

DBPLUS
better performance



Performance Monitor for Oracle RAC support

Sessions Online

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The DBPLUS PM application supports the Real Application Clusters (RAC) architecture.

It allows a quick preview of all instances in the **RAC** from the level of the monitored database.

The session screen allows an **online** preview of the **sessions** performed in the RAC.

Sessions
Sort usage sessions
Unid usage sessions
Sessions history
Session / Sort / Unid history

☒ Active sessions
 ☒ Users only
 Min elapsed time: sec.
 Sid:

All instances ▼
 Instance 1
 Instance 2
 Instance 4

[Show additional filters](#)

Select session	(LAST REFRESHED: 08.04.20)	Kill session
2	2019-02-04 06:45:38	635
2	2019-02-04 06:45:38	714
2	2019-02-04 06:45:38	793
2	2019-02-04 06:45:38	874
2	2019-02-04 06:45:38	961
2	2019-02-06 20:38:35	254
2	2019-02-06 20:38:35	404
2	2019-02-06 20:38:35	492
2	2019-02-06 20:38:35	582

Inst ID	Logon time	Sid	Serial	Hash Value	Username	Status	Elapsed Time <small>(seconds)</small>	Schema	OS user	Process (server)	Process (client)	Machine	Module	Wait	Blocking session
2	2019-02-04 06:45:38	635	40273	1704423528	REPORTS	ACTIVE	352.483	AMM_CAZ	oracle	320834	320834	expi-ami-caz02.energa	oracle@expi-ami-d02	JDBC Thin Client	PX Deq: Table Q Norm
2	2019-02-04 06:45:38	714	10643	1704423528	REPORTS	ACTIVE	352.483	AMM_CAZ	oracle	320838	320838	expi-ami-caz02.energa	oracle@expi-ami-d02	JDBC Thin Client	PX Deq: Table Q Norm
2	2019-02-04 06:45:38	793	26373	1704423528	REPORTS	ACTIVE	352.483	AMM_CAZ	oracle	320841	320841	expi-ami-caz02.energa	oracle@expi-ami-d02	JDBC Thin Client	gc cr request
2	2019-02-04 06:45:38	874	32747	1704423528	REPORTS	ACTIVE	352.483	AMM_CAZ	oracle	320845	320845	expi-ami-caz02.energa	oracle@expi-ami-d02	JDBC Thin Client	cell single block physical
2	2019-02-04 06:45:38	961	14699	1704423528	REPORTS	ACTIVE	352.483	AMM_CAZ	oracle	320848	320848	expi-ami-caz02.energa	oracle@expi-ami-d02	JDBC Thin Client	gc buffer busy acquire
2	2019-02-06 20:38:35	254	54441	1704423528	REPORTS	ACTIVE	129.706	AMM_CAZ	oracle	320866	320866	expi-ami-caz02.energa	oracle@expi-ami-d02	JDBC Thin Client	PX Deq: Table Q Norm
2	2019-02-06 20:38:35	404	62967	1704423528	REPORTS	ACTIVE	129.706	AMM_CAZ	oracle	320872	320872	expi-ami-caz02.energa	oracle@expi-ami-d02	JDBC Thin Client	PX Deq: Table Q Norm
2	2019-02-06 20:38:35	492	23773	1704423528	REPORTS	ACTIVE	129.706	AMM_CAZ	oracle	320890	320890	expi-ami-caz02.energa	oracle@expi-ami-d02	JDBC Thin Client	PX Deq: Table Q Norm
2	2019-02-06 20:38:35	582	27507	1704423528	REPORTS	ACTIVE	129.706	AMM_CAZ	oracle	320898	320898	expi-ami-caz02.energa	oracle@expi-ami-d02	JDBC Thin Client	gc cr request

