Subject: Fortran call_external under linux Posted by u600067138 on Tue, 06 Mar 2001 10:06:47 GMT View Forum Message <> Reply to Message

Dear all.

We are currently migrating from SGI IRIX to Red Hat 6.2 Linux. We rely on some fortran code, and would prefer to be able to use call_external instead of spawn with all its overhead etc.

Apparently IDL does not have any example fortran code to work with the g77 compiler, and the IRIX code does not compile. It seems that the "structure" and "record" constructs which is used to pass strings between IDL and fortran is not recognized by g77.

Does anybody have experience with compiling fortran under Linux and linking it to IDL (5.4)?

Greetings, Ole BC, Danish Met. Institute

--

Sent by obc from dmi subpart from dk
This is a spam protected message. Please answer with reference header.
Posted via http://www.usenet-replayer.com/cgi/content/new

Subject: Re: Fortran call_external under linux Posted by James Tappin on Thu, 08 Mar 2001 15:35:45 GMT View Forum Message <> Reply to Message

u600067138@spawnkill.ip-mobilphone.net wrote:

- > We are currently migrating from SGI IRIX to Red Hat 6.2 Linux. We rely on
- > some fortran code, and would prefer to be able to use call_external
- > instead of spawn with all its overhead etc.

>

- > Apparently IDL does not have any example fortran code to work with the g77
- > compiler, and the IRIX code does not compile. It seems that the
- > "structure" and "record" constructs which is used to pass
- > strings between IDL and fortran is not recognized by g77.

>

- > Does anybody have experience with compiling fortran under Linux and
- > linking it to IDL (5.4)?

>

Records/structures are indeed an extension that g77 doesn't support.

I haven't actually tried it, but I believe that passing the string by value, which passes a normal C-type string pointer and passing the length explicitly should do the job.

g77, like most modern fortrans, adds one extra argument for each string at the end of the argument list.

You'll need a C-stub to convert the argc, argv arguments.

James

```
| James Tappin | School of Physics & Astronomy | O__ |
sit@star.sr.bham.ac.uk | University of Birmingham | -- V |
| Ph: 0121-414-6462. Fax: 0121-414-3722
<del>+-----</del>
```