
Subject: Re: Upp 2007.1beta2 released

Posted by [piotr5](#) on Mon, 29 Jan 2007 10:15:20 GMT

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Thanks. another bug I found is that single-file packages don't get linked into a lib, even though the final link-command does expect *.a instead of *.o. but this bug is also present in older versions and I simply ignored it...

but back to the hydra-problem: I tried to debug the "waiting", and it turned out that waitpid did keep returning -1 to indicate an error (errno 10, "child does not exist" or something) while Web/sproc.cpp did interpret this as "child hasn't exited yes".

the debug-session did look like this:

GNU gdb 2003-02-03-cvs

...

Console::Wait() (this=0xbffeebb8)

at /home/p/upp/ups/upp-ups/ide/Console.cpp:252

252 for(;;) {

(gdb)

253 ProcessEvents();

(gdb)

254 switch(Flush()) {

(gdb)

256 case 0: sleep = min(sleep + 5, 20); break;

(gdb)

259 Ctrl::GuiSleep(sleep);

(gdb)

252 for(;;) {

(gdb)

253 ProcessEvents();

(gdb)

254 switch(Flush()) {

(gdb) s

Console::Flush() (this=0xbffeebb8)

at /home/p/upp/ups/upp-ups/ide/Console.cpp:67

67 bool done_output = false;

(gdb) n

...

85 for(int i = 0; i < processes.GetCount(); i++) {

(gdb)

86 Slot& slot = processes[i];

(gdb)

87 if(!slot.process)

```

(gdb)
88  continue;
(gdb)
85  for(int i = 0; i < processes.GetCount(); i++) {
(gdb)
86  Slot& slot = processes[i];
(gdb)
87  if(!slot.process)
(gdb)
89  String s;
(gdb)
90  slot.process->Read(s);
(gdb)
91  if(!IsNull(s)) {
(gdb)
104 if(!slot.process->IsRunning()) {
(gdb) s
Upp::One<Upp::SlaveProcess>::operator->() (this=0x886d490)
    at /home/p/upp/uvs/upp-uvs/Core/Other.h:30
30 T      *operator->()      { ChkP();
...
Upp::LocalSlaveProcess::IsRunning() (this=0x94c5e80)
    at /home/p/upp/uvs/upp-uvs/Web/sproc.cpp:358
358 if(!pid || !IsNull(exit_code)) {
(gdb) n
362 int status = 0, wp;
(gdb)
363 if((wp = waitpid(pid, &status, WNOHANG | WUNTRACED)) != pid ||
!DecodeExitCode(status))
(gdb) s
364 return true;
(gdb) p wp
$1 = -1
(gdb) p status
$2 = 0
(gdb) p pid
$3 = 905
(gdb) n
368 }
(gdb)
Console::Flush() (this=0xbffeebb8)
    at /home/p/upp/uvs/upp-uvs/ide/Console.cpp:114
114 running = true;
(gdb) n
85  for(int i = 0; i < processes.GetCount(); i++) {
(gdb) p processes
$4 = {<MoveableAndDeepCopyOption<Upp::Array<Console::Slot>,Upp::EmptyClass>> =
{<Moveable<Upp::Array<Console::Slot>,Upp::DeepCopyOption<Upp::Array<Console::Slot>,

