[oradebug 用法小结(二）](http://blog.itpub.net/28697282/viewspace-1479070/)

 分类： Oracle2015-03-30 16:47:55

**INSTRODUCTION**

 Oracle utility called ***oradebug***. This tool is primarily used by Oracle worldwide customer support .With oradebug utility you can literally see the database engine. The

oradebug is especially useful when things go very bad - e.g. **the database just stops, hangs, or the database keeps crashing with the ORA-0600 error!To run this tool you must have administrator privileges.**

ORADEBUG工具主要用于下面场景中

- enabling/disabling the SQL tracing for another user's session.

- suspending intensive processes 进程挂起

- finding information about shared memory and semaphores  发现共享内存和信号量的信息

- closing the trace file so that new one can be generated 关闭trace file，以便能够产生新的trace file

- manipulating and dumping internal structures    操纵和dump出内部结构

- wake up processes etc.                            唤醒进程

**COMMAND**

**Oradebug** is a command that can be executed from[***SQL\*Plus***](http://www.orafaq.com/wiki/SQL*Plus)***(or***[***Svrmgrl***](http://www.orafaq.com/wiki/Svrmgrl)***in Oracle 8i and lower releases***) to display or dump diagnostics information.

Execute the "ORADEBUG HELP" command to obtain a list of valid ORADEBUG commands.

> oradebug help

HELP           [command]                 Describe one or all commands

SETMYPID                                 Debug current process

SETOSPID                         Set OS pid of process to debug

SETORAPID       ['force']        Set Oracle pid of process to debug

SETORAPNAME                    Set Oracle process name to debug

SHORT\_STACK                              Get abridged OS stack

CURRENT\_SQL                              Get current SQL

DUMP           [addr]  Invoke named dump

PDUMP          [interval=]     Invoke named dump periodically

               [ndumps=]   [addr]

DUMPSGA        [bytes]                   Dump fixed SGA

DUMPLIST                                 Print a list of available dumps

EVENT                              Set trace event in process

SESSION\_EVENT                      Set trace event in session

DUMPVAR

 [level]  Print/dump a fixed PGA/SGA/UGA variable

DUMPTYPE

 Print/dump an address with type infoSETVAR

 Modify a fixed PGA/SGA/UGA variable

PEEK           [level]      Print/Dump memoryPOKE                Modify memoryWAKEUP                          Wake up Oracle processSUSPEND                                  Suspend executionRESUME                                   Resume executionFLUSH                                    Flush pending writes to trace fileCLOSE\_TRACE                              Close trace fileTRACEFILE\_NAME                           Get name of trace fileSETTRACEFILEID         Set tracefile identifierLKDEBUG                                  Invoke global enqueue service debuggerNSDBX                                    Invoke CGS name-service debugger-G               Parallel oradebug command prefix-R               Parallel oradebug prefix (return outputSETINST              Set instance list in double quotesSGATOFILE               Dump SGA to file; dirname in double quotesDMPCOWSGA       Dump & map SGA as COW; dirname in double quotesMAPCOWSGA               Map SGA as COW; dirname in double quotesHANGANALYZE    [level] [syslevel]        Analyze system hangFFBEGIN                                  Flash Freeze the InstanceFFDEREGISTER                             FF deregister instance from clusterFFTERMINST                               Call exit and terminate instanceFFRESUMEINST                             Resume the flash frozen instanceFFSTATUS                                 Flash freeze status of instanceSKDSTTPCS                Helps translate PCs to namesWATCH           Watch a region of memoryDELETE         watchpoint    Delete a watchpointSHOW           watchpoints        Show  watchpointsDIRECT\_ACCESS   Fixed table accessIPC                                      Dump ipc informationUNLIMIT                                  Unlimit the size of the trace fileCALL           [-t count] [arg1]...[argn]  Invoke function with argumentsCORE                                     Dump core without crashing processPROCSTAT                                 Dump process statistics  
  
EXAMPLE  
oradebug setmypid  
> oradebug help setmypidSETMYPID                                 Debug current process为了方便定位到trace文件，我们在这里指定trace文件的名字> alter session set tracefile\_identifier='mytrace';  
查看当前的trace文件的路径> oradebug tracefile\_name/s01/oracle/app/oracle/diag/rdbms/test/test/trace/test\_ora\_2844\_mytrace.trc  
  
