
Subject: sharable libraries with linux

Posted by [g9426092](#) on Thu, 16 May 1996 07:00:00 GMT

[View Forum Message](#) <> [Reply to Message](#)

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.
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.

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.

TIA

Jeremy

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)

Subject: Re: sharable libraries with linux
Posted by [tferro](#) on Thu, 23 May 1996 07:00:00 GMT
[View Forum Message](#) <> [Reply to Message](#)

My understanding was that their support was somewhat tied into the the fact that the stable version of Linux, 1.2.13, didn't have the full ELF support and was lacking some things. I think RSI hoped to wait until the next stable release. With 2.0 coming soon, maybe they will be able to more fully support Linux. I'd be very glad if they would just get a real license manager. Having to renew all the licenses every six months is a real drag.

- Tony Ferro

Anthony J. Ferro aferro@as.arizona.edu
Steward Observatory, NICMOS Project Ph: (520) 621-8683
University of Arizona FAX: (520) 621-1891
Tucson, AZ 85721 <http://merlin.as.arizona.edu/~tferro/>