SQL
Operation progress
Statistics
Session Waits

```

STATEMENT TEXT [SQL ID: 4d6v69n0c89ub]

INSERT ALL WHEN BITAND(:B4, 4) = 0 THEN INFO INTO APP_STATION_BALANCE_MONTHS(STATION_ID, SNAP_TIME, CAP_TIME, BS, HS_B8, CS, HC_CS, CSR, SC_HR_CS, HS, HC_HS, HSR, SC_HSEI) VALUES (:STATION_ID, :B4, CAP_TIME_AGG, SUM_BS, COUNT_BS, SUM_CS, COUNT_CS, SUM_CSR, COORD_CS, AVG_BS, COUNT_BS, AVG_HSR, COORD_HSR) WHEN BITAND(:B4, 8) = 0 THEN INFO INTO STATION_BALANCE_MIDRES(STATION_ID, BS, HS_B8, CS, HC_CS, CSR, SC_HR_CS, HS, HC_HS, HSR, SC_HSEI) VALUES (:STATION_ID, :B4, CAP_TIME_AGG, SUM_BS, COUNT_BS, SUM_CS, COUNT_CS, SUM_CSR, COORD_CS, AVG_BS, COUNT_BS, AVG_HSR, COORD_HSR) WHEN BITAND(:B4, 1) = 1 THEN INFO INTO APP_STATION_BALANCE_MONTHS(STATION_ID, SNAP_TIME, CAP_TIME, BS, CS, CSR, HS, HSR) VALUES (:STATION_ID, :B4, CAP_TIME, AVG_BS, SUM_BS, AVG_HSR, AVG_HSR WITH ALL DATA AS ( SELECT DATA_METER_ID, STATE_SNAP_TIME_ID, STATE_INFO, DATA_METER_OBJECT_ID, DATA_CAPTURE_TIME, (CASE WHEN BITAND(DATA_FLAGS, 4) = 0 THEN STATE.MPS JOIN ELSE 1 END), DATA.VALUE+POWER(10, DATA_SCALE)*(CASE WHEN DATA_UNIT = 25 THEN (1/4000) ELSE 1 END) RESCALCED VALUE FROM ( SELECT METER_ID, METER_OBJECT_ID, METER_VALUE, FLAG, SCALE, UNIT FROM ( SELECT ROW_NUMBER() OVER (PARTITION BY NO_CAP_TIME, METER_ID, METER_ID ORDER BY NO_CAP_TIME DESC) AS RNO, METER_ID, NO_METER_OBJECT_ID, NO_FLAG, MD_VALU, MD_SCALE, MD_UNIT FROM NO_METER HO WHERE HO.CAP_TIME <= :B1 AND NO_CAP_TIME <= :B2 AND MD_CAP_TIME < :B4 AND NO_METER_OBJECT_ID IS (SELECT NO_ID FROM METER_OBJECT NO WHERE NO.ALIAS ID ('CS', 'BS', 'HS', 'CSR', 'HSEI') AND EXISTS (SELECT * FROM METER_BALANCE_CLIENT MSC WHERE MSC.BALANCE_ID = :SCN AND MSC.CLIENT_ID = :CLIENT_ID AND MSC.STATE_SNAP_TIME_ID = :STATE_SNAP_TIME_ID AND MSC.STATE_INFO = :STATE_INFO AND MSC.DATA_METER_ID = :DATA_METER_ID AND MSC.NO_METER_ID = :NO_METER_ID AND MSC.NO_METER_OBJECT_ID = :NO_METER_OBJECT_ID AND MSC.NO_FLAG = :NO_FLAG AND MSC.NO_SCALE = :NO_SCALE AND MSC.NO_UNIT = :NO_UNIT)))))
    
```

