Item 320
git_comments:

git_commits:

1. **summary:** [TRAFODION-2785] mxosrvr dumps core generated when loading data
   message: [TRAFODION-2785] mxosrvr dumps core generated when loading data Need to cast it as a unsigned char to output the correct byte Otherwise sprintf was printing it as oxff

github_issues:

github_issues_comments:

github_pulls:

github_pulls_comments:

github_pulls_reviews:

jira_issues:

1. **summary:** mxosrvr dumps core generated when loading data from Oracle to Trafodion at times
   description: The stack trace of the dump is #0 0x00007feb0d59f5f7 in raise () from /mnt/gselva/guangxi/zlibs-datanode07.hadoop.gxdwdc/lib64/libc.so.6 #1 0x00007feb0d5a0e28 in abort () from /mnt/gselva/guangxi/zlibs-datanode07.hadoop.gxdwdc/lib64/libc.so.6 #2 0x00007feb0eea7f85 in os::abort(bool) () from /mnt/gselva/guangxi/zlibs-datanode07.hadoop.gxdwdc/opt/java/jdk1.8/jre/lib/amd64/server/libjvm.so #3 0x00007feb0f04a383 in VMError::report_and_die() () from /mnt/gselva/guangxi/zlibs-datanode07.hadoop.gxdwdc/opt/java/jdk1.8/jre/lib/amd64/server/libjvm.so #4 0x00007feb0eead48f in JVM_handle_linux_signal () from /mnt/gselva/guangxi/zlibs-datanode07.hadoop.gxdwdc/opt/java/jdk1.8/jre/lib/amd64/server/libjvm.so #5 0x00007feb0eea39d3 in signalHandler(int, siginfo*, void*) () from /mnt/gselva/guangxi/zlibs-datanode07.hadoop.gxdwdc/opt/java/jdk1.8/jre/lib/amd64/server/libjvm.so #6 <signal handler called> #7 0x00007feb0a00e833 in convCharToChar (source=<optimized out>, sourceLen=<optimized out>, sourceType=<optimized out>, sourcePrecision=256, sourceScale=<optimized out>, target=0x7feacb882bcc '\377' <repeats 92 times>, targetLen=1717986918, targetType=26214, targetPrecision=1717986918, targetScale=1717986918, heap=0x6666666666666666, diagsArea=0x6666666666666666, dataConversionErrorFlag=0x6666666666666666, actualTargetLen=0x6666666666666666, blankPadResult=0, ignoreTrailingBlanksInSource=1, allowInvalidCodePoint=0) at ../exp/exp_conv.cpp:4895 #8 0x6666666666666666 in ?? () #9 0x6666666666666666 in ?? () #10 0x6666666666666666 in ?? () #11 0x6666666666666666 in ?? () #12 0x6666666666666666 in ?? () #13 0x6666666666666666 in ?? () #14 0x6666666666666666 in ?? () #15 0x6666666666666666 in ?? () #16 0x6666666666666666 in ?? () #17 0x0000000000000000 in ?? ()

jira_issues_comments:

1. **body:** Reconstruct the stack from the variables, the stack had the following variables p &target = (char **) 0x7feafab02868 p &outputDataLen = (UInt32 *) 0x7feafab02870 p &translatedCharCnt = (UInt32 *) 0x7feafab02874 p &firstUntranslatedChar = (char **) 0x7feafab02878 Gap in the stack p &hexstr ((char (*)[256]) 0x7feafab028b0 p &stackBuffer = (char (*)[512]) 0x7feafab029b0 Upto 0x7feafab02bb0 p &targetLen = (Lng32 *) 0x7feafab02bf0 (gdb) x /100x 0x7feafab02868 0x7feafab02868: 0x00007feacb882bcc 0x00000000ffffffff 0x7feafab02878: 0x0000000000000000 {color:red} 0x00007feb0ce16290{color} 0x7feafab02888: {color:red}0x00007feb0ab8c5b0{color} {color:red}0x00007feb0ce162b0{color} 0x7feafab02898: {color:red}0x00007feb0ab8c5b0{color} {color:red}0x00007feb0ce162d0{color} 0x7feafab028a8: 0x00007feafab028b0 0x6666666666666666 0x7feafab028b8: 0x6666666666666666 0x6666666666666666 0x7feafab028c8: 0x6666666666666666 0x6666666666666666 0x7feafab028d8: 0x6666666666666666 0x6666666666666666 The addresses in {color:red}red {color} are the parameters to ComDiagsArea and DgString0 and DgString1 and DgString2 inline functions respectively

label: code-design

2. So, it is quite clear from the above hextostring caused buffer overrun and hence corrupted the stack
3. GitHub user selvaganesang opened a pull request: https://github.com/apache/incubator-trafodion/pull/1280 [TRAFODION-2785] mxosrvr dumps core generated when loading data from … … Oracle to Trafodion at times When there is an error while loading the data, the hexadecimal representation of character column upto 254 bytes is shown as part of the error message. The function stringToHex had a subtle bug that can cause buffer overrun resulting in stack corruption. You can merge this pull request into a Git repository by running: $ git pull https://github.com/selvaganesang/incubator-trafodion trafodion-2785 Alternatively you can review and apply these changes as the patch at: https://github.com/apache/incubator-trafodion/pull/1280.patch To close this pull request, make a commit to your master/trunk branch with (at least) the following in the commit message: This closes #1280 ---- commit 3cd76072e436fbf98e3713bc9ef5d77cab1401f8 Author: selvaganesang <selva.govindarajan@esgyn.com> Date: 2017-10-28T00:40:56Z [TRAFODION-2785] mxosrvr dumps core generated when loading data from Oracle to Trafodion at times When there is an error while loading the data, the hexadecimal representation of character column upto 254 bytes is shown as part of the error message. The function stringToHex had a subtle bug that can cause buffer overrun resulting in stack corruption. ----
4. It is found that the corruption happens in RH7
5. Github user asfgit closed the pull request at: https://github.com/apache/incubator-trafodion/pull/1280
6. https://github.com/apache/incubator-trafodion/pull/1280
7. GitHub user selvaganesang opened a pull request: https://github.com/apache/incubator-trafodion/pull/1287 [TRAFODION-2785] mxosrvr dumps core generated when loading data Expected file change for the failures observed in daily build due to fix for the above problem You can merge this pull request into a Git repository by running: $ git pull https://github.com/selvaganesang/incubator-trafodion trafodion-2785_1 Alternatively you can review and apply these changes as the patch at: https://github.com/apache/incubator-trafodion/pull/1287.patch To close this pull request, make a commit to your master/trunk branch with (at least) the following in the commit message: This closes #1287 ---- commit 450d5cf10541ef50a61b353d2fb670ce389a35a5 Author: selvaganesang <selva.govindarajan@esgyn.com> Date: 2017-10-31T16:33:34Z [TRAFODION-2785] mxosrvr dumps core generated when loading data Expected file change for the failures observed in daily build due to fix for the above problem ----
8. Github user asfgit closed the pull request at: https://github.com/apache/incubator-trafodion/pull/1287
9. Closing old tickets (bulk process in JIRA).