追踪进程**oradebug setospid  
> select \* from v$mystat where rownum=1;  
  
       SID STATISTIC#      VALUE**---------- ---------- ----------         1          0          0  
> select spid,pid from v$process  2  where addr=(select paddr from v$session where sid=1);  
  
SPID                            PID------------------------ ----------2844                             17  
> oradebug setospid 2844Oracle pid: 17, Unix process pid: 2844, image: oracle@uumile (TNS V1-V3)  
oradebug setorapid  
使用上面的查询结果> oradebug setorapid 17Oracle pid: 17, Unix process pid: 2844, image: oracle@uumile (TNS V1-V3)  
  
测试跟踪事件**oradebug event  
> oradebug help event**EVENT                              Set trace event in process> oradebug unlimitStatement processed.> oradebug event 10046 trace name context forever,level 12;Statement processed.> oradebug event 10046 trace name context off;  
更多关于oracle interval event ，请参考<http://blog.itpub.net/28697282/viewspace-1479325/>Event numbers can be found in $ORACLE\_HOME/rdbms/mesg/oraus.msg (in unix or linux)<http://www.eygle.com/digest/2008/04/oracle_internal_events_introdu.html>唤醒进程  
oradebug wakeup当需要smon进程来清理临时段时，可以用这个命令来唤醒smon进程，使之清理临时段。  
> oradebug help wakeupWAKEUP                          Wake up Oracle process > select pid from v$process p,v$bgprocess b   2  where b.paddr=p.addr  3  and name='SMON';  
       PID----------        13  
> oradebug wakeup 13Statement processed.  
挂起和恢复进程  
挂起进程**oradebug suspend**oradebug also allows you to suspend a process. Firstly you need to identify the shadow processthat you want to suspend. Then set your debug session to point to that process.  
将某个进程挂起，这里我们以挂起某个会话的进程为例进行说明**session A**> select \* from v$mystat where rownum=1;  
       SID STATISTIC#      VALUE---------- ---------- ----------         1          0          0  
session B> select \* from v$mystat where rownum=1;  
       SID STATISTIC#      VALUE---------- ---------- ----------        23          0          0  
> select a.username,a.sid,a.serial#,b.spid from v$session a,v$process b where a.paddr=b.addr  2  order by username;USERNAME                              SID    SERIAL# SPID------------------------------ ---------- ---------- ------------------------SYS                                    23        107 4595SYS                                     1          5 2844  
假设我们将session A 挂起**session B**> oradebug setospid 2844Oracle pid: 17, Unix process pid: 2844, image: oracle@uumile (TNS V1-V3)> oradebug suspendStatement processed.  
恢复进程**oradebug resume**> oradebug resume  
  
查看下当前的等待事件sys@TEST(127.0.0.1)>  select sid,event,state from v$session\_wait;  
会话挂起时，通过v$session\_wait可以看到有关debug的wait event ：**debugger command  
追踪进程信息  
oradebug procstat  
> oradebug help procstat**PROCSTAT                                 Dump process statistics> select pid from v$process p,v$bgprocess b  2  where b.paddr=p.addr  3  and name='PMON';  
  
       PID----------         2  
> oradebug setorapid 2Oracle pid: 2, Unix process pid: 2838, image: oracle@uumile (PMON)> oradebug procstatStatement processed.> oradebug tracefile\_name/s01/oracle/app/oracle/diag/rdbms/test/test/trace/test\_pmon\_2838.trc  
获取trace文件名  
oradebug tracefile\_name  
> oradebug help tracefile\_nameTRACEFILE\_NAME                           Get name of trace file输出类似如下结果> oradebug tracefile\_name/s01/oracle/app/oracle/diag/rdbms/test/test/trace/test\_ora\_3148.trc  
  
关闭跟踪  
oradebug close\_trace  
> oradebug help close\_traceCLOSE\_TRACE                              Close trace file> oradebug close\_traceStatement processed.  
清洗缓冲区**oradebug flush  
To flush the current contents of the trace buffer to the trace file use**> oradebug help flushFLUSH                                    Flush pending writes to trace file> oradebug flushStatement processed.  
  
  
更多用法，请参考<http://www.juliandyke.com/Diagnostics/Tools/ORADEBUG/ORADEBUG.html><http://www.orafaq.com/wiki/Oradebug>