EXPLAIN PLAN

```

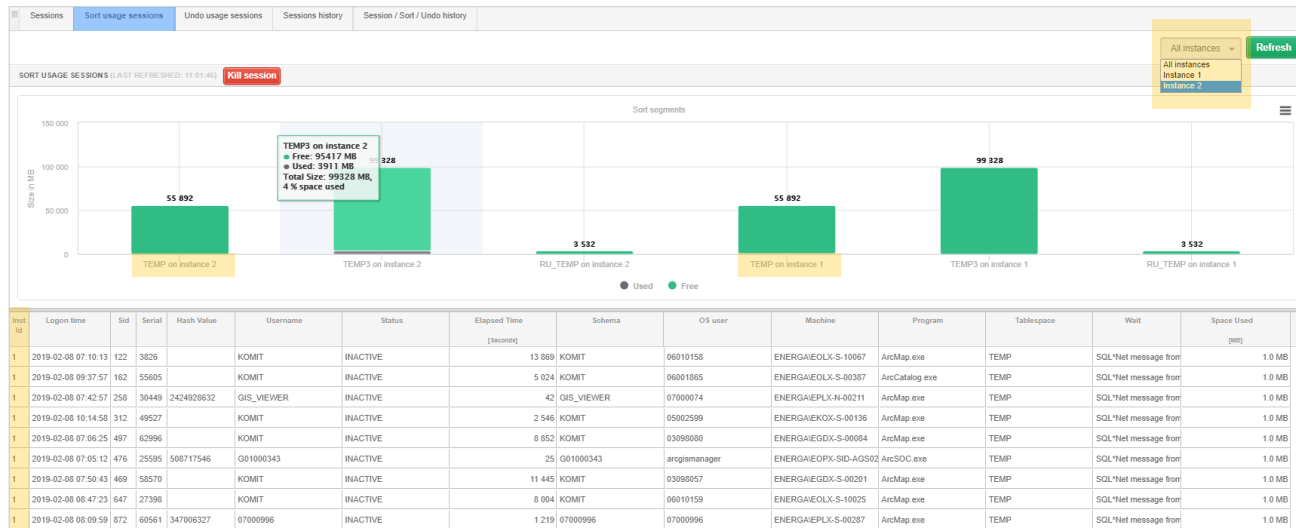
-- INSERT STATEMENT (Cost = 945579 , Bytes = 0 , Cardinality = 0 , Search Columns = 0 )
-- MULTI-TABLE INSERT
-- END TABLE TRANSFORMATION
-- PX COORDINATOR
-- PX SEND (Q RANDOM) :TQ10006 (Cost = 945579 , Bytes = 224 , Cardinality = 2 , Search Columns = 0 )
    
```

Sort Usage Sessions

Sort usage sessions

- a screen that allows for session analysis for the use of temporary space (e.g. a query session that **sorts** a large amount of data).

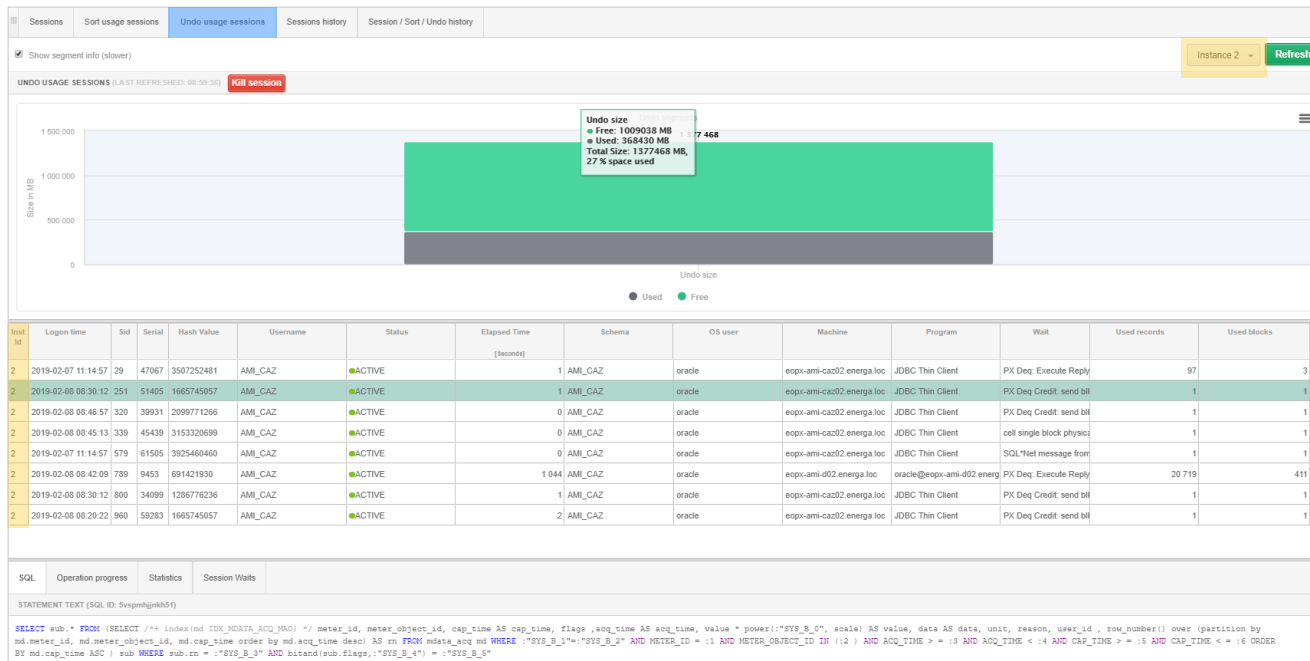
The graph presents information about space occupancy for each instance in **RAC**.