```

```

Upp::EmptyClass> >> = {<DeepCopyOption<Upp::Array<Console::Slot>,Upp::EmptyClass>> =
{<EmptyClass> = {<No data fields>}, <No data fields>}, <No data fields>}, <No data fields>},
  vector = {<MoveableAndDeepCopyOption<Upp::Vector<void*>,Upp::EmptyClass>> =
{<Moveable<Upp::Vector<void*>,Upp::DeepCopyOption<Upp::Vector<void*>, Upp::EmptyClass>
>> = {<DeepCopyOption<Upp::Vector<void*>,Upp::EmptyClass>> = {<EmptyClass> = {<No data
fields>}, <No data fields>}, <No data fields>}, <No data fields>},
  vector = 0x886d480, items = 2, alloc = 2}}
(gdb) p processes[0]
$5 = (Slot &) @0x8815b80: {
  process =
{<MoveableAndDeepCopyOption<Upp::One<Upp::SlaveProcess>,Upp::EmptyClass>> =
{<Moveable<Upp::One<Upp::SlaveProcess>,Upp::DeepCopyOption<Upp::One<Upp::SlaveProce
ss>, Upp::EmptyClass>>> =
{<DeepCopyOption<Upp::One<Upp::SlaveProcess>,Upp::EmptyClass>> = {<EmptyClass> =
{<No data fields>}, <No data fields>}, <No data fields>}, <No data fields>}, ptr = 0x0},
  cmdline = {<AString<char,Upp::String>> = {<Moveable<Upp::String,Upp::EmptyClass>> =
{<EmptyClass> = {<No data fields>}, <No data fields>},
  ptr = 0x889a33c "/usr/bin/c++ -c -I\"/home/p/upp/uvs/upp-uvs\" -I\"/usr/X11R6/include\"
-I\"/usr/include\" -I\"/usr/X11R6/include/freetype2\" -I\"/opt/upp/uppsrc\" -DflagGUI -DflagGCC
-DflagSHARED -DflagDEBUG_FULL -DflagLINUX "...", <No data fields>},
  output = {<AString<char,Upp::String>> = {<Moveable<Upp::String,Upp::EmptyClass>> =
{<EmptyClass> = {<No data fields>}, <No data fields>},
  ptr = 0x853974c ""}, <No data fields>},
  key = {<AString<char,Upp::String>> = {<Moveable<Upp::String,Upp::EmptyClass>> =
{<EmptyClass> = {<No data fields>}, <No data fields>},
  ptr = 0x94e3404 "/opt/upp/out/Core/GCC.Debug_full.Gui.Release.Shared/Win32Com.o"}, <No
data fields>},
  group = {<AString<char,Upp::String>> = {<Moveable<Upp::String,Upp::EmptyClass>> =
{<EmptyClass> = {<No data fields>}, <No data fields>},
  ptr = 0x94a7e44 "Core"}, <No data fields>}, outfile = 0x0,
  quiet = false, exitcode = 0, last_msecs = 948604485}
(gdb) p processes[1]
$6 = (Slot &) @0x886d490: {
  process =
{<MoveableAndDeepCopyOption<Upp::One<Upp::SlaveProcess>,Upp::EmptyClass>> =
{<Moveable<Upp::One<Upp::SlaveProcess>,Upp::DeepCopyOption<Upp::One<Upp::SlaveProce
ss>, Upp::EmptyClass>>> =
{<DeepCopyOption<Upp::One<Upp::SlaveProcess>,Upp::EmptyClass>> = {<EmptyClass> =
{<No data fields>}, <No data fields>}, <No data fields>}, <No data fields>}, ptr = 0x94c5e80},
  cmdline = {<AString<char,Upp::String>> = {<Moveable<Upp::String,Upp::EmptyClass>> =
{<EmptyClass> = {<No data fields>}, <No data fields>},
  ptr = 0x94e937c "/usr/bin/c++ -c -I\"/home/p/upp/uvs/upp-uvs\" -I\"/usr/X11R6/include\"
-I\"/usr/include\" -I\"/usr/X11R6/include/freetype2\" -I\"/opt/upp/uppsrc\" -DflagGUI -DflagGCC
-DflagSHARED -DflagDEBUG_FULL -DflagLINUX "...", <No data fields>},
  output = {<AString<char,Upp::String>> = {<Moveable<Upp::String,Upp::EmptyClass>> =
{<EmptyClass> = {<No data fields>}, <No data fields>},
  ptr = 0x853974c ""}, <No data fields>},
  key = {<AString<char,Upp::String>> = {<Moveable<Upp::String,Upp::EmptyClass>> =

```

```
{<EmptyClass> = {<No data fields>}, <No data fields>},
  ptr = 0x94d89cc "/opt/upp/out/Core/GCC.Debug_full.Gui.Release.Shared/OL_Set.o"}, <No
data fields>},
  group = {<AString<char,Upp::String>> = {<Moveable<Upp::String,Upp::EmptyClass>> =
{<EmptyClass> = {<No data fields>}, <No data fields>},
  ptr = 0x94a7e44 "Core"}, <No data fields>}, outfile = 0x0,
  quiet = false, exitcode = 0, last_msecs = 955095921}
(gdb) q
The program is running. Quit anyway (and detach it)? (y or n) Detaching from program:
/home/p/upp/out/gcc.Debug_full.Gui.Shared/ide, process 362
```

