## Homework 6, ECE 590 & CS320 Software Reliability.

## Linux Kernel: https://bugzilla.kernel.org

#### **ARB**

:MEM

https://bugzilla.kernel.org/show\_bug.cgi?id=72231

just as the description of the bug, it would continuously leak memory, finally causing crash.

Because it is related to memory management, it is MEM.

https://bugzilla.kernel.org/show\_bug.cgi?id=205603

https://bugzilla.kernel.org/show bug.cgi?id=210293

https://bugzilla.kernel.org/show\_bug.cgi?id=88881

the above three bugs are related to memory leak, so they are MEM.

#### **NAM**

:ENV

https://bugzilla.kernel.org/show bug.cgi?id=214205

After updating the bios, the bug has been fixed, so it is a bug related to the system-internal environment.

https://bugzilla.kernel.org/show bug.cgi?id=215271

disable 'eth' would fix this problem, so it is a bug related to eth. it is a ENV bug.

## **BOH**

https://bugzilla.kernel.org/show\_bug.cgi?id=213091

there is a use-of-uninitialized-data bug in `\_\_slab\_free` function. It is neither ARB nor NAM, so it is BOH.

# • MySQL: http://bugs.mysql.com

#### ARB

:MEM

https://bugs.mysql.com/bug.php?id=83047

the program would gradually utilizes system memory to the point where there are no system memory or cache available bringing the system to a halt. Therefore, it is a MEM.

#### **BOH**

https://bugs.mysql.com/bug.php?id=94747

it is a documentation bug, not ARB or NAM, so it is BOH.

https://bugs.mysql.com/bug.php?id=77637

this is because of the wrong initialization. It is a BOH bug.

https://bugs.mysql.com/bug.php?id=71220

this bug is due to wrong input. It is a BOH bug.

https://bugs.mysql.com/bug.php?id=96900

one thread interrupts another thread that is executing and interrupts by creating a database connection, but the connection is not closed. It is a BOH bug.

https://bugs.mysql.com/bug.php?id=93374

GetStream method would return wrong value. This bug is not related to ARB or NAM, so it is a BOH bug.

## https://bugs.mysql.com/bug.php?id=97742

a certain query was allowed to run even though neither of other conditions were met. It is a BOH bug.

# • Apache: https://issues.apache.org/bugzilla

#### **ARB**

:MEM

https://bz.apache.org/bugzilla/show\_bug.cgi?id=46863

Unable to close DeflaterOutputStream and over time led to OutOfMemoryError

https://bz.apache.org/bugzilla/show\_bug.cgi?id=64264

https://bz.apache.org/bugzilla/show\_bug.cgi?id=31105

The above two is related memory leak, so they are MEM.

#### **NAM**

:SEQ

https://bz.apache.org/bugzilla/show bug.cgi?id=45237

Call order of FOEventHandler method is incorrect, so it is SEQ.

https://bz.apache.org/bugzilla/show\_bug.cgi?id=59932

Should first use groupColumn, then setColumnWidth and it works. Therefore it is a SEQ bug.

https://bz.apache.org/bugzilla/show bug.cgi?id=47642

it is a bug because of interleaving I/O in incorrect order

#### **BOH**

https://bz.apache.org/bugzilla/show\_bug.cgi?id=56300

The errors are because person only have a single member in the cluster so there is nowhere to send the message to. It is a BOH bug.