

shinken-synchronizer (Modèle d'hôte)

Abstract

This document describes how you can monitor an Oracle database server such as:

- Connection time
- A recent restart
- The number of connections
- Cache hit
- Dead lock
- etc

Steps

There are some steps you'll need to follow in order to monitor a new database machine. They are:

- Setup the oracle user account
- Setup your server host definition

What's Already Done For You

To make your life a bit easier, a few configuration tasks have already been done for you:

- Installation of Oracle instant Client
- Installation of check_oracle_health plugin : /var/lib/shinken/libexec/check_oracle_health
- Creation of several host templates



Note

We suppose here that the Oracle machine you want to monitor is named srv-lin-1 and is a linux. Please change the configuration and commands according with the real name of your server of course.

Setup the oracle user account

Create the database user



Note

You will need to configure the user for all your oracle databases.

Connect to your database as sysadmin on the oracle server :

```
srv-lin-1:oracle# sqlplus "/" as sysdba"
```

And then create your shinken account on the database:

```
CREATE USER shinken IDENTIFIED BY shinkenpassword;GRANT CREATE SESSION TO shinken;
GRANT SELECT any dictionary TO shinken;
GRANT SELECT ON V_$SYSSTAT TO shinken;
GRANT SELECT ON V_$INSTANCE TO shinken;
GRANT SELECT ON V_$LOG TO shinken;
GRANT SELECT ON SYS.DBA_DATA_FILES TO shinken;
GRANT SELECT ON SYS.DBA_FREE_SPACE TO shinken;
```

And for old 8.1.7 database only:

```

---- if somebody still uses Oracle 8.1.7...
GRANT SELECT ON sys.dba_tablespaces TO shinken;
GRANT SELECT ON dba_temp_files TO shinken;
GRANT SELECT ON sys.v_$Temp_extent_pool TO shinken;
GRANT SELECT ON sys.v_$TEMP_SPACE_HEADER TO shinken;
GRANT SELECT ON sys.v_$session TO shinken;

```

Test the connection

To see if the connection to the database named **PROD** is ok, just launch :

```

/var/lib/shinken/libexec/check_oracle_health --connect "(DESCRIPTION=(ADDRESS_LIST=(ADDRESS=(PROTOCOL=TCP)(HOST=srv-lin-1)(PORT=1521)))(CONNECT_DATA=(SID=PROD)))" --user "shinken" --password "shinkenpassword" --mode connection-time

```

Configuring host template and host for monitoring

The parameters common to every Oracle server monitored should be setted in the host template "**oracle-connection-method**".

The parameters specifics to each server, such as **database name** for example, have to be done in the host's data itself.

Tip

It's a best practice to use the same database monitoring user on every Oracle server monitored. Doing so, you can configure the database user/password only once in the host template "**oracle-connection-method**".

Configuration of Oracle-connection-method host template

- select the Oracle-connection-method host template
- Clic on "Data" tab
- Type the oracle user in the ORACLE_USER field (shinken in the previous example)
- Type the oracle password in the ORACLE_USER field (shinkenpassword in the previous example)

Configuration of a host

- Add the Oracle choosen host template to the Host Templates to inherit field
- Clic on "Data" tab
- Look for the field DATABASES in the "From templates" datas
- Type the name of the database to be monitoring
- If not configured in the Oracle-connection-method host template
 - Type the oracle user in the ORACLE_USER field (shinken in the previous example)
 - Type the oracle password in the ORACLE_USER field (shinkenpassword in the previous example)

Tip

You can monitor multiple database on the same host in typing the name of the database separated by a comma.

Exemple : DB1,DB2,DB3

What is checked with the templates

Oracle

Check	Detail	Check range	Default Warning	Default Critical
tnsping	listener			

process-usage	Percentage of max possible processes	0% to 100%	80	90
sga-shared-pool-free	Free Memory in the Shared Pool	0% to 100%	10:	5:
tablespace-usage	Used disk space in the tablespace	0% to 100%	90	98
corrupted-blocks	Number of corrupted blocks in database	0 to n	1	10
invalid-objects	Sum of faulty Objects, Indices, Partitions	0 to n	0.1	0.1

Oracle-datafile

Check	Detail	Check range	Default Warning	Default Critical
datafile-io-traffic	Sum of IO-Operations from Datafiles per second	n/sec	1000	5000
datafiles-existing	Percentage of max possible datafiles	0% to 100%	80	90

Oracle-enqueue

Check	Detail	Check range	Default Warning	Default Critical
enqueue-contention	Enqueue wait/request-Ratio	0% to 100%	1	10
enqueue-waiting	How many percent of the elapsed time since the last run has an Enqueue spend with waiting	0% to 100%	0.00033	0.00033

