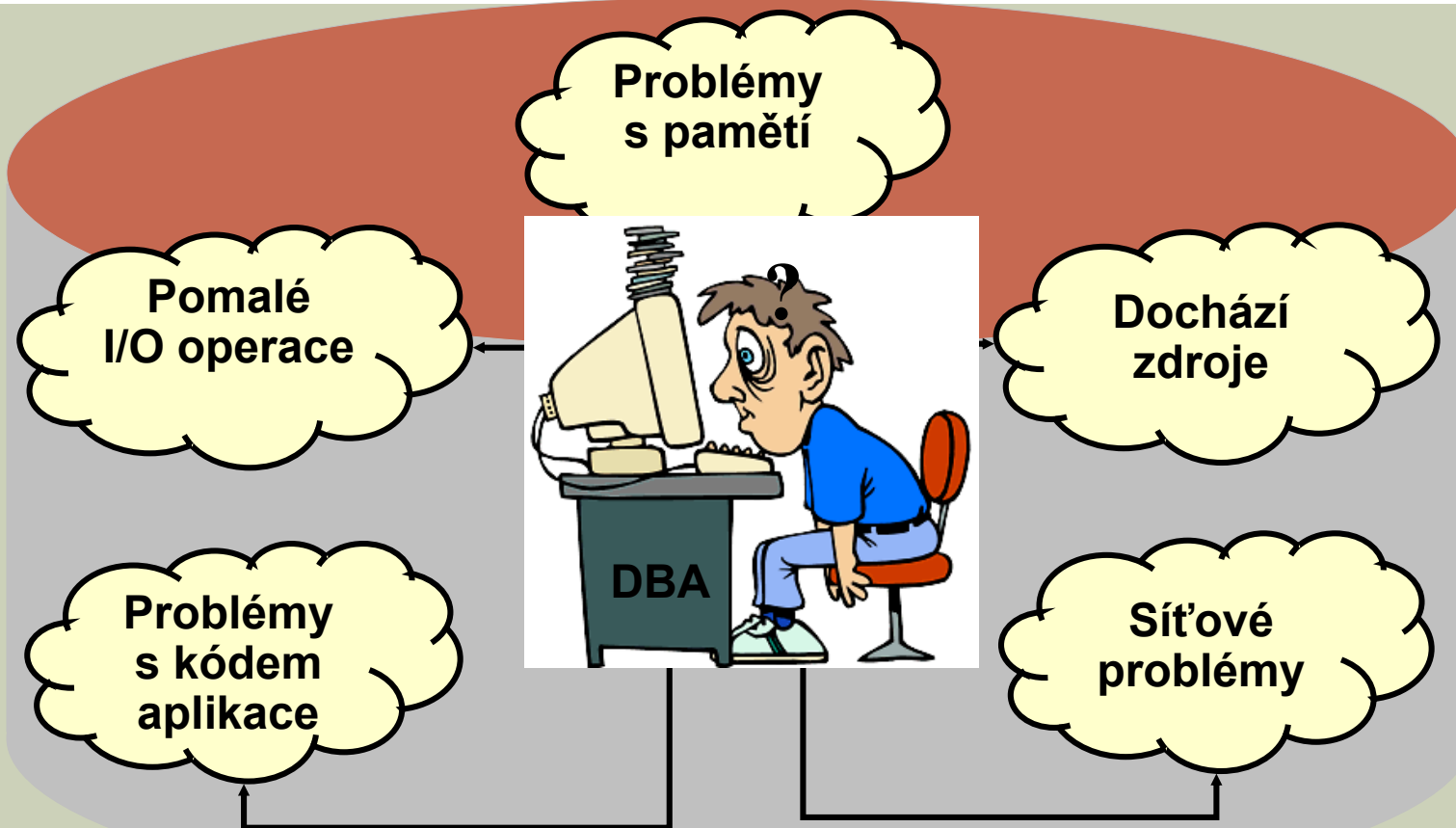


LADĚNÍ VÝKONU

MONITOROVÁNÍ VÝKONU



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Help SYS Log Out

HOTSOS (12.1.0.1.0) Configuration Storage Security Performance

beta12.homework.local

Performance Hub: Real Time - Last Hour

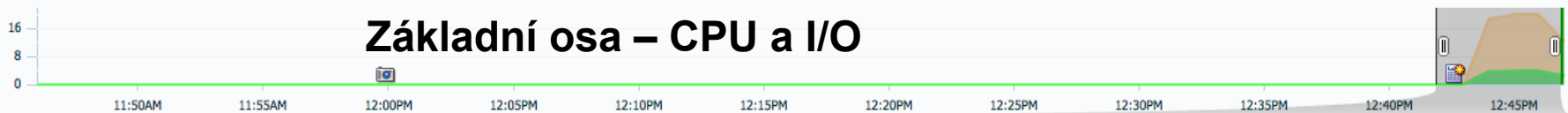
Select Time Period Hide Time Picker

Save

Page Refreshed 12:46:48 PM GMT+0200

Auto Refresh

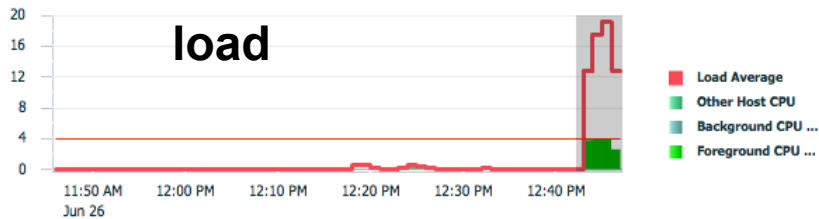
1 Minute



Summary Activity Workload Monitored SQL ADDM Current ADDM Findings

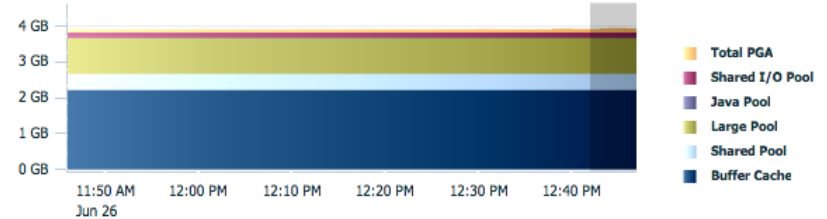
Host: Runnable Processes

Show Load Average



Memory: Host Total 7.8GB

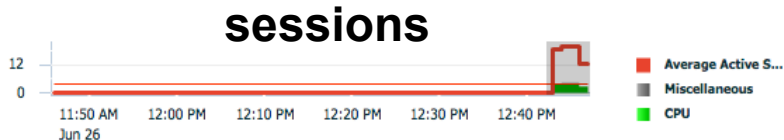
Show Host Memory



Active Sessions

Activity Services

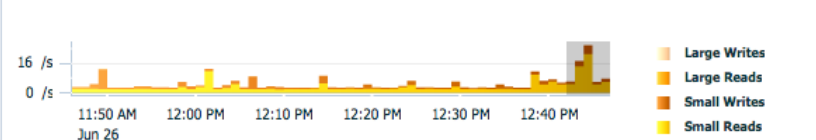
Foreground Only Foreground + Background



I/O

Requests Throughput Latency

I/O Type I/O Function I/O Consumer Group



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HOTSOS (12.1.0.1.0) Configuration Storage Security Performance

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Performance Hub: Real Time - Last Hour

