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| **ORA-20011 ORA-29913 and ORA-29400 with Associated KUP-XXXXX Errors from DBMS\_STATS.GATHER\_STATS\_JOB (Doc ID 1274653.1)** | [IMG_256](https://support.oracle.com/epmos/faces/SearchDocDisplay?_adf.ctrl-state=165vuexpq4_9%26_afrLoop=593439107609245%20/o%20To%20Bottom)  [To Bottom](https://support.oracle.com/epmos/faces/SearchDocDisplay?_adf.ctrl-state=165vuexpq4_9&_afrLoop=593439107609245 \\o To Bottom) | IMG_257 |

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| **APPLIES TO:**  Oracle Database - Standard Edition - Version 11.2.0.2 and later  Oracle Database - Enterprise Edition - Version 11.2.0.2 and later  Oracle Database - Personal Edition - Version 11.2.0.2 and later  Information in this document applies to any platform.  **SYMPTOMS**  The key symptoms in these cases are typically the following:   * DBMS\_STATS is being executed in some form * ORA-20011, ORA-29913 and ORA-29400 Errors are seen, ORA-29913 specifying external function "ODCIEXTTABLEOPEN" signifying that there was an error in the callout by the external function "ODCIEXTTABLEOPEN " while trying to open an external table.   Some specific examples follow:   * When attempting to run GATHER\_STATS\_JOB the following errors occur:   **ORA-20011: Approximate NDV failed:ORA-29913: error in executing ODCIEXTTABLEOPEN callout**  **ORA-29400: data cartridge error**    usually accompanied with varying other errors such as:  **KUP-11024: This external table can only be accessed from within a Data Pump job**    and others.   * The alert log may also show following errors:   **Exception [type: SIGSEGV, Address not mapped to object] [ADDR:0x5400000000] [PC:0xFFFFFFFF7CB19EFC, memcpy%sun4u-opl()+236] [flags: 0x0, count: 1]**  **ERROR: Unable to normalize symbol name for the following short stack (at offset 200):**  **dbgexProcessError()+176<-dbgePostErrorKGE()+1348<-dbkePostKGE\_kgsf()+48<-kgeade()+**      **NOTE:** With cases where the file was not found in the directory specified raising:  **KUP-04040: file %s in %s not found**  See:  [Document 150737.1](https://support.oracle.com/epmos/faces/DocumentDisplay?parent=DOCUMENT&sourceId=1274653.1&id=150737.1) ORA-29913, ORA-29400, KUP-04040 While Selecting from External Table  [Document 1290722.1](https://support.oracle.com/epmos/faces/DocumentDisplay?parent=DOCUMENT&sourceId=1274653.1&id=1290722.1) "KUP-04040: file timezdif.csv in TIMEZDIF\_DIR not found " logged by GATHER\_STATS\_JOB in alert.log after upgrade  [Document 1305127.1](https://support.oracle.com/epmos/faces/DocumentDisplay?parent=DOCUMENT&sourceId=1274653.1&id=1305127.1) KUP-04040: file TRCA\_CONTROL.txt in TRCA$STAGE not found     * Alternatively you may get text in the trace file like:   **\*\*\* 2012-09-10 05:00:11.921**  **DBMS\_STATS: GATHER\_STATS\_JOB: GATHER\_TABLE\_STATS('"SH"','"SALES\_TRANSACTIONS\_EXT"','""', ...)**  **DBMS\_STATS: ORA-20011: Approximate NDV failed: ORA-29913: error in executing ODCIEXTTABLEOPEN callout**  **ORA-29400: data cartridge error**  **error opening file ../demo/schema/log/ext\_1v3.log**    **CAUSE**  The primary cause of this issue is that an OS file for an "external table" existed at some point in time but does not now. However, the database still believes the OS file for the table exists since the dictionary information about the object has not been modified to reflect the change. When DBMS\_STATS is run against the table in question, it makes a call out to the external table which fails because the object is not there.  There are many reasons that an external table may not exist including:   * Temporary Datapump external tables have not been cleaned up properly. The dictionary information should have been dropped when the DataPump jobs completed. * An OS file for an External table has been removed without clearing up the corresponding data dictionary information. For example: Oracle Demo Schema Tables such as the external table “SALES\_TRANSACTIONS\_EXT” may have been removed but the dictionary has not been updated to reflect this. The "SALES\_TRANSACTIONS\_EXT" table is an external table in the "SH" schema which is one of Demo Schema provided by Oracle.   **SOLUTION**  Essentially the solution to this issue is to clean up the orphaned dictionary entries. Different solutions are appropriate dependent on the exact nature of the primary cause and these are outlined below:  ***Temporary Datapump External Table***   1. Ensure that there are no DataPump jobs running at the same time as the DBMS\_STATS job (this is to avoid any potential complications associated with cleaning up at the same time as someting else is running). 