          7.4            7.4     0.00
       buffer_cache                            848.0          848.0     0.00
       fixed_sga                                 2.2            2.2     0.00
       log_buffer                                5.4            5.4     0.00
          ------------------------------------------------------------
FFSQL Memory Statistics  DB/Inst: DB1/inst1  Snaps: 7-8

                                  Begin            End         % Diff
                         -------------- -------------- --------------
   Avg Cursor Size (KB):          40.73          40.73            .00
 Cursor to Parent ratio:           1.05           1.05            .00
          Total Cursors:          1,700          1,700            .00
          Total Parents:          1,621          1,621            .00
          ------------------------------------------------------------
FFinit.ora Parameters  DB/Inst: DB1/inst1  Snaps: 7-8

                                                                End value
Parameter Name                 Begin value                     (if different)
------------------------------ ------------------------------- -------------
audit_file_dest                F:\DATA_F\ADMIN\VFML0004\ADUMP
```

```
audit_trail                     DB
compatible                      11.2.0.0.0
control_files                   F:\DATA_F\ORADATA\VFML0004\CONTRO
                                L01.CTL, F:\DATA_F\ORADATA\VFML00
                                04\CONTROL02.CTL, F:\DATA_F\ORADA
                                TA\VFML0004\CONTROL03.CTL
db_block_size                   8192
db_cache_size                   889192448
db_domain                       verkfuesys.org
db_name                         vfml0004
db_recovery_file_dest           R:\DATA_R\flash_recovery_area\vfm
                                l0004
db_recovery_file_dest_size      4294967296
dispatchers                     (PROTOCOL=TCP) (SERVICE=vfml0004X
                                DB)
java_pool_size                  234881024
large_pool_size                 285212672
nls_language                    GERMAN
nls_territory                   GERMANY
open_cursors                    400
pga_aggregate_target            1038090240
processes                       1500
remote_login_passwordfile       EXCLUSIVE
sessions                        2301
shared_pool_size                570425344
undo_tablespace                 UNDOTBS1
utl_file_dir                    F:\DATA_F\protocol\vfml0004\resul
                                t
          -------------------------------------------------------------

End of Report ( 180911_report_during_route_calculation_7_8.lst )
```