Oracle-events

Check	Detail	Check range	Default Warning	Default Critical
event-waits	Waits/sec from system events	n/sec	10	100
event-waiting	How many percent of the elapsed time has an event spend with waiting	0% to 100%	0.1	0.5

Oracle-flash-recovery-area

Check	Detail	Check range	Default Warning	Default Critical
flash-recovery-area-usage	Used disk space in the flash recovery area	0% to 100%	90	98

Oracle-latch

Check	Detail	Check range	Default Warning	Default Critical
latch-contention	Latch misses/gets-ratio. With -name a Latchname or Latchnumber can be passed over. (See list-latches)	0% to 100%	1	2
latch-waiting	How many percent of the elapsed time since the last run has a Latch spend with waiting	0% to 100%	0.1	1

Oracle-pga

Check	Detail	Check range	Default Warning	Default Critical
pga-in-memory-sort-ratio	Percentage of sorts in the memory	0% to 100%	99:	90:

Oracle-redo

Check	Detail	Check range	Default Warning	Default Critical
switch-interval	Interval between RedoLog File Switches	0 to n	600:	60:
retry-ratio	Retry-Rate in the RedoLog Buffer	0% to 100%	1	10
redo-io-traffic	Redolog IO in MB/sec	n/sec	199	200

Oracle-rman

Check	Detail	Check range	Default Warning	Default Critical
rman-backup-problems	Number of RMAN-errors during the last three days	0 to n	1	2

Oracle-rollback-segment

Check	Detail	Check range	Default Warning	Default Critical
roll-header-contention	Rollback Segment Header Contention	0% to 100%	1	2
roll-block-contention	Rollback Segment Block Contention	0% to 100%	1	2
roll-hit-ratio	Rollback Segment gets/waits Ratio	0% to 100%	99:	98:
roll-extends	Rollback Segment Extends n	n/sec	1	100
roll-wraps	Rollback Segment Wraps n	n/sec	1	100

Oracle-sga

Check	Detail	Check range	Default Warning	Default Critical
sga-data-buffer-hit-ratio	Hitrate in the Data Buffer Cache	0% to 100%	98:	95:
sga-library-cache-gethit-ratio	Hitrate in the Library Cache (Gets)	0% to 100%	98:	95:
sga-library-cache-pinhit-ratio	Hitrate in the Library Cache (Pins)	0% to 100%	98:	95:
sga-library-cache-reloads	Reload-Rate in the Library Cache	n/sec	10	10
sga-dictionary-cache-hit-ratio	Hitrate in the Dictionary Cache	0% to 100%	95:	90:
sga-latches-hit-ratio	Hitrate of the Latches	0% to 100%	98:	95:
sga-shared-pool-reloads	Reload-Rate in the Shared Pool	0% to 100%	1	10

Oracle-soft-parse

Check	Detail	Check range	Default Warning	Default Critical
soft-parse-ratio	Percentage of soft-parse-ratio	0% to 100%	90:	98:

Oracle-stale-statistics

Check	Detail	Check range	Default Warning	Default Critical
stale-statistics	Sum of objects with obsolete optimizer statistics	n	10	100

Oracle-sysstat

Check	Detail	Check range	Default Warning	Default Critical
sysstat	Changes/sec for any value from v\$sysstat	n/sec	10	xx

Oracle-tablespace

Check	Detail	Check range	Default Warning	Default Critical
tablespace-fragmentation	Free Space Fragmentation Index	100 to 1	30:	20:
tablespace-can-allocate-next	Checks if there is enough free tablespace for the next Extent			
tablespace-remaining-time	Sum of remaining days until a tablespace is used by 100%. The rate of increase will be calculated with the values from the last 30 days. (With the parameter –lookback different periods can be specified)	Days	90:	30:

Oracle-top10-stats

Check	Detail	Check range	Default Warning	Default Critical
seg-top10-logical-reads	Sum of the userprocesses under the top 10 logical reads	n	1	9
seg-top10-physical-reads	Sum of the userprocesses under the top 10 physical reads	n	1	9
seg-top10-buffer-busy-waits	Sum of the userprocesses under the top 10 buffer busy waits	n	1	9
seg-top10-row-lock-waits	Sum of the userprocesses under the top 10 row lock waits	n	1	9

Oracle-usage

Check	Detail	Check range	Default Warning	Default Critical
session-usage	Percentage of max possible sessions	0% to 100%	80	90
Connected users	Number of currently connected users	0 to n	50	100

Oracle-full

Contains all Oracle host templates listed previously.



Warning

Using the Oracle-full template could lead to slow issues. You should use the really needed templates instead.