Undo usage sessions

Undo usage session - functionality that allows for session analysis for the use of UNDO space (e.g. sessions holding a large portion of data in an uncommitted transaction).

By changing the instance, you can quickly verify which sessions use the most space from all instances in the **RAC**.



Sessions history

The screen contains information on **session history** for all instances included in the RAC.

It allows a quick preview of instances in the **RAC** from the level of the monitored database.

The history also contains information about the following sessions:

- active
- using sorting
- using UNDO

SessionsSort usage sessionsUndo usage sessionsSessions historySession / Sort / Undo history

From2019/02/0800:00to2019/02/0823:59Using Hash Value/Seq IdEnter hash value or seq idInstance 1Username:Enter usernameSidRefresh

Hide additional filters

Performance Waits

Search by name ...
ADR block file read
ADR block file write
ADR file lock
ARCH wait for archivelog lock
ARCH wait for netserver init 2
ARCH wait on ATTACH

Waits selected to filtering

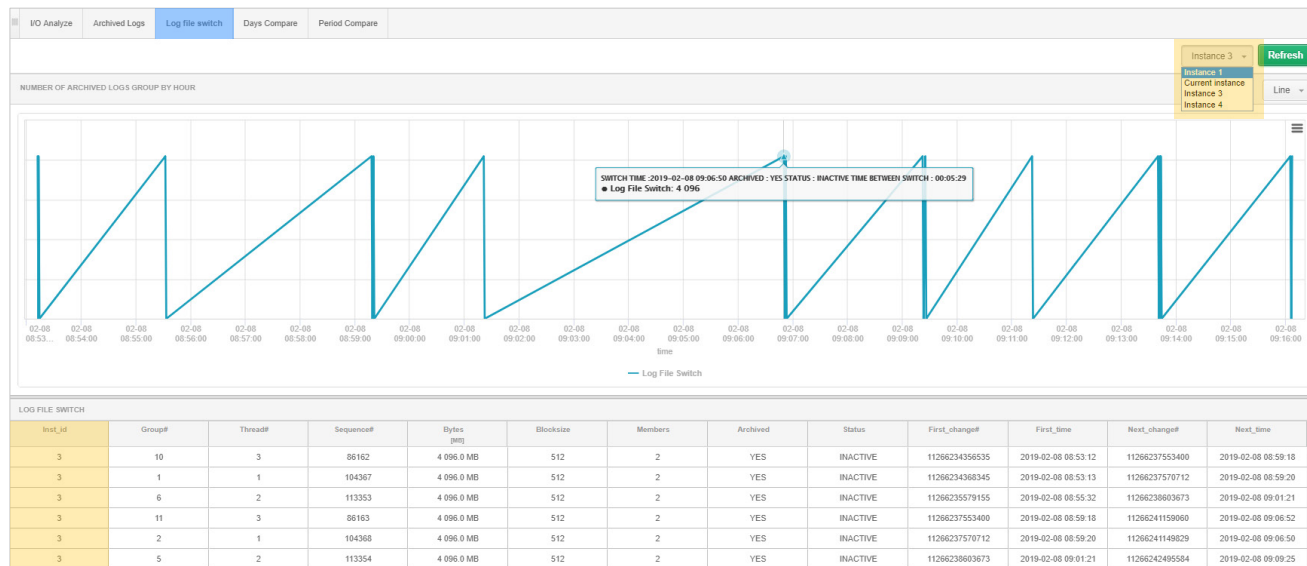
Machine:
Module:

