How To Add/Increase The Size Of Redo Log Files In Rac Environment? (Doc ID 779306.1)     To BottomTo Bottom      
  
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 Applies to:  
 Oracle Database - Enterprise Edition - Version 9.2.0.1 and later  
 Information in this document applies to any platform.  
 \*\*\*Checked for relevance on 04-Aug-2010\*\*\*  
  
 Oracle Server Enterprise Edition - Version: 9.2 to 11.2  
  
  
 Goal  
  
 Problem: Need to increase the amount/size of redo log files in the RAC environment.  
  
 The following note explains this process for single-instance databases :  
 Note 1035935.6 - Example of How To Resize the Online Redo Logfiles  
  
 Here we will address the process for RAC databases.  
  
  
 Note: For 11gR2 onwards, this note applies only to administrator-managed databases.  
 For policy-managed databases using OMF and ASM, RAC automatically allocates redo threads and undo ts when the instance is started.  
 Solution  
  
 In RAC, each instance has a redo thread; when you start the instance, it mounts one and only one thread. Therefore if you want to add logs or increase the size, you must do it for each thread. The goal is normally to have the same number and size of logs for each thread.  
  
 First, determine what log members each thread has.  
 Here is a sample of a script to show what log members you currently have and their sizes:  
  
 -- Script begins here --  
 --  
 -- Please note, this is a sample script  
 -- provided for educational purposes only  
 -- and is not certified by Oracle Support for any purpose.  
  
 spool log.lst  
 set echo off  
 set feedback off  
 set linesize 120  
 set pagesize 35  
 set trim on  
 set trims on  
 set lines 120  
 col group# format 999  
 col thread# format 999  
 col member format a70 wrap  
 col status format a10  
 col archived format a10  
 col fsize format 999 heading "Size (MB)"  
  
 select l.group#, l.thread#,  
 f.member,  
 l.archived,  
 l.status,  
 (bytes/1024/1024) fsize  
 from  
 v$log l, v$logfile f  
 where f.group# = l.group#  
 order by 1,2  
 /  
  
 spool off  
  
 -- End of script --  
  
  
 Sample output:  
  
 GROUP# THREAD# MEMBER                             ARCHIVED STATUS    MB  
 ------ ------- ---------------------------------- -------- --------- ---  
      3       2 /u04/oradata/redologs/redo03a.log  NO       INACTIVE   10  
      3       2 /u04/oradata/redologs/redo03b.log  NO       INACTIVE   10  
      4       2 /u04/oradata/redologs/redo04a.log  NO       CURRENT    10  
      4       2 /u04/oradata/redologs/redo04b.log  NO       CURRENT    10  
      5       1 /u04/oradata/redologs/redo05a.log  NO       CURRENT   100  
      5       1 /u04/oradata/redologs/redo05b.log  NO       CURRENT   100  
      6       1 /u04/oradata/redologs/redo06a.log  NO       INACTIVE  100  
      6       1 /u04/oradata/redologs/redo06b.log  NO       INACTIVE  100  
      7       1 /u04/oradata/redologs/redo07a.log  NO       INACTIVE  100  
      7       1 /u04/oradata/redologs/redo07b.log  NO       INACTIVE  100  
      8       1 /u04/oradata/redologs/redo08a.log  NO       INACTIVE  100  
      8       1 /u04/oradata/redologs/redo08b.log  NO       INACTIVE  100  
  
  
  
 EXAMPLE:  
 Consider the above sample output.  For Thread 2, you have 2 redo log groups with 2 10MB member each. You want to create 4 100MB logs for thread 2.  
  
 1. Add 4 new redo log groups to Thread 2, with two member each, the member 100MB in size :  
  
 alter database add logfile  
 thread 2 group 9  
 ('/u06/oradata/redologs/redo09a.log','/u06/oradata/redologs/redo09b.log') size 100M;  
  
 alter database add logfile  
 thread 2 group 10  
 ('/u06/oradata/redologs/redo10a.log','/u06/oradata/redologs/redo10b.log') size 100M;  
  
 alter database add logfile  
 thread 2 group 11  
 ('/u06/oradata/redologs/redo11a.log','/u06/oradata/redologs/redo11b.log') size 100M;  
  
 alter database add logfile  
 thread 2 group 12  
 ('/u06/oradata/redologs/redo12a.log','/u06/oradata/redologs/redo12b.log') size 100M;  
  
  
 2. Once you have added them, rotate the logs ("alter system switch logfile") on instance 2 so that  
 the active log is 100MB and both of the 10MB logs are inactive.  
  
 Rotate the logs:  
  
 alter system switch logfile;  
  
 select l.group#, l.thread#, f.member, l.archived, l.status, (bytes/1024/1024) fsize  
 from v$log l, v$logfile f where f.group# = l.group#  
 and l.thread#=2 ;  
  
  
  
 repeat until the active log is 100MB and both of the 10MB logs are inactive.  
  
 3. Once both of the 10MB logs are inactive, you can drop the redo log groups with the 10mb members.  
  
 alter database drop logfile group 3;  
 alter database drop logfile group 4;  
  
  
 Result:  
  
 GROUP# THREAD# MEMBER                            ARCHIVED STATUS     MB  
 ------ ------- --------------------------------- -------- ---------- ---  
      5       1 /u04/oradata/redologs/redo05a.log  NO       CURRENT    100  
      5       1 /u04/oradata/redologs/redo05b.log  NO       CURRENT    100  
      6       1 /u04/oradata/redologs/redo06a.log  NO       INACTIVE   100  
      6       1 /u04/oradata/redologs/redo06b.log  NO       INACTIVE   100  
      7       1 /u04/oradata/redologs/redo07a.log  NO       INACTIVE   100  
      7       1 /u04/oradata/redologs/redo07b.log  NO       INACTIVE   100  
      8       1 /u04/oradata/redologs/redo08a.log  NO       INACTIVE   100  
      8       1 /u04/oradata/redologs/redo08b.log  NO       INACTIVE   100  
      9       2 /u06/oradata/redologs/redo09a.log  NO       CURRENT    100  
      9       2 /u06/oradata/redologs/redo09b.log  NO       CURRENT    100  
     10       2 /u06/oradata/redologs/redo10a.log  NO       INACTIVE   100  
     10       2 /u06/oradata/redologs/redo10b.log  NO       INACTIVE   100  
     11       2 /u06/oradata/redologs/redo11a.log  NO       INACTIVE   100  
     11       2 /u06/oradata/redologs/redo11b.log  NO       INACTIVE   100  
     12       2 /u06/oradata/redologs/redo12a.log  NO       INACTIVE   100  
     12       2 /u06/oradata/redologs/redo12b.log  NO       INACTIVE   100