2. Check and clean up orphaned DataPump jobs. The following article addresses a case where DBMS\_WORKLOAD\_CAPTURE does not drop external tables (causing ORA-20011 from DBMS\_STATS):   [Document 10327346.8](https://support.oracle.com/epmos/faces/DocumentDisplay?parent=DOCUMENT&sourceId=1274653.1&id=10327346.8) Bug 10327346 - DBMS\_WORKLOAD\_CAPTURE does not drop external tables (causing ORA-20011 from DBMS\_STATS)  Both above steps can be done by following Document:  [Document 336014.1](https://support.oracle.com/epmos/faces/DocumentDisplay?parent=DOCUMENT&sourceId=1274653.1&id=336014.1) How To Cleanup Orphaned DataPump Jobs In DBA\_DATAPUMP\_JOBS ?   1. Identify external tables. To do this, Run the following as SYSDBA in SQL\*Plus   spool obj.out  set linesize 200 trimspool on  set pagesize 2000  col owner form a30  col created form a25  col last\_ddl\_time form a25  col object\_name form a30  col object\_type form a25  select OWNER,OBJECT\_NAME,OBJECT\_TYPE, status,  to\_char(CREATED,'dd-mon-yyyy hh24:mi:ss') created  ,to\_char(LAST\_DDL\_TIME , 'dd-mon-yyyy hh24:mi:ss') last\_ddl\_time  from dba\_objects  where object\_name like 'ET$%'  /  select owner, TABLE\_NAME, DEFAULT\_DIRECTORY\_NAME, ACCESS\_TYPE  from dba\_external\_tables  order by 1,2  /  spool off  Correlate the information from DBA\_OBJECTS and DBA\_EXTERNAL TABLES above to identify the temporary external tables that belong to the DataPump.   1. Drop the temporary external tables that belong to the DataPump. eg:   SQL> drop table system.&1 purge;  Enter value for 1: ET$00654E1E0001  old 1: drop table system.&1 purge  new 1: drop table system.ET$00654E1E0001 purge  ***Other External Table***  With cases where specific External tables (be they Demo Schema tables or other tables) are missing, the process for handling them is much the same and can be resolved by following the procedures below. For example, if the additional error is 'error opening file ../demo/schema/log/ext\_1v3.log', then this indicates that there is a problem opening or locating the log file from the demo schema directory. The implication is that the demo tables have not been cleared up correctly:   1. Try to locate the files for these tables in their directory.   To confirm if a file is present at the expected location for the external file, the following query might be helpful.  undefine owner  undefine table\_pattern  select el.table\_name, el.owner, dir.directory\_path||'/'||dir.directory\_name "path"  from dba\_external\_locations el  , dba\_directories dir  where el.table\_name like '%&&table\_pattern%'  and el.owner like '%&&owner%'  and el.directory\_owner = dir.owner  and el.directory\_name = dir.directory\_name  order by 1, 2;  It may be that the files still exist but they have just been renamed or re-located. If that is the case you can correct the location to avoid the problem. If the file has been removed then follow either the following steps:   1. Lock the statistics on these tables by using the following command:   DBMS\_STATS.LOCK\_TABLE\_STATS ('ownname','tabname');  (This step prevents DBMS\_STATS from gathering against the missing table)  AND/OR  Remove the dictionary object for the external table.  For example if the os file for the "SALES\_TRANSACTIONS\_EXT" Demo table is missing you would use :  DROP TABLE SALES\_TRANSACTIONS\_EXT;      **REFERENCES**  [NOTE:336014.1](https://support.oracle.com/epmos/faces/DocumentDisplay?parent=DOCUMENT&sourceId=1274653.1&id=336014.1) - How To Cleanup Orphaned DataPump Jobs In DBA\_DATAPUMP\_JOBS ?  [NOTE:150737.1](https://support.oracle.com/epmos/faces/DocumentDisplay?parent=DOCUMENT&sourceId=1274653.1&id=150737.1) - ORA-29913, ORA-29400, KUP-04040 While Selecting from External Table  [BUG:9387797](https://support.oracle.com/epmos/faces/BugDisplay?parent=DOCUMENT&sourceId=1274653.1&id=9387797 \\t _blank) - ORA-20011 / ORA-1870 EXECUTING GATHER\_FIXED\_OBJECTS\_STATS AFTER UPGRADE TO 11.2  [NOTE:1305127.1](https://support.oracle.com/epmos/faces/DocumentDisplay?parent=DOCUMENT&sourceId=1274653.1&id=1305127.1) - KUP-04040: file TRCA\_CONTROL.txt in TRCA$STAGE not found  [NOTE:1290722.1](https://support.oracle.com/epmos/faces/DocumentDisplay?parent=DOCUMENT&sourceId=1274653.1&id=1290722.1) - "KUP-04040: file timezdif.csv in TIMEZDIF\_DIR not found " Logged by GATHER\_STATS\_JOB in Alert.log After Upgrade |