
Subject: [RFC][PATCH][cryo] Read/print contents of fifo
Posted by [Sukadev Bhattiprolu](#) on Tue, 17 Jun 2008 21:30:40 GMT
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>From 0f5b3ea20238e0704a71252a3d495ca0db61e1dc Mon Sep 17 00:00:00 2001
From: Sukadev Bhattiprolu <sukadev@linux.vnet.ibm.com>
Date: Sat, 14 Jun 2008 11:45:00 -0700
Subject: [RFC][PATCH] Read/print contents of fifo.

To test that checkpoint/restart of pipes is working, read one byte at a time from the pipe and write to stdout.

After checkpoint, both the checkpointed application and the restarted application should continue reading from the checkpoint.

The '-e' option to the program, tests with an empty pipe.

Signed-off-by: Sukadev Bhattiprolu <sukadev@us.ibm.com>

```
tests/pipe.c | 32 ++++++-----  
1 files changed, 28 insertions(+), 4 deletions(-)
```

```
diff --git a/tests/pipe.c b/tests/pipe.c  
index cc3cdfd..0812cb3 100644  
--- a/tests/pipe.c  
+++ b/tests/pipe.c  
@@ -3,25 +3,49 @@  
#include <unistd.h>  
#include <stdlib.h>  
#include <string.h>  
+#include <errno.h>  
+#include <sys/fcntl.h>  
  
-int main()  
+int main(int argc, char *argv[]){  
    int i = 0;  
+    int rc;  
    int fds[2];  
+    int c;  
+    int empty;  
    char *buf = "abcdefghijklmnopqrstuvwxyz";  
  
+/*  
+ * -e: test with an empty pipe  
+ */  
+    empty = 0;  
+    if (argc > 1 && strcmp(argv[1], "-e") == 0)
```

```

+ empty = 1;
+
if (pipe(fds) < 0) {
    perror("pipe()");
    exit(1);
}

- write(fds[1], buf, strlen(buf));
+ if (!empty)
+ write(fds[1], buf, strlen(buf));

+ if (fcntl(fds[0], F_SETFL, O_NONBLOCK) < 0) {
+ perror("fcntl()");
+ exit(1);
+ }
printf("Running as %d\n", getpid());
while (i<100) {
    sleep(1);
    - if (i%5 == 0)
    - printf("i is %d (pid %d)\n", i, getpid());
    + if (i%5 == 0) {
    + c = errno = 0;
    + rc = read(fds[0], &c, 1);
    + if (rc != 1) {
    + perror("read() failed");
    + }
    + printf("i is %d (pid %d), c is %c\n", i, getpid(), c);
    +
    + }
    i++;
}
}

--
```

1.5.2.5

Containers mailing list
 Containers@lists.linux-foundation.org
<https://lists.linux-foundation.org/mailman/listinfo/containers>

Subject: Re: [RFC][PATCH][cryo] Read/print contents of fifo
Posted by serue on Tue, 17 Jun 2008 22:31:22 GMT

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Quoting sukadev@us.ibm.com (sukadev@us.ibm.com):

>
 >>From 0f5b3ea20238e0704a71252a3d495ca0db61e1dc Mon Sep 17 00:00:00 2001

> From: Sukadev Bhattiprolu <sukadev@linux.vnet.ibm.com>
> Date: Sat, 14 Jun 2008 11:45:00 -0700
> Subject: [RFC][PATCH] Read/print contents of fifo.
>
> To test that checkpoint/restart of pipes is working, read
> one byte at a time from the pipe and write to stdout.
>
> After checkpoint, both the checkpointed application and the
> restarted application should continue reading from the checkpoint.
>
> The '-e' option to the program, tests with an empty pipe.
>
> Signed-off-by: Sukadev Bhattiprolu <sukadev@us.ibm.com>

Thanks, will apply to the git tree tonight.

-serge

> ---
> tests/pipe.c | 32 ++++++-----
> 1 files changed, 28 insertions(+), 4 deletions(-)
>
> diff --git a/tests/pipe.c b/tests/pipe.c
> index cc3cd9..0812cb3 100644
> --- a/tests/pipe.c
> +++ b/tests/pipe.c
> @@ -3,25 +3,49 @@
> #include <unistd.h>
> #include <stdlib.h>
> #include <string.h>
> +#include <errno.h>
> +#include <sys/fcntl.h>
>
> -int main()
> +int main(int argc, char *argv[])
> {
> int i = 0;
> + int rc;
> int fds[2];
> + int c;
> + int empty;
> char *buf = "abcdefghijklmnopqrstuvwxyz";
>
> + /*
> + * -e: test with an empty pipe
> + */
> + empty = 0;
> + if (argc > 1 && strcmp(argv[1], "-e") == 0)

```
> + empty = 1;
> +
>   if (pipe(fds) < 0) {
>     perror("pipe()");
>     exit(1);
>   }
>
> - write(fds[1], buf, strlen(buf));
> + if (!empty)
> +   write(fds[1], buf, strlen(buf));
>
> + if (fcntl(fds[0], F_SETFL, O_NONBLOCK) < 0) {
> +   perror("fcntl()");
> +   exit(1);
> +
>   printf("Running as %d\n", getpid());
>   while (i<100) {
>     sleep(1);
> -   if (i%5 == 0)
> -     printf("i is %d (pid %d)\n", i, getpid());
> +   if (i%5 == 0) {
> +     c = errno = 0;
> +     rc = read(fds[0], &c, 1);
> +     if (rc != 1) {
> +       perror("read() failed");
> +     }
> +     printf("i is %d (pid %d), c is %c\n", i, getpid(), c);
> +
> +   }
> +   i++;
>   }
> }
> --
> 1.5.2.5
```

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