

● :

$$\vdots$$

- «» , , . Zabbix Nagios.

«>>, (1) hydra_monitoring.sh

hydra_job_monitoring.sh

```
#!/bin/sh

. /etc/profile

rval=0

ORA_USER="AIS_NET"
ORA_PASS="mypass"
SQLPLUS_PATH="$ORACLE_HOME/bin/sqlplus"

if [ -n "$3" ]; then
    ORA_SID="$3"
    export ORACLE_SID=$ORA_SID
fi

sql=""

case $1 in
    'job_state')
        if [ -n "$2" ]; then
            echo "
SELECT to_char(N_JOB_STATE_ID, 'FM9999999999999999') FROM SS_V_JOBS WHERE N_JOB_ID=$2;
" | ${SQLPLUS_PATH} -s ${ORA_USER}/${ORA_PASS}@${ORACLE_SID} |
awk '{ if ($1 == 2034) print "Running"
        else if($1 == 1034) print "Waiting"
        else if($1 == 3034) print "Starting"
        else if($1 == 4034) print "Locked"
        else if($1 == 5034) print "Deleted"
        else if($1 == 6034) print "Error"
        else if($1 == 7034) print "Cant Start"
      }'
        else
            rval=1
            echo "No JOB_ID" >&2
        fi
        ;;
    'job_last_start')
        if [ -n "$2" ]; then
            sql="
SELECT to_char((sysdate - D_LAST_START) * (86400), 'FM9999999999999999') FROM SS_V_JOBS WHERE
N_JOB_ID=$2;
"
        else
            rval=1
            echo "No JOB_ID" >&2
        fi
        ;;
    *)
        echo "Hydra monitoring tool"
        echo "usage:"
        echo "    $0 job_state <JOB_ID> [SID]  -- Check job status."
        echo "    $0 job_last_start <JOB_ID> [SID]  -- Check job last start date/time."
        rval=1
        exit $rval
        ;;
esac

if [ -n "$sql" ]; then
    echo "$sql" | ${SQLPLUS_PATH} -s ${ORA_USER}/${ORA_PASS}@${ORACLE_SID}
fi
rval=$?

exit $rval
```

7 :

1034		
2034		
3034		
4034		
5034		
6034		
7034		

, ...
-> - .
.

, , () . , . 10 SQL-:

```
WITH JOB_SEANCES AS (  
    SELECT N_JOB_STATUS,  
           VC_JOB_STATUS,  
           D_START,  
           D_FINISH,  
           ROW_NUMBER() OVER (ORDER BY D_START DESC) N_ROW  
    FROM   SS_V_JOB_SEANCES  
    WHERE  N_JOB_ID = <num_N_JOB_ID>)  
SELECT *  
FROM   JOB_SEANCES  
WHERE  N_ROW <= 10;
```

:

- num_N_JOB_ID — .

5 (N_JOB_STATUS SQL-):

-2		
-1		
0		
1		
2		

, .
D_START D_FINISH SQL- . D_FINISH – NULL.
-> - .
.

, :

```
SELECT COUNT(*)  
FROM ss_v_job_seances  
WHERE d_start > SYSDATE - 15/24/60  
AND   c_reason = 'A'
```

15 .
,"0".

(tablespaces) . SQL:-

```
WITH TBLSP_TOTAL AS (  
  SELECT TABLESPACE_NAME,  
         ROUND(SUM(BYTES)/(1024*1024)) ALLOCATED_MB,  
         ROUND(SUM(DECODE(MAXBYTES, 0, BYTES, MAXBYTES))/(1024*1024)) MAX_MB  
  FROM   DBA_DATA_FILES  
 GROUP BY TABLESPACE_NAME  
 UNION ALL  
  SELECT TABLESPACE_NAME,  
         ROUND(SUM(BYTES)/(1024*1024)) ALLOCATED_MB,  
         ROUND(SUM(DECODE(MAXBYTES, 0, BYTES, MAXBYTES))/(1024*1024)) MAX_MB  
  FROM   DBA_TEMP_FILES  
 GROUP BY TABLESPACE_NAME),  
TBLSP_FREE AS (  
  SELECT TABLESPACE_NAME,  
         ROUND(SUM(BYTES)/(1024*1024)) FREE_MB  
  FROM   DBA_FREE_SPACE  
 GROUP BY TABLESPACE_NAME  
 UNION ALL  
  SELECT TABLESPACE_NAME,  
         ROUND(FREE_SPACE/(1024*1024)) FREE_MB  
  FROM   DBA_TEMP_FREE_SPACE),  
TBLSP_USED AS (  
  SELECT TS.TABLESPACE_NAME,  
         TS.ALLOCATED_MB - NVL(FS.FREE_MB, 0)                USED_MB,  
         NVL(FS.FREE_MB, 0)                                FREE_MB,  
         TS.ALLOCATED_MB                                    TOTAL_MB,  
         TS.MAX_MB                                          TOTAL_MAX_MB,  
         TS.MAX_MB - (TS.ALLOCATED_MB - NVL(FS.FREE_MB, 0)) FREE_MAX_MB  
  FROM   TBLSP_TOTAL TS,  
         TBLSP_FREE FS  
 WHERE  FS.TABLESPACE_NAME(+) = TS.TABLESPACE_NAME)  
SELECT TABLESPACE_NAME "TABLESPACE",  
       USED_MB          "Used MB",  
       FREE_MB          "Free MB",  
       TOTAL_MB         "Total MB",  
       TOTAL_MAX_MB     "Total Max MB",  
       FREE_MAX_MB      "Free Max MB",  
       ROUND(100*(FREE_MAX_MB/TOTAL_MAX_MB)) "Pct. Free"  
FROM   TBLSP_USED  
ORDER BY TABLESPACE_NAME;
```