Sessions	Sort	Undo	Logdate	Inst Id	Sid	Serial#	Hash Value	User	Status	Elapsed Time [seconds]	Schema	OS User	Machine	Program	Tablespace	Wait	Space Used [MB]
2019-02-08 00:00:41	1			169		49395	2128489894	AMI_CAZ	ACTIVE	12.286	AMI_CAZ	oracle	expx-ami-caz01.energi	JDBC Thin Client	TEMP	direct path read temp	25.455
2019-02-08 00:00:41	1			11		40663	2128489894	AMI_CAZ	ACTIVE	1.378	AMI_CAZ	oracle	expx-ami-caz02.energi	JDBC Thin Client	TEMP	direct path write temp	9.535
2019-02-08 00:00:41	1			497		4415	1711166452	AMI_EXTREPORTING	ACTIVE	62.249	AMI_EXTREPORTING	oracle	expx-ami-d03.energi	oracle@expx-ami-d01	TEMP_MISC	PX Deq: Table Q Norm	8.266
2019-02-08 00:00:41	1			170		49173	1711166452	AMI_EXTREPORTING	ACTIVE	62.249	AMI_EXTREPORTING	oracle	expx-ami-d03.energi	oracle@expx-ami-d01	TEMP_MISC	PX Deq: Table Q Norm	8.084
2019-02-08 00:00:41	1			255		12991	1711166452	AMI_EXTREPORTING	ACTIVE	62.249	AMI_EXTREPORTING	oracle	expx-ami-d03.energi	oracle@expx-ami-d01	TEMP_MISC	PX Deq: Table Q Norm	6.089
2019-02-08 00:00:41	1			406		30311	1711166452	AMI_EXTREPORTING	ACTIVE	62.249	AMI_EXTREPORTING	oracle	expx-ami-d03.energi	oracle@expx-ami-d01	TEMP_MISC	PX Deq: Table Q Norm	5.716
2019-02-08 00:00:41	1			317		29339	1711166452	AMI_EXTREPORTING	ACTIVE	62.249	AMI_EXTREPORTING	oracle	expx-ami-d03.energi	oracle@expx-ami-d01	TEMP_MISC	PX Deq: Table Q Norm	5.621
2019-02-08 00:00:41	1			326		56573	1711166452	AMI_EXTREPORTING	ACTIVE	62.249	AMI_EXTREPORTING	oracle	expx-ami-d03.energi	oracle@expx-ami-d01	TEMP_MISC	PX Deq: Table Q Norm	5.512
2019-02-08 00:00:41	1			169		49395	2128489894	AMI_CAZ	ACTIVE	12.286	AMI_CAZ	oracle	expx-ami-caz01.energi	JDBC Thin Client	TEMP	direct path read temp	153
2019-02-08 00:00:41	1			11		40663	2128489894	AMI_CAZ	ACTIVE	1.378	AMI_CAZ	oracle	expx-ami-caz02.energi	JDBC Thin Client	TEMP	direct path write temp	153
2019-02-08 00:05:47	1			169		49395	2128489894	AMI_CAZ	ACTIVE	12.591	AMI_CAZ	oracle	expx-ami-caz01.energi	JDBC Thin Client	TEMP	direct path read temp	25.455
2019-02-08 00:05:47	1			11		40663	2128489894	AMI_CAZ	ACTIVE	1.683	AMI_CAZ	oracle	expx-ami-caz02.energi	JDBC Thin Client	TEMP	direct path write temp	12.311
2019-02-08 00:05:47	1			497		4415	1711166452	AMI_EXTREPORTING	ACTIVE	62.554	AMI_EXTREPORTING	oracle	expx-ami-d03.energi	oracle@expx-ami-d01	TEMP_MISC	PX Deq: Table Q Norm	8.266
2019-02-08 00:05:47	1			170		49173	1711166452	AMI_EXTREPORTING	ACTIVE	62.554	AMI_EXTREPORTING	oracle	expx-ami-d03.energi	oracle@expx-ami-d01	TEMP_MISC	PX Deq: Table Q Norm	8.084
2019-02-08 00:05:47	1			255		12991	1711166452	AMI_EXTREPORTING	ACTIVE	62.554	AMI_EXTREPORTING	oracle	expx-ami-d03.energi	oracle@expx-ami-d01	TEMP_MISC	PX Deq: Table Q Norm	6.177
2019-02-08 00:05:47	1			406		30311	1711166452	AMI_EXTREPORTING	ACTIVE	62.554	AMI_EXTREPORTING	oracle	expx-ami-d03.energi	oracle@expx-ami-d01	TEMP_MISC	PX Deq: Table Q Norm	5.771

Log file Switch

The screen shows information about the switching of **redo log** files.