I fixed this bad behaviour by forcing IsRunning() to return true only when waitpid didn't return -1, and while I already where altering the code I also inserted some logging of the errno. then I tried again, and no locking. still, this is not a bug-fix, since the process still didn't pass its return-code. maybe someone might actually find the real bug. I logged the ide's stdout, here's the output (as above, I inserted "..." for brevity):

```
...
LocalSlaveProcess::Free, pid = 294
rpipe[-1, -1]
wpipe[-1, -1]
LocalSlaveProcess::Open(/usr/bin/c++ -c ... -o "/opt/upp/out/Core/GCC.Gui.Shared/Mt.o")
IsRunning() -> no

LocalSlaveProcess::Free, pid = 294
rpipe[-1, -1]
wpipe[-1, -1]

LocalSlaveProcess::Open
rpipe[7, 14]
wpipe[15, 16]
fork, pid = 698, getpid = 294
parent process - continue
LocalSlaveProcess::Open(/usr/bin/c++ -c ... -o "/opt/upp/out/Core/GCC.Gui.Shared/Thread.o")
IsRunning() -> no

LocalSlaveProcess::Free, pid = 294
rpipe[-1, -1]
wpipe[-1, -1]

LocalSlaveProcess::Open
rpipe[17, 18]
wpipe[19, 20]
```

fork, pid = 700, getpid = 294
parent process - continue
IsRunning() -> no, just exited, exit code = 0
IsRunning() -> no
IsRunning() -> no
IsRunning() -> no

LocalSlaveProcess::Free, pid = 294
rpipe[7, 14]
wpipe[15, 16]
IsRunning() -> no
IsRunning() -> no

LocalSlaveProcess::Free, pid = 294
rpipe[-1, -1]
wpipe[-1, -1]
IsRunning() -> no, just exited, errno = 10
IsRunning() -> no
IsRunning() -> no

LocalSlaveProcess::Free, pid = 294
rpipe[17, 18]
wpipe[19, 20]
IsRunning() -> no
IsRunning() -> no

LocalSlaveProcess::Free, pid = 294
rpipe[-1, -1]
wpipe[-1, -1]
LocalSlaveProcess::Open(/usr/bin/c++ -c ... -o "/opt/upp/out/Core/GCC.Gui.Shared/OL_Set.o")
IsRunning() -> no

LocalSlaveProcess::Free, pid = 294
rpipe[-1, -1]
wpipe[-1, -1]

LocalSlaveProcess::Open
rpipe[7, 14]
wpipe[15, 16]
fork, pid = 704, getpid = 294
parent process - continue
IsRunning() -> no, just exited, exit code = 0
IsRunning() -> no
IsRunning() -> no
IsRunning() -> no