:

#	TABLESPACE	Used MB	Free MB	Total MB	Total Max MB	Free Max MB	Pct. Free
1	HYDRA	22903	27555	50458	61492	38589	63
2	HYDRA_INDEX	40621	6781	47402	94292	53671	57
3	SYSAUX	1829	321	2150	32768	30939	94
4	SYSTEM	14413	67	14480	32768	18355	56
5	TOOLS	1	31	32	32	31	97
6	UNDOTBS1	8445	29078	37523	65536	57091	87
7	USERS	1	4	5	32768	32767	100

:

- *TABLESPACE* —
- *Used MB* —
- *Free MB* —
- *Total MB* —

- *Total Max MB* — , . . .
- *Free Max MB* — , . . .
- *Pct. Free* — . Free Max MB Total Max MB.

Pct. Free HYDRA HYDRA_INDEX. (20%) . , , :

```
JB_DATA_COLLECT_PKG.EX_DATA_COLLECT_ACCOUNTING
[ORA-01654: unable to extend index AIS_NET.EX_TRAFFIC_COL_C_FIRM_IDX by 8192
in tablespace HYDRA_INDEX]
```

:

```
SELECT COUNT(*)
FROM   EX_V_CDR
WHERE  N_CDR_TYPE_ID = SYS_CONTEXT('CONST', 'CDR_TYPE_PhoneCall')
AND    N_CDR_STATE_ID = SYS_CONTEXT('CONST', 'CDR_Status_Finished')
AND    D_END          >= SYSDATE - 1/24
AND    (N_SUM_A IS NULL AND N_SUM_B IS NULL)
AND    N_DURATION_SEC != 0;
```

0, .. .

CDR

CDR ():

```
SELECT DECODE(MAX(D_LOG_CREATE), NULL, 'Never',
              TO_CHAR(MAX(D_LOG_CREATE), 'DD.MM.YYYY HH24:MI:SS')) VC_LAST_LOAD_DATE
FROM   EX_V_CDR
WHERE  N_CDR_TYPE_ID = SYS_CONTEXT('CONST', 'CDR_TYPE_PhoneCall');
```

:

```
LAST_DATE_LOAD
-----
29.01.2013 11:05:54
```

«Never», CDR:

```
LAST_DATE_LOAD
-----
Never
```

, CDR (), «-1», CDR. :

```
SELECT DECODE(MAX(D_LOG_CREATE), NULL, -1, TO_CHAR((SYSDATE-MAX(D_LOG_CREATE))*(60*60*24),
'FM999999999999999990')) N_LAST_LOAD_SEC
FROM   EX_V_CDR
WHERE  N_CDR_TYPE_ID = SYS_CONTEXT('CONST', 'CDR_TYPE_PhoneCall');
```

CDR RADIUS-.

