
Subject: IDL installation tip for Linux
Posted by [penteado](#) on Mon, 07 Dec 2009 03:28:06 GMT
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Again, I try to install IDL in a clean system (in this case Fedora 12), and again I wonder when IDL will have a decent Linux installer (preferably using some packaging system), or at least give error messages telling why it is not working.

In this particular instance, the symptom was that calling `idlde` results in nothing at first sight: no error messages, no log files, no dialogs, no asking for the workspace, just a brief pause before returning to the command line. On further inspection, it only creates a skeleton `IDLWorkspace71` directory (without ever asking for the workspace to use).

What fixes it for me, which may come useful to some of you, is Adobe Reader. Many times I found that installing the Reader with a package manager (Adobe has a Fedora repository) gets as dependencies a bunch of X libraries, apparently several of which are also used by IDL.

Subject: Re: IDL installation tip for Linux
Posted by [Robbie](#) on Tue, 15 Dec 2009 22:36:29 GMT
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How have you managed to install 32 bit java on 64 bit Fedora system? There used to be good instructions for previous versions of Fedora, but that's not the case any more.

Subject: Re: IDL installation tip for Linux
Posted by [penteado](#) on Wed, 16 Dec 2009 00:36:59 GMT
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On Dec 15, 8:36 pm, Robbie <ret...@iinet.net.au> wrote:
> How have you managed to install 32 bit java on 64 bit Fedora system?
> There used to be good instructions for previous versions of Fedora,
> but that's not the case any more.

I used the 32 bit java from the Fedora repository. All it takes is to do, as root:

```
yum install java-1.6.0-openjdk.i686
```

Subject: Re: IDL installation tip for Linux
Posted by [Robbie](#) on Wed, 13 Jan 2010 03:05:46 GMT
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Just a follow up

```
> yum install java-1.6.0-openjdk.i686
No package java-1.6.0-openjdk.i686 available.
```

The 32 bit package for java didn't exist in my installation of Fedora 11. I tried many other perturbations with no success.

I followed directions at this website and it seemed to work fine.

<http://beginlinux.com/blog/2009/09/installing-32-bit-support-into-64-bit-fedora-11/>

Subject: Re: IDL installation tip for Linux
Posted by [penteado](#) on Wed, 13 Jan 2010 03:30:43 GMT
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On Jan 13, 1:05 am, Robbie <ret...@iinet.net.au> wrote:

```
> Just a follow up
>
>> yum install java-1.6.0-openjdk.i686
>
> No package java-1.6.0-openjdk.i686 available.
```

I forgot that it was only in Fedora 12 that the 32 bit architecture changed to i686. In F11, I see the package java-1.6.0-openjdk-1.6.0.0-20.b14.fc11.i586.rpm in the Fedora repository. There is also a Java 5 package, java-1.5.0-gcj-1.5.0.0-28.fc11.i586.rpm. The Fedora Updates repository has java-1.6.0-openjdk-1.6.0.0-30.b16.fc11.i586.rpm. I do not remember which one I used for IDL.

Anyway, I should have said to look for whatever 32 bit java is present on the distribution's repository, instead of quoting the name of a specific package.

Subject: Re: IDL installation tip for Linux
Posted by [Robbie](#) on Wed, 13 Jan 2010 23:37:59 GMT
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So are these dependancies missing from the packaged version of java in /usr/local/itt/idl/idlde/bin.linux.x86/jre/bin

Would it be a non-trivial exercise for the next version of IDL to interrogate all packaged shared objects before starting java?

Subject: Re: IDL installation tip for Linux

Posted by [penteado](#) on Thu, 14 Jan 2010 00:22:44 GMT

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On Jan 13, 9:37 pm, Robbie <ret...@iinet.net.au> wrote:

> So are these dependancies missing from the packaged version of java
> in /usr/local/itt/idl/idlde/bin.linux.x86/jre/bin
>
> Would it be a non-trivial exercise for the next version of IDL to
> interrogate all packaged shared objects before starting java?

I do not know where the dependencies originate. But IDL definitely needs a better installer, capable of figuring out if there are any missing dependencies. The nonuniformity of Linux distributions is no excuse, since there are several proprietary applications that have much easier installation. A few common examples:

- 1) Acrobat and Skype. Both share many dependencies with IDL, as I mentioned in this thread.
- 2) Intel's compilers and VTune. Both use Eclipse.
- 3) Sun's Java, Netbeans and compiler Studio.
- 4) Google Earth and Opera.

Of those, Acrobat and Skype provide repositories for Fedora (and I guess other distributions too), while the rest provide either rpm packages or install scripts that do a much better job than IDL's.

Subject: Re: IDL installation tip for Linux

Posted by [Michael Galloy](#) on Thu, 14 Jan 2010 23:49:15 GMT

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On 1/13/10 5:22 PM, pp wrote:

> On Jan 13, 9:37 pm, Robbie<ret...@iinet.net.au> wrote:
>> So are these dependancies missing from the packaged version of java
>> in /usr/local/itt/idl/idlde/bin.linux.x86/jre/bin
>>
>> Would it be a non-trivial exercise for the next version of IDL to
>> interrogate all packaged shared objects before starting java?
>

> I do not know where the dependencies originate. But IDL definitely
> needs a better installer, capable of figuring out if there are any
> missing dependencies. The nonuniformity of Linux distributions is no
> excuse, since there are several proprietary applications that have
> much easier installation. A few common examples:
>
> 1) Acrobat and Skype. Both share many dependencies with IDL, as I
> mentioned in this thread.
>
> 2) Intel's compilers and VTune. Both use Eclipse.
>
> 3) Sun's Java, Netbeans and compiler Studio.
>
> 4) Google Earth and Opera.
>
> Of those, Acrobat and Skype provide repositories for Fedora (and I
> guess other distributions too), while the rest provide either rpm
> packages or install scripts that do a much better job than IDL's.