By changing instances, you can easily verify file switching for any instance in **RAC**.



Locks history

It is possible to track locks in a given **period of time** on the screen.

It is also possible to check which instance in the **RAC** causes a high level of locks at a given time.

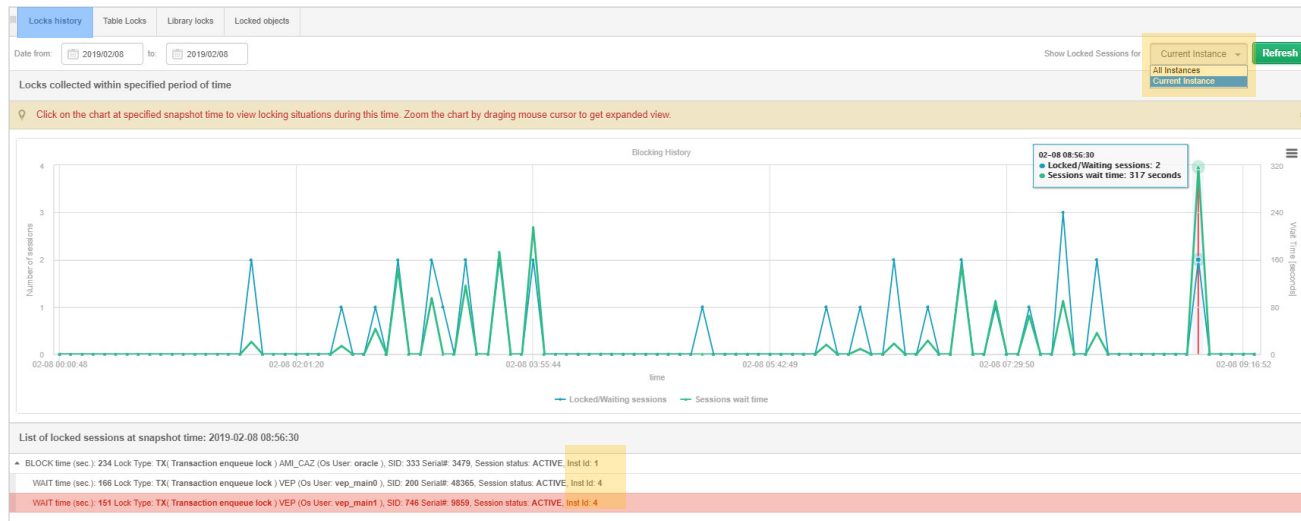


Table Locks/Locked objects

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The **Table Locks** screen enables **ongoing** analysis of locks in the database. With the **All Instances** setting, it is possible to observe locks in all instances at the same time.

Locks history	Table Locks	Library locks	Locked objects
<div>Show Locked Sessions for All Instances <input type="checkbox"/> Show Locked Objects Lock Type: ALL Refresh</div>			
List of locked sessions			
<p>BLOCK time (sec.): 0 Lock Type: PS(Parallel operation lock) AMI_CAZ (Os User: oracle), SID: 966 Serial#: 16099, Session status: ACTIVE, Inst id: 2</p> <p>WAIT time (sec.): 0 Lock Type: PS(Parallel operation lock) AMI_CAZ (Os User: oracle), SID: 650 Serial#: 23677, Session status: INACTIVE, Inst id: 2</p>			
<pre>SQL STATEMENT FOR SESSION SID: 966 SELECT /*+ index(index_TQX_MDATA_NCO) */ md.cap_time, md.meter_id, md.value, md.meter_object_id, md.scale, md.unit, md.expression, md.flags, md.default_scaler_scaler, md.precision, md.acq_time, md.type meter_object_type, mo.ix_bitmask mcb_ix_bitmask, md.data, ot.active ot_active FROM mdata md LEFT JOIN meter_object mo ON mo.ID = md.METER_OBJECT_ID LEFT JOIN meter_data ot ON ot.meter_id = :SYS_B_00 AND ot.meter_id = md.meter_id AND ot.active = :SYS_B_01 AND md.cap_time=ot.cap_time AND meter_object_id=ot.meter_object_id AND md.acq_time=ot.acq_time WHERE md.cap_time BETWEEN :1 AND :2 AND md.meter_id = :3 AND md.meter_object_id IN (:SYS_B_02,:SYS_B_03,:SYS_B_04,:SYS_B_05,:SYS_B_06,:SYS_B_07,:SYS_B_08,:SYS_B_09,:SYS_B_10,:SYS_B_11,:SYS_B_12,:SYS_B_13,:SYS_B_14,:SYS_B_15,:SYS_B_16,:SYS_B_17) AND md.Acq_TIME <= :4 ORDER BY md.cap_time, md.meter_object_id, md.acq_time DESC</pre>			
SESSION DETAILS			
Request	0		
Sid	966		