():

```
SELECT DECODE(MAX(D_END), NULL, 'Never',
              TO_CHAR(MAX(D_END), 'DD.MM.YYYY HH24:MI:SS')) VC_LAST_UPDATE
FROM   EX_V_CDR
WHERE  N_CDR_TYPE_ID IN (SYS_CONTEXT('CONST', 'CDR_TYPE_PPP_WithCharging'), SYS_CONTEXT('CONST',
'CDR_TYPE_PPP_wOCharging'));
```

:

```
LAST_DATE_LOAD
-----
26.11.2013 10:01:38
```

«Never», -:

```
LAST_DATE_LOAD
-----
Never
```

, (), «-I», . :

```
SELECT DECODE(MAX(D_END), NULL, -1, TO_CHAR((SYSDATE-MAX(D_END))*(60*60*24), 'FM9999999999999990'))
N_LAST_UPDATE_SEC
FROM   EX_V_CDR
WHERE  N_CDR_TYPE_ID IN (SYS_CONTEXT('CONST', 'CDR_TYPE_PPP_WithCharging'), SYS_CONTEXT('CONST',
'CDR_TYPE_PPP_wOCharging'));
```

RADIUS-

():

```
SELECT DECODE(MAX(D_LOAD), NULL, 'Never',
              TO_CHAR(MAX(D_LOAD), 'DD.MM.YYYY HH24:MI:SS')) VC_LAST_LOAD
FROM   EX_V_PAYMENTS
WHERE  N_RATING = 100;
```

:

```
LAST_DATE_LOAD
-----
25.03.2014 08:09:43
```

«Never», :

```
LAST_DATE_LOAD
-----
Never
```

:

```
SELECT DECODE(MAX(D_LOAD), NULL, 'Never',
              TO_CHAR(MAX(D_LOAD), 'DD.MM.YYYY HH24:MI:SS')) VC_LAST_LOAD
FROM   EX_V_PAYMENTS
WHERE  N_RATING = 100
AND    N_TO_ACCOUNT_ID = <num_N_TO_ACCOUNT_ID>;
```

:

• num_N_TO_ACCOUNT_ID — .

, (), «-1», . :

```
SELECT DECODE(MAX(D_LOAD), NULL, -1, TO_CHAR((SYSDATE-MAX(D_LOAD))*(60*60*24), 'FM9999999999999990'))
N_LAST_LOAD_SEC
FROM EX_V_PAYMENTS
WHERE N_RATING = 100;
```

:

```
SELECT DECODE(MAX(D_LOAD), NULL, -1, TO_CHAR((SYSDATE-MAX(D_LOAD))*(60*60*24), 'FM9999999999999990'))
N_LAST_LOAD_SEC
FROM EX_V_PAYMENTS
WHERE N_RATING = 100
AND N_TO_ACCOUNT_ID = <num_N_TO_ACCOUNT_ID>;
```

:

• num_N_TO_ACCOUNT_ID — .

.

:

```
SELECT COUNT(*)
FROM SS_V_EVENTS_QUEUE
WHERE N_EVENT_STATE_ID IN (SYS_CONTEXT('CONST', 'EVENT_QUE_STATE_Warning'),
                          SYS_CONTEXT('CONST', 'EVENT_QUE_STATE_Error'))
AND D_ACK >= SYSDATE - 1/24;
```

0, ..

SYSDBA (standby).

```
SELECT SEQUENCE# FROM V$LOG_HISTORY WHERE RECID = (SELECT MAX(RECID) FROM V$LOG_HISTORY);
```

. 1-2, - .

/etc/sudoers hzabbix oracle, SYSDBA.

```
zabbix ALL=(oracle) NOPASSWD:/etc/zabbix-agent/monrep.sh
```

```
zabbix@hydra ~ $ sudo -u oracle /etc/zabbix-agent/monrep.sh
```

monrep.sh max(sequence#)

```
#!/bin/bash

. /etc/profile
. /etc/environment
export ORAENV_ASK=NO
. oraenv > /dev/null
sql="SELECT SEQUENCE# FROM V$LOG_HISTORY WHERE RECID = (SELECT MAX(RECID) FROM V$LOG_HISTORY);"
echo -e $sql | sqlplus -s / as sysdba
```



... ..

:

```
SQL> SELECT COUNT(*)
FROM SD_GOOD_MOVES;
```

EX_CALL_DATA_REC	CDR PPP-	15
EX_DATA_COLLECT	PPP-	PPP- , . , 500. 4- , (. ., -. .), :500 . * 4 = 2 .
EX_TRAFFIC_COLLECT_C		2
SD_GOOD_MOVES		15
SS_SESSION_LOGS		5

- :

```
SELECT COUNT(*)
FROM EX_V_CDR
WHERE N_SERVICE_ID = 40223001 --
AND D_END BETWEEN TO_DATE('01.05.2013 00:00:00', 'DD.MM.YYYY HH24:MI:SS') AND TO_DATE('31.05.2013 23:59:59',
'DD.MM.YYYY HH24:MI:SS') --
AND N_CDR_STATE_ID IN (SYS_CONTEXT('CONST', 'CDR_Status_Finished'),
                        SYS_CONTEXT('CONST', 'CDR_Status_FinForced'));
```

SD_GOOD_MOVES

.
..: " "-> ""-> ""-> " "-> " ":

EX_DATA_COLLECT

PPP-. CDR EX_DATA_COLLECT .