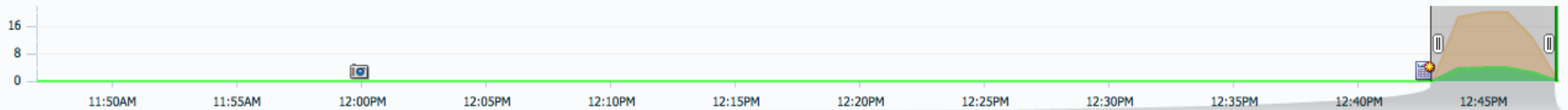
Select Time Period Hide Time Picker

Save

Page Refreshed 12:47:31 PM GMT+0200

Auto Refresh

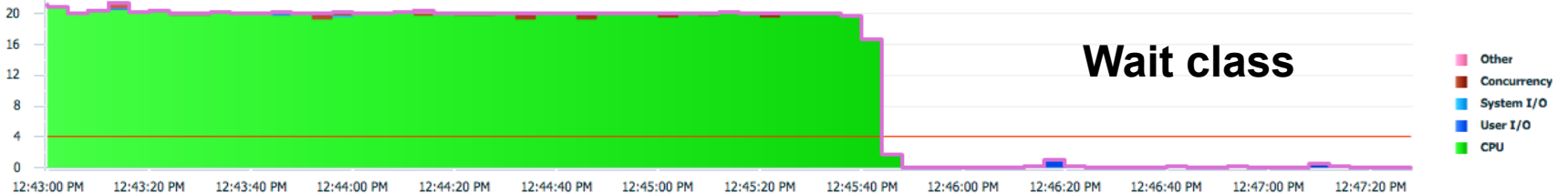
1 Minute



Summary Activity Workload Monitored SQL ADDM Current ADDM Findings

Filters None

Wait Class Show ☒ Total Activity ☒ CPU Cores



SQL ID By Wait Class Tune SQL

SQL ID	Activity (Average Active Sessions)
0kscu68htbz0u	7.42
47z9gc7013axc	3.1
06g9mhm5ba7tt	.03
7r24h5ucyggz	.01
bcfxdsw16f3dq	<.01
g89yk8ub53cyx	<.01
09p3vf74541p5	<.01

User Session By Wait Class

User Session	Activity (Average Active Sessions)
1:17,127	.57
1:173,153	.56
1:326,81	.56
1:329,21	.56
1:487,133	.56
1:488,21	.56
1:165,31	.56

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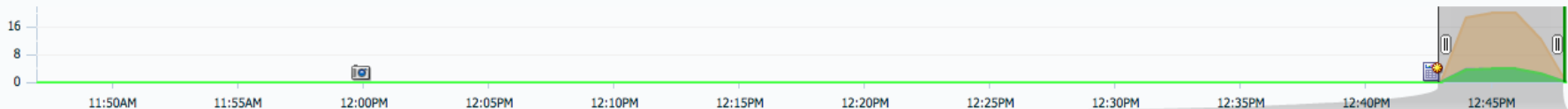
HOTSOS (12.1.0.1.0) Configuration Storage Security Performance

beta12.homework.local

Performance Hub: Real Time - Last Hour

Select Time Period Hide Time Picker

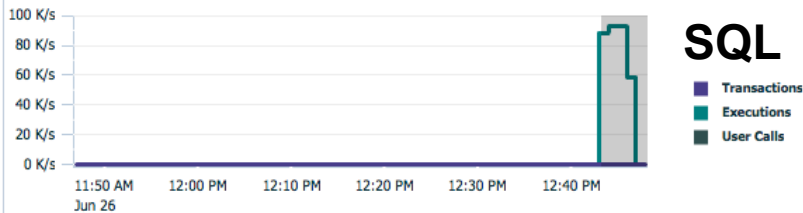
Save Page Refreshed 12:47:46 PM GMT+0200 Auto Refresh 1 Minute



Summary Activity Workload Monitored SQL ADDM Current ADDM Findings

Workload Profile

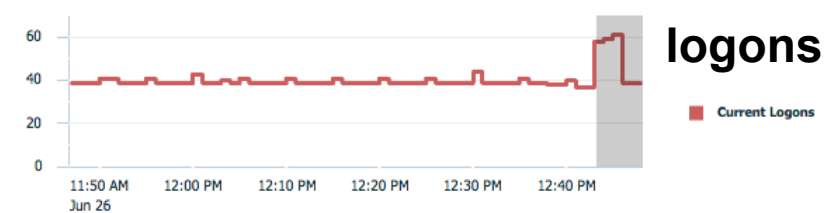
User Calls Parse Calls Redo Size SQL*Net



SQL

Sessions

Current Logons Logon Rate Open Cursors



logons

Top SQL

Top SQL by Database Time SQL Detail

SQL ID

SQL ID	Database Time	SQL Text
0kscu68htbz0u	37.1m	BEGIN load7(1000000); END;
47z9gc7013axc	15.5m	select 1 from dual where 1=2
06g9mhm5ba7tt	9.0s	begin :rept := dbms_report.get_report(:report_ref, :content, :comp); end;
7r24h5ucyggz	3.0s	WITH MONITOR_DATA AS (SELECT INST_ID, KEY, NVL2(PX_QCSID, NULL, STATUS) STATUS, FIRST_REFRESH_TIME,
bcdxsw16f3dq	2.0s	alter table "CLI_SWP
g89yk8ub53cyx	2.0s	UPDATE WRI\$_SQLMON_USAGE SET NUM_EM_REPORTS = NUM_EM_REPORTS + DECODE(:B2, 'EM', 1, 0) + NVL(:B7,