LocalSlaveProcess::Free, pid = 294
rpipe[7, 14]

```
wpipe[15, 16]
IsRunning() -> no
IsRunning() -> no

LocalSlaveProcess::Free, pid = 294
rpipe[-1, -1]
wpipe[-1, -1]
LocalSlaveProcess::Open(/usr/bin/c++ -c ... -o "/opt/upp/out/Core/GCC.Gui.Shared/heap.o")
IsRunning() -> no

LocalSlaveProcess::Free, pid = 294
rpipe[-1, -1]
wpipe[-1, -1]

LocalSlaveProcess::Open
rpipe[7, 14]
wpipe[15, 16]
fork, pid = 707, getpid = 294
parent process - continue
LocalSlaveProcess::Open(/usr/bin/c++ -c ... -o "/opt/upp/out/Core/GCC.Gui.Shared/heapdbg.o")
IsRunning() -> no

LocalSlaveProcess::Free, pid = 294
rpipe[-1, -1]
wpipe[-1, -1]

LocalSlaveProcess::Open
rpipe[17, 18]
wpipe[19, 20]
fork, pid = 709, getpid = 294
parent process - continue
Read() -> select
Read(), read -> 1024: rpipe[7, 14]
wpipe[15, 16]
IsRunning() -> no
IsRunning() -> no

LocalSlaveProcess::Free, pid = 294
rpipe[-1, -1]
wpipe[-1, -1]
LocalSlaveProcess::Open(/usr/bin/c++ -c ... -o "/opt/upp/out/Core/GCC.Gui.Shared/Mt.o")
IsRunning() -> no

LocalSlaveProcess::Free, pid = 294
rpipe[-1, -1]
wpipe[-1, -1]

LocalSlaveProcess::Open
```

```

rpipe[7, 14]
wpipe[15, 16]
fork, pid = 698, getpid = 294
parent process - continue
LocalSlaveProcess::Open(/usr/bin/c++ -c ... -fexceptions
Read() -> select
Read(), read -> 1024: -Os -finline-limit=20 -x c++ "/home/p/upp/uvsvs/upp-uvsvs/Core/Thread.cpp" -o
"/opt/upp/out/Core/GCC.Gui.Shared/Thread.o")
IsRunning() -> no

LocalSlaveProcess::Free, pid = 294
rpipe[-1, -1]
wpipe[-1, -1]

LocalSlaveProcess::Open
rpipe[17, 18]
wpipe[19, 20]
fork, pid = 700, getpid = 294
parent process - continue
IsRunning() -> no, just exited, exit code = 0
IsRunning() -> no
IsRunning() -> no
IsRunning() -> no

LocalSlaveProcess::Free, pid = 294
rpipe[7, 14]
wpipe[15, 16]
IsRunning() -> no
IsRunning() -> no

LocalSlaveProcess::Free, pid = 294
rpipe[-1, -1]
wpipe[-1, -1]
IsRunning() -> no, just exited, errno = 10
IsRunning() -> no
IsRunning() -> no

LocalSlaveProcess::Free, pid = 294
rpipe[17, 18]
wpipe[19, 20]
IsRunning() -> no
IsRunning() -> no

LocalSlaveProcess::Free, pid = 294
rpipe[-1, -1]
wpipe[-1, -1]
LocalSlaveProcess::Open(/usr/bin/c++ -c -I"/home/p/upp/uvsvs/upp-uvsvs" ...
...

```

```
LocalSlaveProcess::Open(/usr/bin/c++ -c ... -o
"/opt/upp/out/Draw/GCC.Gui.Shared/DrawTextXft.o")
IsRunning() -> no
```

```
LocalSlaveProcess::Free, pid = 294
rpipe[-1, -1]
wpipe[-1, -1]
```

```
LocalSlaveProcess::Open
rpipe[17, 18]
wpipe[19, 20]
fork, pid =
Read() -> select
Read(), read -> 1024: 974, getpid = 294
parent process - continue
IsRunning() -> no, just exited, exit code = 0
IsRunning() -> no
IsRunning() -> no
IsRunning() -> no
```

```
LocalSlaveProcess::Free, pid = 294
rpipe[7, 14]
wpipe[15, 16]
IsRunning() -> no
IsRunning() -> no
```

```
LocalSlaveProcess::Free, pid = 294
rpipe[-1, -1]
wpipe[-1, -1]
LocalSlaveProcess::Open(/usr/bin/c++ -c ... -o "/opt/upp/out/Draw/GCC.Gui.Shared/Draw.o")
IsRunning() -> no
```

```
LocalSlaveProcess::Free, pid = 294
rpipe[-1, -1]
wpipe[-1, -1]
```

```
LocalSlaveProcess::Open
rpipe[7, 14]
wpipe[15, 16]
fork, pid = 0, getpid = 977
child process - execute application
26arguments:
[0]: </usr/bin/c++>
[1]: <-c>
[2]: <-I/home/p/upp/uvs/upp-uvs>
[3]: <-I/usr/X11R6/include>
[
IsRunning() -> no, just exited, exit code = 0
```

IsRunning() -> no
IsRunning() -> no
IsRunning() -> no

LocalSlaveProcess::Free, pid = 294
rpipe[7, 14]
wpipe[15, 16]
IsRunning() -> no
IsRunning() -> no

