Subject: Re: sharable libraries with linux
Posted by marq on Wed, 22 May 1996 07:00:00 GMT
View Forum Message <> Reply to Message

Hi,

I'm working with IDL 4.0.1b on Linux...

J.D. Gill (g9426092@mcmail.cis.McMaster.CA) wrote:
: I'm considering purchasing a copy of IDL for linux but have one or two
: concerns about it in regards to linking to sharable libraries.

: 1. I notice that the demo version is in an a.out binary format. Most
:   distributions of Linux are moving to an ELF binary format, making it
:   somewhat tedious to work with IDL under linux.

True. They do not ship a ELF version, and people at CREASO (the german
seller of IDL) told me they will not do so with the 4.0.1 version.

: 2. Neither linkimage, nor call_external seem to be supported under
:   linux, and the callable method of interacting with IDL (i.e. from a
:   compiled C program) won't work because the demo doesn't come with any
:   idl library to link against.

True as well. The reason is that the old a.out format for shared libraries
needs unique addresses for every single routine, regardless of the library
it's stored in. Thus, all the important shared libraries had some kind
reserved address spaces. It made building new shared libraries without
letting register their address space somewhat dangerous, as it always
was possible that some official library used these addresses as well. And
it makes call_external or linkimage, say, difficult, as there is no
standardized way on how to link these old libraries dynamically.

: So my questions are these: Does RSI support ELF versions of linux, or do
: they intend to in the future, and is there something I've overlooked as far
: as getting additional code into the linux version of IDL.

No; the current version of Linux IDL does neither support ELF nor dynamic
linking. Trusting the people from Creaso, this will change ``probably
with the next version''.

If anyone knows better, please tell me; I would need call_externals
like hell...

Regards from Berlin,

  Chris Marquardt   (marq@strat01.met.fu-berlin.de)