EX_CALL_DATA_REC

CDR PPP-.

:

1. , ,

```
SQL> SELECT SI_REF_PKG_S.GET_NAME_BY_ID(N_CDR_TYPE_ID) VC_CDR_NAME,
COUNT(*)
FROM EX_CALL_DATA_REC
GROUP BY N_CDR_TYPE_ID;
```

VC_CDR_NAME	COUNT(*)
-------------	----------

107552	
PPP- () 3774012	

2. CDR() CDR .
3. PPP- CDR , PPP-.

SS_SESSION_LOGS

, SS_AUTHENTICATION_PKG.LOGIN. , .

-

HOPER

PID-.

- 3.3 , /var/run/hydra/hoper/unicorn.pid.
- 3.3 . shared/unicorn.pid .

0, , 1, PID- (root):

```
root@sever:~# PIDFILE="/var/run/hydra/hoper/unicorn.pid" ; if [ -f $PIDFILE ] ; then kill -0 `cat $PIDFILE` > /dev/null 2>&1 ; echo $? ; else echo "1" ; fi
```

HUPO

PID-.

- 3.3 , /var/run/hydra/hupo/unicorn.pid .
- 3.3 . shared/pids/unicorn.pid .

0, , 1, PID- (root):

```
root@sever:~# PIDFILE="/var/run/hydra/hupo/unicorn.pid" ; if [ -f $PIDFILE ] ; then kill -0 `cat $PIDFILE` > /dev/null 2>&1 ; echo $? ; else echo "1" ; fi
```

HDD

hdd_default PID-.

- 3.3 , /var/run/hydra/hdd/hdd_default.pid .
- 3.3 . tmp/ .

0, , 1, PID- hdd_default (root):

```
root@sever:~# PIDFILE="/var/run/hydra/hdd/hdd_default.pid" ; if [ -f $PIDFILE ] ; then kill -0 `cat $PIDFILE` > /dev/null 2>&1 ; echo $? ; else echo "1" ; fi
```

hamd

PID-, (/etc/hamd/hamd.conf). PID- /var/run/hydra/hamd.pid.

0, , 1, PID- (root):

```
root@server:~# PIDFILE="/var/run/hydra/hamd.pid" ; if [ -f $PIDFILE ] ; then kill -0 `cat $PIDFILE` > /dev/null 2>&1 ; echo $? ; else echo "1" ; fi
```

. 0, , 1, :

```
root@server:~# PORT=8889; lsof -i :$PORT -n > /dev/null ; echo $?
```

hard

PID-, (/etc/hard/hard.conf). PID- /var/run/hydra/hard.pid.

0, , 1, PID- (root):

```
root@sever:~# PIDFILE="/var/run/hydra/hard.pid" ; if [ -f $PIDFILE ] ; then kill -0 `cat $PIDFILE` > /dev/null 2>&1 ; echo $? ; else echo "1" ; fi
```

```
. 0, , 1, :
```

```
root@sever:~# PORT=11080; lsof -i :$PORT -n > /dev/null ; echo $?
```

hcd

```
PID-, (/etc/hcd/hcd.conf). PID- /var/run/hydra/hcd.pid.  
0, , 1, PID- ( root):
```

```
root@sever:~# PIDFILE="/var/run/hydra/hcd.pid" ; if [ -f $PIDFILE ] ; then kill -0 `cat $PIDFILE` > /dev/null 2>&1 ; echo $? ; else echo "1" ; fi
```

```
. 0, , 1, :
```

```
root@sever:~# PORT=8888; lsof -i :$PORT -n > /dev/null ; echo $?
```

hid

```
PID-, (/etc/hid/hid.conf). PID- /var/run/hydra/hid.pid.  
0, , 1, PID- ( root):
```

```
root@sever:~# PIDFILE="/var/run/hydra/hid.pid" ; if [ -f $PIDFILE ] ; then kill -0 `cat $PIDFILE` > /dev/null 2>&1 ; echo $? ; else echo "1" ; fi
```

```
. 0, , 1, :
```

```
root@sever:~# PORT=10080; lsof -i :$PORT -n > /dev/null ; echo $?
```

hpd

```
PID-, (/etc/hpd/hpd.conf). PID- /var/run/hydra/hpd.pid.  
0, , 1, PID- ( root):
```

```
root@sever:~# PIDFILE="/var/run/hydra/hpd.pid" ; if [ -f $PIDFILE ] ; then kill -0 `cat $PIDFILE` > /dev/null 2>&1 ; echo $? ; else echo "1" ; fi
```

```
. 0, , 1, :
```

```
root@sever:~# PORT=9080; lsof -i :$PORT -n > /dev/null ; echo $?
```