Top SQL

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HOTSOS (12.1.0.1.0) Configuration Storage Security Performance

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Performance Hub: Real Time - Last Hour

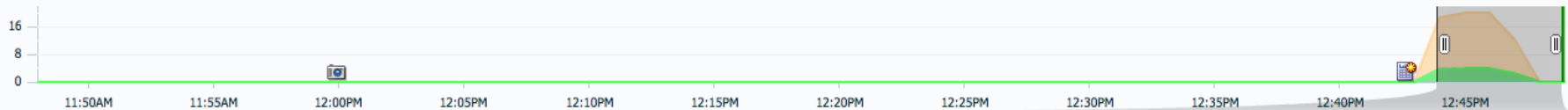
Select Time Period Hide Time Picker

Save

Page Refreshed 12:48:31 PM GMT+0200

Auto Refresh

1 Minute



Summary Activity Workload Monitored SQL ADDM Current ADDM Findings

Top 100 By Last Active Time											
Type All											
Execution Detail SQL Detail Session Detail Kill Session											
ID											
Status	Duration	Type	ID	SQL Plan Hash	User	Parallel	Database Time	IO Requests	Start	Ended	SQL Text
✓	3.6m	SQL	0kscu68htbz0u		TEST		3.6m		12:42:13 PM	12:45:48 PM	BEGIN load7(1000000); END;
✓	3.6m	SQL	0kscu68htbz0u		TEST		3.6m		12:42:13 PM	12:45:48 PM	BEGIN load7(1000000); END;
✓	3.6m	SQL	0kscu68htbz0u		TEST		3.6m		12:42:13 PM	12:45:48 PM	BEGIN load7(1000000); END;
✓	3.6m	SQL	0kscu68htbz0u		TEST		3.6m		12:42:13 PM	12:45:48 PM	BEGIN load7(1000000); END;
✓	3.6m	SQL	0kscu68htbz0u		TEST		3.6m		12:42:13 PM	12:45:48 PM	BEGIN load7(1000000); END;
✓	3.6m	SQL	0kscu68htbz0u		TEST		3.6m		12:42:13 PM	12:45:48 PM	BEGIN load7(1000000); END;
✓	3.6m	SQL	0kscu68htbz0u		TEST		3.6m		12:42:13 PM	12:45:47 PM	BEGIN load7(1000000); END;
✓	3.6m	SQL	0kscu68htbz0u		TEST		3.6m		12:42:13 PM	12:45:47 PM	BEGIN load7(1000000); END;
✓	3.6m	SQL	0kscu68htbz0u		TEST		3.6m		12:42:13 PM	12:45:47 PM	BEGIN load7(1000000); END;
✓	3.6m	SQL	0kscu68htbz0u		TEST		3.6m		12:42:13 PM	12:45:47 PM	BEGIN load7(1000000); END;
✓	3.6m	SQL	0kscu68htbz0u		TEST		3.6m		12:42:13 PM	12:45:46 PM	BEGIN load7(1000000); END;
✓	3.6m	SQL	0kscu68htbz0u		TEST		3.6m		12:42:13 PM	12:45:46 PM	BEGIN load7(1000000); END;
✓	3.6m	SQL	0kscu68htbz0u		TEST		3.5m		12:42:13 PM	12:45:46 PM	BEGIN load7(1000000); END;
✓	3.6m	SQL	0kscu68htbz0u		TEST		3.6m		12:42:13 PM	12:45:46 PM	BEGIN load7(1000000); END;
✓	3.6m	SQL	0kscu68htbz0u		TEST		3.6m		12:42:13 PM	12:45:46 PM	BEGIN load7(1000000); END;

Detail SQL

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HOTSOS (12.1.0.1.0) Configuration Storage Security Performance

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Monitored SQL Execution Details: 0kscu68htbz0u

Navigate to SQL Details

Save Page Refreshed 12:48:10 PM GMT+0200

Overview

General

SQL Text BEGIN load7(1000000); END;
Execution Started Wed Jun 26, 2013 12:42:13 PM
Last Refresh Time Wed Jun 26, 2013 12:45:48 PM
Execution ID 16777216
User TEST
Fetch Calls 0

