How do I analyze and debug core files on AIX

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Sometimes, applications stop working and crash for any reason. A core file appears in scene.

First, we're going to set a PATH for all cores files on the system using syscorepath command.

In order to do this, We're going to:

- 1- Create and mount a new filesystem /corefiles
- 1.1- Create the new filesytem:

1 2	# crfs -v jfs2 -g volgrp2 -m /home/pipe -A yes -a size=1G
3	File system created successfully.
4	1048340 kilobytes total disk space.
	New File System size is 2097152

1.2- Mount the filesystem:

1		
	# mount /corefiles	

- 2- Using syscorepath command, we'll set a PATH where all these cores files will be dumped..
- 2.1- Set the directory for all cores files:

```
1 # syscorepath -p /corefiles
```

2.2- To check if the core's PATH was correctly set, running:

```
# syscorepath -g /corefiles

# /corefiles
```

3- Analize the core file using dbx command.

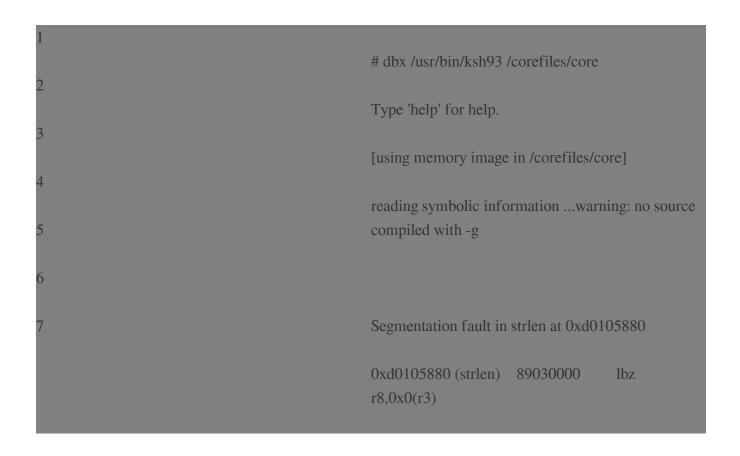
Once you get all cores in /corefiles, we're going to analyse them using dbx command. Follow these steps:

3.1- Get the cause of the core file by running check_core command. In the example ksh93 is the victim:

```
# /usr/lib/ras/check_core /corefiles/core Itail -1

ksh93
```

3.2- Debugging with dbx (Provides an environment to debug and run programs) command:



3.3- Once your are in dbx shell, type 'where'

1	(dbx) where
2	strlen() at 0xd0105880
4	varsub() at 0x100475fc
5	copyto(??, ??) at 0x100494c8
6	sh_mactrim(??, ??) at 0x1004a5a0
7	word_trim(??, ??) at 0x1000e340
Q	sh_exec(??, ??) at 0x1000ff88

9	sh_exec(??, ??) at 0x1001043c
10	sh_exec(??, ??) at 0x1000ff50
11	sh_exec(??, ??) at 0x10010470
12	sh_exec(??, ??) at 0x1000fdcc
13	sh_exec(??, ??) at 0x1000fd94
14	sh_exec(??, ??) at 0x1000fe08
15	sh_exec(??, ??) at 0x1000fdb8
16	sh_exec(??, ??) at 0x1000fe08
17	sh_exec(??, ??) at 0x1000fdb8
18	sh_exec(??, ??) at 0x100106d8
19	sh_exec(??, ??) at 0x1000fdb8
20	sh_exec(??, ??) at 0x1000fe08
21	sh_exec(??, ??) at 0x1000fd94
22	b_dot_cmd(??, ??, ??) at 0x10066e20
23	sh_funct(??, ??, ??, ??) at 0x1000e500
24	sh_exec(??, ??) at 0x1000ee88
25	sh_exec(??, ??) at 0x1000fd94
26	sh_exec(??, ??) at 0x10010370
27	sh_exec(??, ??) at 0x1000fdb8

28	sh_exec(??, ??) at 0x1000fe98
29	exfile(??, ??) at 0x10000ed8
30	sh_main(??, ??, ??) at 0x100015dc
	pmain.main(??, ??) at 0x10000370

Or you can use others dbx's commands. Please see man dbx.

Just thanks if the post was helpful

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