The **Locked objects** screen shows a list of objects on which locks are currently installed.

[illegible]

Load Trends Analysis

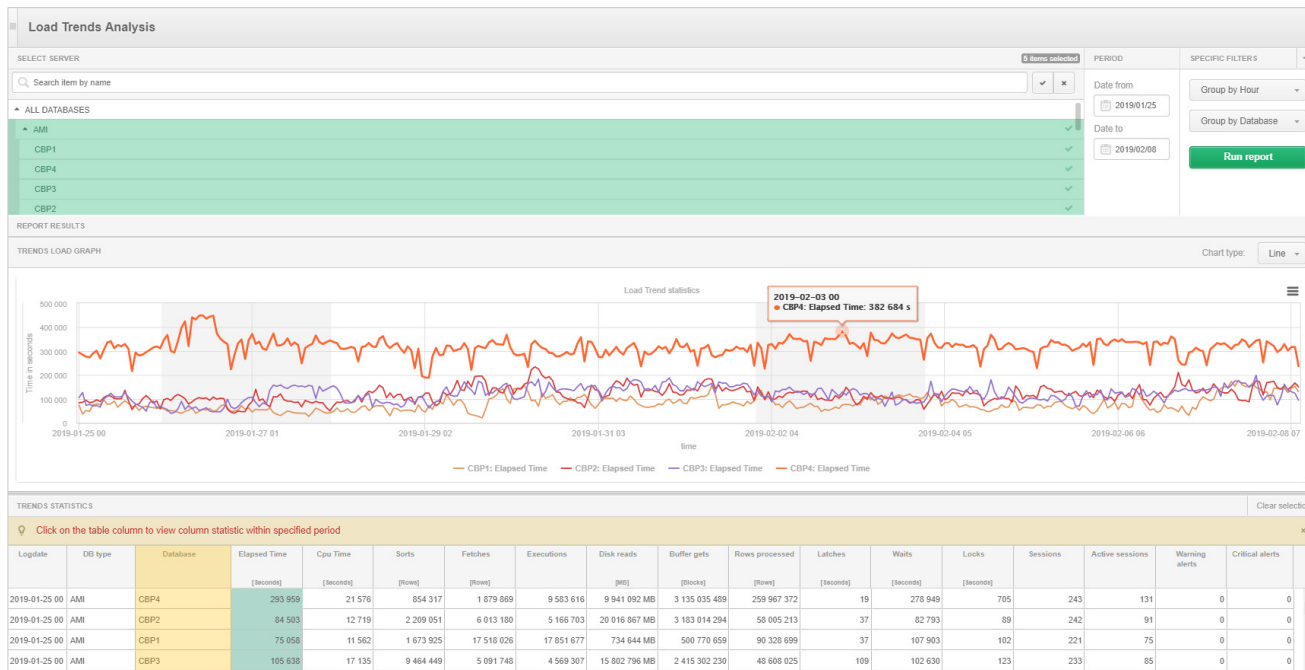
It is possible to compare the trends taking place in many databases on the screen.

In order to execute the report, select the databases or instances included in the RAC from the available list.

The data in the chart is presented for the selected **statistics**.

The report can be grouped by:

- *Databases*
- *Databases types*
- *Total for all databases selected for the report*



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