Time & Wait Statistics

Duration 3.6m
Database Time 3.6m
PL/SQL & Java 1.1m
Wait Activity % 100

IO Statistics

Buffer Gets 0
IO Requests 0
IO Bytes 0

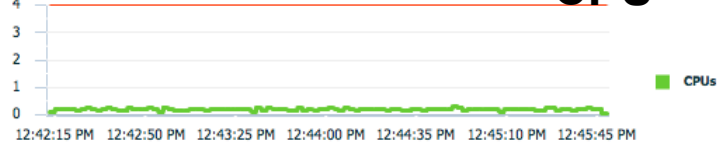
Details

Activity

Metrics

CPU Used

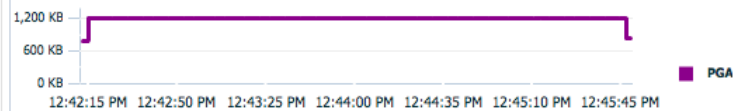
CPU



Memory

paměť

PGA Usage

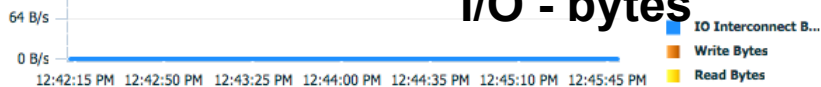


IO Throughput

Storage

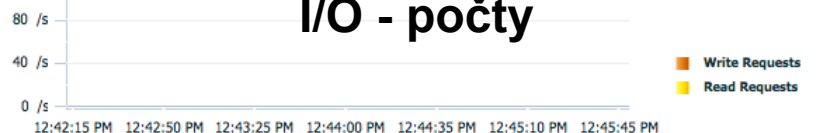
Buffer Cache

I/O - bytes



IO Requests

I/O - počty



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HOTSOS (12.1.0.1.0) Configuration Storage Security Performance

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Performance Hub: Real Time - Last Hour

Select Time Period

Hide Time Picker

Save

Page Refreshed 12:48:57 PM GMT+0200

Auto Refresh

1 Minute



Summary Activity Workload Monitored SQL ADDM Current ADDM Findings

ADDM Tasks

Show Task Details

Task Name

Task Name	Task ID	Time	Task Analysis Type	Number of Findings	Average Active Sessions
ADDM:3488152100_1_279	440	Wed Jun 26, 2013 12:00:10 PM	INSTANCE		

