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| **IF:Too Many Inactive Sessions in Database (Doc ID 2012634.1)** | [IMG_256](https://support.oracle.com/epmos/faces/DocumentDisplay?_afrLoop=179058550142367%26id=2012634.1%26_adf.ctrl-state=1a25pamq5g_321%20/o%20To%20Bottom)  [To Bottom](https://support.oracle.com/epmos/faces/DocumentDisplay?_afrLoop=179058550142367&id=2012634.1&_adf.ctrl-state=1a25pamq5g_321 \\o To Bottom) | IMG_257 |

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| **In this Document**   |  |  | | --- | --- | |  | [Goal](https://support.oracle.com/epmos/faces/DocumentDisplay?_afrLoop=179058550142367&id=2012634.1&_adf.ctrl-state=1a25pamq5g_321 \\l GOAL) |  |  |  | | --- | --- | |  | [Solution](https://support.oracle.com/epmos/faces/DocumentDisplay?_afrLoop=179058550142367&id=2012634.1&_adf.ctrl-state=1a25pamq5g_321 \\l FIX) |  |  |  | | --- | --- | |  | [References](https://support.oracle.com/epmos/faces/DocumentDisplay?_afrLoop=179058550142367&id=2012634.1&_adf.ctrl-state=1a25pamq5g_321 \\l REF) |   IMG_260  **APPLIES TO:**  Oracle Database - Enterprise Edition - Version 9.2.0.1 and later  Information in this document applies to any platform.  **GOAL**   Too many INACTIVE sessions in database. How to identify the cause and how to automate the cleanup of these INACTIVE sessions.  **SOLUTION**   1. Collect information about the INACTIVE sessions.  connect ... as sysdba  set markup html on  set pagesize 30  spool inactive\_sessions.html  select status, count(1) from v$session group by status;  select username, status, count(1) from v$session group by username, status;  select username, program, count(1) from v$session where status='INACTIVE' group by username, program;  select  p.username "V$PROCESS - OS USERNAME",  p.terminal,  p.program,  s.username "V$SESSION - USERNAME",  [s.command](http://s.command/),  s.status,  s.server,  s.process,  s.machine,  s.port,  s.terminal,  s.program,  s.sid,  s.serial#,  p.spid  FROM v$session s,v$process p  WHERE p.addr=s.paddr  and s.status='INACTIVE'  order by p.background desc;  spool off  exit;   2. Inactive sessions in database could be either due to Dead connections or due to Idle connections.  Inactive sessions due Dead connections can be prevented by enabling Dead Connection Detection (DCD) which is implemented by adding SQLNET.EXPIRE\_TIME = <MINUTES> to the sqlnet.ora file  Inactive sessions due to idle connections can be prevented by:  - Implementing Database Resource Limits using user profiles. This can be done by creating profiles with IDLE\_TIME limit set to an appropriate value such that sessions that are IDLE beyond this time limit are killed.  - (OR) Using resource manager plans to kill INACTIVE sessions that are idle beyond the specified MAX\_IDLE\_TIME limit .  A discussion of Dead Connection Detection, Resource Limits, V$SESSION, V$PROCESS and OS processes [Note:601605.1](https://support.oracle.com/epmos/faces/DocumentDisplay?parent=DOCUMENT&sourceId=2012634.1&id=601605.1)   3. If there are too many inactive sessions for the same program ( check v$session.program column ) , then, examine the program ( often a web server ) to see if the program has a setting to abandon a connection after X number of seconds and reconnect (a respawn event). If the program has such a setting, then a slowdown in either network or database performance should be investigated as this would cause a timeout in the application . A reconnect setting with a longer 'timeout' in the application often will control the INACTIVE sessions.   4. If there are too many INACTIVE sessions with program name oraagent.bin, then these sessions could be due to either bug 10299006 or bug 11877079. A merge of patch 10299006 and patch 11877079 should be applied to avoid accumulation of INACTIVE oraagent.bin connections in database.  Large Number of Sessions in Database with Program Name Oraagent.bin [Note:1307139.1](https://support.oracle.com/epmos/faces/DocumentDisplay?parent=DOCUMENT&sourceId=2012634.1&id=1307139.1)  Many Connections From oraagent.bin to ASM or Database Instance (Likely ORA-00020) [Note:1287496.1](https://support.oracle.com/epmos/faces/DocumentDisplay?parent=DOCUMENT&sourceId=2012634.1&id=1287496.1)    **REFERENCES**  [BUG:11877079](https://support.oracle.com/epmos/faces/BugDisplay?parent=DOCUMENT&sourceId=2012634.1&id=11877079 \\t _blank) - HUNDREDS OF ORAAGENT.BIN@HOSTNAME SESSSIONS IN 11.2.0.2 DATABASE  [NOTE:1287854.1](https://support.oracle.com/epmos/faces/DocumentDisplay?parent=DOCUMENT&sourceId=2012634.1&id=1287854.1) - Troubleshooting Guide - ORA-20: Maximum Number Of Processes (%S) Exceeded  [NOTE:601605.1](https://support.oracle.com/epmos/faces/DocumentDisplay?parent=DOCUMENT&sourceId=2012634.1&id=601605.1) - A discussion of Dead Connection Detection, Resource Limits, V$SESSION, V$PROCESS and OS processes  [NOTE:1935739.1](https://support.oracle.com/epmos/faces/DocumentDisplay?parent=DOCUMENT&sourceId=2012634.1&id=1935739.1) - How To Automatic Kill Inactive Sessions using Resource Manager  [BUG:10299006](https://support.oracle.com/epmos/faces/BugDisplay?parent=DOCUMENT&sourceId=2012634.1&id=10299006 \\t _blank) - AFTER 11.2.0.2 UPGRADE, ORAAGENT.BIN CONNECTS TO DATABASE WITH TOO MANY SESSIONS  [NOTE:1016552.102](https://support.oracle.com/epmos/faces/DocumentDisplay?parent=DOCUMENT&sourceId=2012634.1&id=1016552.102) - How To Use PROFILES To Limit User Resources  [NOTE:1585035.1](https://support.oracle.com/epmos/faces/DocumentDisplay?parent=DOCUMENT&sourceId=2012634.1&id=1585035.1) - How to Avoid ORA-20 and Allow SYS or System Connection Using Logon Trigger to Limit the Connections Below the Processes Parameter Value |