LocalSlaveProcess::Free, pid = 294
rpipe[-1, -1]
wpipe[-1, -1]
IsRunning() -> no, just exited, errno = 10
IsRunning() -> no
IsRunning() -> no

LocalSlaveProcess::Free, pid = 294
rpipe[17, 18]
wpipe[19, 20]
IsRunning() -> no
IsRunning() -> no

LocalSlaveProcess::Free, pid = 294
rpipe[-1, -1]
wpipe[-1, -1]
LocalSlaveProcess::Open(/usr/bin/c++ -c ... -o
"/opt/upp/out/Draw/GCC.Gui.Shared/DrawOpWin32.o")
IsRunning() -> no

LocalSlaveProcess::Free, pid = 294
rpipe[-1, -1]
wpipe[-1, -1]

LocalSlaveProcess::Open
rpipe[7, 14]
wpipe[15, 16]
fork, pid = 981, getpid = 294
parent process - continue
LocalSlaveProcess::Open(/usr/bin/c++ -c ... -o
"/opt/upp/out/Draw/GCC.Gui.Shared/DrawOpX11.o")
IsRunning() -> no

LocalSlaveProcess::Free, pid = 294
rpipe[-1, -1]
wpipe[-1, -1]

LocalSlaveProcess::Open

```

rpipe[17, 18]
wpipe[19, 20]
fork, pid = 983, getpid = 294
parent process - continue
IsRunning() -> no, just exited, exit code = 0
IsRunning() -> no
IsRunning() -> no
IsRunning() -> no

LocalSlaveProcess::Free, pid = 294
rpipe[7, 14]
wpipe[15, 16]
IsRunning() -> no
IsRunning() -> no

LocalSlaveProcess::Free, pid = 294
rpipe[-1, -1]
wpipe[-1, -1]
LocalSlaveProcess::Open(/usr/bin/c++ -c ... -o "/opt/upp/out/Draw/GCC.Gui.Shared/DrawData.o")
IsRunning() -> no

LocalSlaveProcess::Free, pid = 294
rpipe[-1, -1]
wpipe[-1, -1]

LocalSlaveProcess::Open
rpipe[7, 14]
wpipe[15, 16]
fork, pid = 986, getpid = 294
parent process - continue
IsRunning() -> no, just exited, exit code = 0
IsRunning() -> no
IsRunning() -> no
IsRunning() -> no

LocalSlaveProcess::Free, pid = 294
rpipe[17, 18]
wpipe[19, 20]
IsRunning() -> no
IsRunning() -> no

LocalSlaveProcess::Free, pid = 294
rpipe[-1, -1]
wpipe[-1, -1]
LocalSlaveProcess::Open(/usr/bin/c++ -c ... -o "/opt/upp/out/Draw/GCC.Gui.Shared/Drawing.o")
IsRunning() -> no

LocalSlaveProcess::Free, pid = 294
```

rpipe[-1, -1]
wpipe[-1, -1]

LocalSlaveProcess::Open
rpipe[17, 18]
wpipe[19, 20]
fork, pid = 989, getpid = 294
parent process - continue
Read() -> select
Read(), read -> 1024: upp/uvs/upp-uvs>
[3]: <-l/usr/X11R6/include>
[
IsRunning() -> no, just exited, exit code = 0
IsRunning() -> no
IsRunning() -> no
IsRunning() -> no

LocalSlaveProcess::Free, pid = 294
rpipe[7, 14]
wpipe[15, 16]
IsRunning() -> no
IsRunning() -> no

LocalSlaveProcess::Free, pid = 294
rpipe[-1, -1]
wpipe[-1, -1]
IsRunning() -> no, just exited, errno = 10
IsRunning() -> no
IsRunning() -> no

LocalSlaveProcess::Free, pid = 294
rpipe[17, 18]
wpipe[19, 20]
IsRunning() -> no
IsRunning() -> no

LocalSlaveProcess::Free, pid = 294
rpipe[-1, -1]
wpipe[-1, -1]
LocalSlaveProcess::Open(/usr/bin/c++ -c -l"/home/p/upp/uvs/upp-uvs" ...