Real-Time ADDM Reports

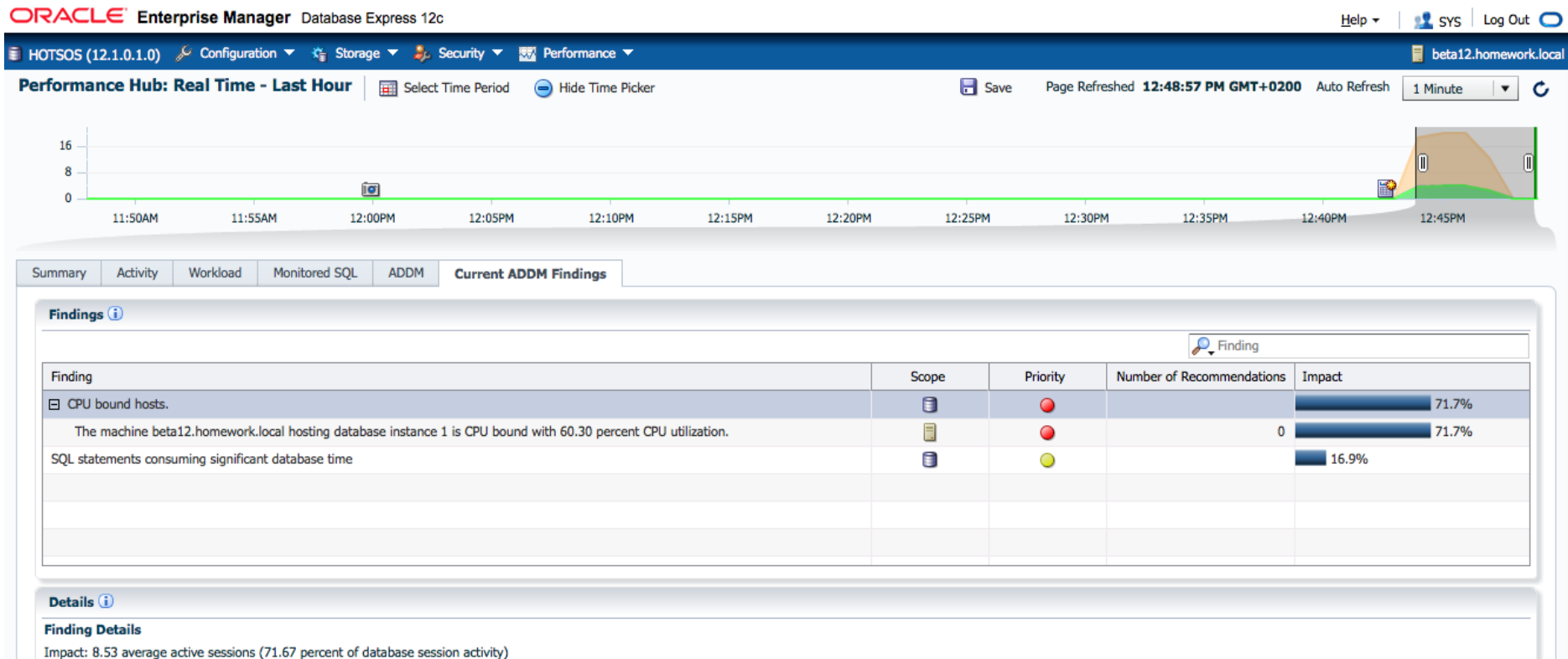
Show Report

Report Name

Report Name	Report ID	Generation Time	Reasons
Real-Time ADDM:999	999	Wed Jun 26, 2013 12:42:55 PM	

ADDM

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ADDM - aktuální

NEJČASTĚJŠÍ WAIT EVENTS

- control file write
- db file scattered read
- db file sequential read
- direct path read
- direct path write
- enqueue
- buffer waits
- latch free
- library cache pin
- library cache lock
- log buffer space
- log file switch (archiving needed)
- log file switch (checkpoint incomplete)
- log file switch completion
- log file sync
- SQL*Net message from client
- SQL*Net message to client

SPRÁVA PAMĚTI

- Automatic Memory Management (AMM)
 - Nastavujeme celkovou velikost použité paměti (SGA i PGA)
 - Inicializační parametry MEMORY_TARGET a MEMORY_MAX_TARGET
- Automatic Shared Memory Management (ASMM):
 - Nastavujeme zvlášť SGA a zvlášť PGA
 - Oracle automaticky alokuje SGA pro shared pool, java pool, buffer cache, large pool a streams pool (od verze 11g)
 - Inicializační parametry SGA_TARGET, SGA_MAX_SIZE a PGA_AGGREGATE_TARGET
- Manuální nastavení paměti:
 - Nastavíme všechny komponenty ručně
 - Používáme Memory Advisor pro doporučení změn
 - Inicializační parametry DB_CACHE_SIZE, SHARED_POOL_SIZE, LARGE_POOL_SIZE, JAVA_POOL_SIZE, STREAMS_POOL_SIZE

DYNAMICKÉ STATISTIKY VÝKONU

Systémové

V\$SYSSTAT

- statistic#
- name
- class
- value
- stat_id

V\$SYSTEM_EVENT

- event
- total_waits
- total_timeouts
- time_waited
- average_wait
- time_waited_micro

 Kumulativní statisiky

 Wait events

Pro jedno připojení

V\$SESSTAT

- sid
- statistic#
- value

V\$SESSION_EVENT

- sid
- event
- total_waits
- total_timeouts
- time_waited
- average_wait
- max_wait
- time_waited_micro
- event_id

DALŠÍ DŮLEŽITÉ POHLEDY

Instance/Databáze

V\$DATABASE
V\$INSTANCE
V\$PARAMETER
V\$SPPARAMETER
V\$SYSTEM_PARAMETER
V\$PROCESS
V\$BGPROCESS
V\$PX_PROCESS_SYSSTAT
V\$SYSTEM_EVENT

Paměť

V\$BUFFER_POOL_STATISTICS
V\$LIBRARYCACHE
V\$SGAINFO
V\$PGASTAT

Disk

V\$DATAFILE
V\$FILESTAT
V\$LOG
V\$LOG_HISTORY
V\$DBFILE
V\$TEMPFILE
V\$TEMPSEG_USAGE
V\$SEGMENT_STATISTICS

Problémy

V\$LOCK
V\$UNDOSTAT
V\$WAITSTAT
V\$LATCH

INVALIDNÍ OBJEKTY

- Dopad na výkon:
 - PL/SQL kód je nutné překompilovat
 - Indexy je nutné obnovit



DOTAZY?