FreeRADIUS

```
PID-, (/etc/freeradius/radiusd.conf). PID- /var/run/radiusd/radiusd.pid.  
0, , 1, PID- ( root):
```

```
root@sever:~# PIDFILE="/var/run/radiusd/radiusd.pid" ; if [ -f $PIDFILE ] ; then kill -0 `cat $PIDFILE` > /dev/null 2>&1 ; echo $? ; else echo "1" ; fi
```

```
( UDP- 1812). 0, , 1, :
```

```
root@sever:~# PORT=1812; lsof -i :$PORT -n > /dev/null ; echo $?
```

:

Oracle, **SYS:**

```

CREATE USER &&username PROFILE DEFAULT IDENTIFIED BY &&password
DEFAULT TABLESPACE USERS TEMPORARY TABLESPACE TEMP
ACCOUNT UNLOCK;
/
GRANT SELECT ON V_$LOG_HISTORY TO &&username;
GRANT SELECT ON V_$PARAMETER TO &&username;

GRANT CONNECT TO &&username;
GRANT RESOURCE TO &&username;

GRANT SELECT ON SS_V_JOBS TO &&username;
GRANT SELECT ON SI_V_USERS TO &&username;
GRANT SELECT ON SS_V_JOB_SEANCES TO &&username;
GRANT SELECT ON SS_V_MANAGER_JOBS TO &&username;

GRANT EXECUTE ON SI_SUBJECTS_PKG_S TO &&username;
GRANT EXECUTE ON SI_OBJECTS_PKG_S TO &&username;
GRANT EXECUTE ON SI_REF_PKG_S TO &&username;

-- count.q*
GRANT SELECT ON SS_V_EVENTS_QUEUE to &&username;
-- count.dbc
GRANT SELECT ON V_$DATABASE_BLOCK_CORRUPTION TO &&username;
-- count.uretenop
GRANT SELECT ON V_$UNDOSTAT TO &&username;
-- count.cdr; count.lastcdr
GRANT SELECT ON EX_V_CDR TO &&username;
-- count.gm
GRANT SELECT ON SD_GOOD_MOVES TO &&username;
-- count.ecrd
GRANT SELECT ON EX_CALL_DATA_REC TO &&username;
-- count.edc
GRANT SELECT ON EX_DATA_COLLECT TO &&username;
-- count.etcc
GRANT SELECT ON EX_TRAFFIC_COLLECT_C TO &&username;
-- count.active
GRANT SELECT ON SI_SUBJ_GOODS TO &&username;
-- tblspace.discovery
GRANT SELECT ON DBA_SEGMENTS TO &&username;
-- tblspace.pcf
GRANT SELECT ON DBA_DATA_FILES TO &&username;
GRANT SELECT ON DBA_FREE_SPACE TO &&username;
GRANT SELECT ON DBA_TEMP_FILES TO &&username;
GRANT SELECT ON DBA_TEMP_FREE_SPACE TO &&username;
GRANT SELECT ON V_$TEMP_EXTENT_POOL TO &&username;
GRANT SELECT ON DBA_UNDO_EXTENTS TO &&username;
-- checkactive
GRANT SELECT ON V_$INSTANCE TO &&username;
-- rcachehit
GRANT SELECT ON V_$SYSSTAT TO &&username;
-- activeusercount
GRANT SELECT ON V_$SESSION TO &&username;
-- dbsize
GRANT SELECT ON DBA_FREE_SPACE TO &&username;
GRANT SELECT ON DBA_TABLESPACES TO &&username;
-- lastarclog
GRANT SELECT ON V_$LOG TO &&username;
-- freebufwaits
GRANT SELECT ON V_$SYSTEM_EVENT TO &&username;
GRANT SELECT ON V_$EVENT_NAME TO &&username;
GRANT SELECT ON EX_V_PAYMENTS TO &&username;
GRANT SELECT ON SS_SESSION_LOGS TO &&username;
/
QUIT;

```