

应用程序死机debug参考

使用gdb定位程序死机位置

- 将应用程序和arm-linux-gnu-gdb放在板子同一个目录，按如下方式执行：

```
/mnt/P2/debug # ls
arm-linux-gnu-gdb test
/mnt/P2/debug # ./arm-linux-gnu-gdb test
GNU gdb (GDB) 7.9
Copyright (C) 2015 Free Software Foundation, Inc.
License GPLv3+: GNU GPL version 3 or later <http://gnu.org/licenses/gpl.html>
This is free software: you are free to change and redistribute it.
There is NO WARRANTY, to the extent permitted by law. Type "show copying"
and "show warranty" for details.
This GDB was configured as "arm-linux-gnueabi".
Type "show configuration" for configuration details.
For bug reporting instructions, please see:
<http://www.gnu.org/software/gdb/bugs/>.
Find the GDB manual and other documentation resources online at:
<http://www.gnu.org/software/gdb/documentation/>.
For help, type "help".
Type "apropos word" to search for commands related to "word"...
Reading symbols from test...done.
(gdb)
```

- 然后敲run执行：

```
For help, type "help".
Type "apropos word" to search for commands related to "word"..
Reading symbols from test...done.
(gdb) run
Starting program: /mnt/P2/debug/test

Program received signal SIGSEGV, Segmentation fault.
0x000103ec in main () at lsof.c:7
7   lsof.c: No such file or directory.
(gdb) bt
#0  0x000103ec in main () at lsof.c:7
(gdb)
```

- bt后就可以印出来死在哪一行(编译应用程序的时候需要带-g参数，不然看不到死在哪一行)：

```
1  #include <stdio.h>
2  #include <fcntl.h>
3
4  int main()
5  {
6  → char *p = NULL;
7  → *p = 1;
8  → return 0;
9  }
```

用coredump定位程序死机位置

V008版本默认coredump已经打开，默认coredump文件生成在config目录。如果config分区不可写，可以修改etc\core.sh下面coredump产生的路径，放到可写的目录(注意应用程序里面不能拦截SIGSEGV信号，否则kernel收不到信号会无法产生coredump)：

```
1  #!/bin/sh
2  /bin/gzip -1 > /config/coredump.process_${1}.gz
3  sync
```

- gunzip coredump_xx.zip;

2. arm-linux-gnueabi-gdb APP(生成coredump对应的应用app)
3. set solib-search-path ../../sdk/verify/application/zk_full/lib/ (app链接对应的lib)
4. core-file coredump.process_xxx
5. bt

```
(gdb) set solib-search-path ../../sdk/verify/application/zk_full/lib/
(gdb) core-file coredump.process_798
[New LWP 798]
[New LWP 801]
[New LWP 800]
[New LWP 802]
[New LWP 804]
[New LWP 850]
[New LWP 849]
[New LWP 803]
[New LWP 851]
warning: Could not load shared library symbols for 13 libraries, e.g. /config/lib/libmi_common.so.
Use the "info sharedlibrary" command to see the complete listing.
Do you need "set solib-search-path" or "set sysroot"?
Core was generated by `./zkgui'.
Program terminated with signal SIGSEGV, Segmentation fault.
#0  0xb3532778 in mainActivity::onSlideItemClick(ZKSlideWindow*, int) ()
    from /home/aaron.feng/P2/Git_src/sdk/verify/application/zk_full/lib/libzkgui.so
[Current thread is 1 (LWP 798)]
(gdb) █
```