验证

/oracle/grid/bin/crsctl check ctss

/oracle/grid/bin/cluvfy comp clocksync -n all

/oracle/grid/bin/cluvfy comp clocksync -verbose

The Cluster Time Synchronization Service (CTSS) is installed as part of Oracle Clusterware and runs in observer mode **if it detects a time synchronization service or a time synchronization service configuration, valid or broken, on the system.**

If CTSS detects that there is no time synchronization service or time synchronization service configuration on any node in the cluster, then CTSS goes into active mode and takes over time management for the cluster.

**CTSSD Runs in Observer Mode Even Though No Time Sync Software is Running (Doc ID 1054006.1)**

**Applies to:**

Oracle Database - Enterprise Edition - Version 11.2.0.1 and later  
 Information in this document applies to any platform.

**Symptoms**

CTSSD runs in observer mode even though no time sync software is running.

or  
  
 Cluvfy comp clocksync fails with:

$ ./cluvfy comp clocksync  
  
 Verifying Clock Synchronization across the cluster nodes  
  
 Checking if Clusterware is installed on all nodes...  
 Check of Clusterware install passed  
  
 Checking if CTSS Resource is running on all nodes...  
 CTSS resource check passed  
  
  
 Querying CTSS for time offset on all nodes...  
 Query of CTSS for time offset passed  
  
 Check CTSS state started...  
 CTSS is in Observer state. Switching over to clock synchronization checks using NTP  
  
  
 Starting Clock synchronization checks using Network Time Protocol(NTP)...  
  
 NTP Configuration file check started...  
 NTP Configuration file check passed  
  
 Checking daemon liveness...  
 Liveness check failed for "ntpd"  
 Check failed on nodes:  
 racbde1  
 PRVF-5415 : Check to see if NTP daemon is running failed  
 Clock synchronization check using Network Time Protocol(NTP) failed  
  
  
 PRVF-9652 : Cluster Time Synchronization Services check failed  
  
 Verification of Clock Synchronization across the cluster nodes was unsuccessful on all the specified nodes.

or

The clusterware alert log reports errors like:

2009-12-23 20:06:53.974  
 [ctssd(13443)]CRS-2409:The clock on host racbde2 is not synchronous with the mean cluster time. No action has been taken as the Cluster Time Synchronization Service is running in observer mode.

Note you could also see the CRS-2409 error if you have a vendor time synchronization service running but the times are sync'd yet.

**Cause**

NTP or some other time sync service is configured but not running.  The install, CVU, and CTSSD check for the following :

* There is only one and only one time synchronization service running at a time.
* The time sync service can be a vendor service (NTP, Windows Time Service, etc...) or CTSS.
* If vendor time service is configured, it needs to be correctly configured AND active.
* For CTSS to be in active mode, a vendor time service must not be running, and must not be configured (correctly or otherwise). This is important. CTSS is conservative and will switch to OBSERVER mode the moment it discovers that a vendor service is running or configured on even one node in the cluster. This is to prevent multiple active time sync services running on the cluster, potentially changing clocks.

**Solution**

1) If you choose to use a vendor time sync service (like ntp), make sure it is configured AND running.  
  
 or  
  
 2) If you choose to let CTSSD handle time synchronization, de-configure the vendor time sync service.  For example, for NTP  move or remove /etc/ntp.conf or /etc/xntp.conf. For Windows platform, please stop the Windows time service W32Time. For more information, refer to [Note 1056693.1](https://support.oracle.com/epmos/faces/DocumentDisplay?parent=DOCUMENT&amp;sourceId=1054006.1&amp;id=1056693.1) How to Configure NTP or Windows Time for Oracle Clusterware.  
  
 After choosing option 2 (and removing /etc/ntp.conf in my case), I now see a good time status reported by cluvfy:

$ ./cluvfy comp clocksync  
  
 Verifying Clock Synchronization across the cluster nodes  
  
 Checking if Clusterware is installed on all nodes...  
 Check of Clusterware install passed  
  
 Checking if CTSS Resource is running on all nodes...  
 CTSS resource check passed  
  
  
 Querying CTSS for time offset on all nodes...  
 Query of CTSS for time offset passed  
  
 Check CTSS state started...  
 CTSS is in Active state. Proceeding with check of clock time offsets on all nodes...  
 Check of clock time offsets passed  
  
  
 Oracle Cluster Time Synchronization Services check passed

Verification of Clock Synchronization across the cluster nodes was successful.