Hanging Informix Dynamic Server (IDS) on a SQL/RSAM error and collecting onstat outputs for debugging

**Question**

How to hang Informix Dynamic Server(IDS) on a SQL/RSAM error and collect onstat outputs for debugging?

**Answer**

You can hang Informix Dynamic Server(IDS) when it encounters a SQL/RSAM error and collect diagnostics information if needed by setting a trap for the error. The following steps explain how to hang the database server on an assertion failure, how to set a trap for an error and how to collect onstat outputs.  
  
**Do the following steps as user informix:**

1. To make the database server hang on an assertion failure, set the environment variable AFDEBUG to 1 and restart the server. If you do not wish to take the server offline, you can set it dynamically by running the following command:

onmode -A 1

2. Set a trap for the error by running the following command:

onmode -I *errno*

***errno***

The error number on which you wish to hang the server.

**Note:** The database server writes a message to the message log indicating that the trap has been set.

3. The database server assert fails and hangs when it encounters the error. The message log shows the location of the assertion failure file and the shared memory dump if it was generated. These files will be located in the directory specified by DUMPDIR in your onconfig file. Check if these files exist.

4. You can now dump the shared memory if the server did not dump it automatically by running the following command:

onstat -o > shmdump

5. Collect onstat information by running the following command:

onstat -g all > onstat\_g\_all.out  
onstat -a > onstat\_a.out

6. Collect the checkpoints statistics for IDS 11.10.UC1 and 11.10.UC2W1:

onstat -g ckp > onstat\_ckp.out

7. Collect the stack trace for all the threads by running the following command:

onstat -g stk all > onstat\_g\_stk.out

8. Release the engine by running the following command:

onmode -i

8. You can unset all traps that have been set previously by running the following command:

onmode -I

9. Reset the environment variable AFDEBUG to 0 and restart the database server. If you do not wish to take the server offline, you can reset AFDEBUG dynamically by running the following command:

onmode -A 0