I agree that IDL definitely needs a better Linux installer.

One other small suggestion: don't name installer "install"! This causes
all manner of odd problems with conflicts between it and
/usr/bin/install. It should be "install_idl" or something.

Mike

--

www.michaelgalloy.com
Research Mathematician
Tech-X Corporation

Subject: Re: IDL installation tip for Linux
Posted by BLemire@ittvis.com on Thu, 21 Jan 2010 18:03:52 GMT
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On Dec 6 2009, 8:28 pm, pp <pp.pente...@gmail.com> wrote:

> Again, I try to install IDL in a clean system (in this case Fedora12), and again I wonder when
IDL will have a decent Linux installer
> (preferably using some packaging system), or at least give error
> messages telling why it is not working.
>
> In this particular instance, the symptom was that calling idlde
> results in nothing at first sight: no error messages, no log files, no
> dialogs, no asking for the workspace, just a brief pause before
> returning to the command line. On further inspection, it only creates
> a skeleton IDLWorkspace71 directory (without ever asking for the
> workspace to use).

>
> What fixes it for me, which may come useful to some of you, is Adobe
> Reader. Many times I found that installing the Reader with a package
> manager (Adobe has aFedorarepository) gets as dependencies a bunch
> of X libraries, apparently several of which are also used by IDL.

We are running some tests with different OS's (Fedora 12, Ubuntu 9.10, etc) to develop a Tech Tip to help our customers install and run IDL on their systems. I was wondering if you did anything else other than install Adobe to get the IDLDE to work on your Fedora 12 installation. I was wondering if you have seen any strange behavior with the IDLDE since you got it to properly launch.

Our goal in support is to capture as much information as possible so that we can review potential solutions to these issues. We currently have a list of libraries that need to be installed to get the IDLDE to open without any errors. A library issue that has been reported to Eclipse is creating some bizarre behavior still. An example of this behavior is when using the mouse to try and save a newly created procedure nothing happens. If you click the enter button then the new file will be saved. We are researching workarounds to enable the mouse to work as expected. There may be some other issues that we have not yet run into so we will keep you posted on the progress we are making.

It is important to us that we provide as much help with the installation process as possible. Any information that you have feel will help us do this is welcome.

Best Regards,

Brandon

Brandon Lemire
ITT VIS
IDL Technical Support Engineer

Subject: Re: IDL installation tip for Linux
Posted by [penteado](#) on Thu, 21 Jan 2010 19:56:45 GMT
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On Jan 21, 4:03 pm, "BLem...@ittvis.com" <brandonlem...@gmail.com> wrote:

> We are running some tests with different OS's (Fedora 12, Ubuntu 9.10,
> etc) to develop a Tech Tip to help our customers install and run IDL
> on their systems. I was wondering if you did anything else other than
> install Adobe to get the IDLDE to work on your Fedora 12

> installation. I was wondering if you have seen any strange behavior
> with the IDLDE since you got it to properly launch.

As far as I remember, it was just adding Adobe Reader, or Skype, from their repositories, to a clean F12 x86_64 install. libXp was necessary even for the command line IDL, but the error message when it was missing clearly indicated it. The installation was from the Fedora install DVD, not a Live image. I will see if I find a spare hard drive to do a test install, to see what happens with the default package selection.

After that, I do not remember any strange behavior.

Subject: Re: IDL installation tip for Linux
Posted by [penteado](#) on Fri, 22 Jan 2010 00:04:09 GMT
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I just tested it. I installed F12 from the install DVD, and selected even less than the default packages. That is, in the package selection screen shown at

<http://docs.fedoraproject.org/install-guide/f12/en-US/html/s 1-pkgselection-x86.html>

I deselected the "Office and Productivity" group. I did no other changes to package selection during installation.

Then, after installing IDL 7.1.1, to get idl and idlde working, I had to do:

```
yum install libXp
yum install libXpm
```

These got idl working, but not idlde. Then:

```
yum install AdobeReader_enu.i486
yum install java-1.6.0-openjdk.i686
```

After setting up adobe-linux-i386.repo, obviously. That got idlde to work. Then to get them to work also on 32 bit mode, I had to do:

```
yum install libXpm.i686
yum install libXmu.i686
/sbin/restorecon '/opt/itt/idl71/bin/bin.linux.x86/libidl.so.7.1'
chcon -t textrel_shlib_t '/opt/itt/idl71/bin/bin.linux.x86/libidl.so.7.1'
```

That got idl -32 to work. Then, for idlde -32 to work, it was

necessary:

```
chcon -t execmem_exec_t '/opt/itt/idl71/bin/bin.linux.x86/
idl_opserver'
```

The libXp, libXpm and libXmu libraries installed just a single package each. Adobe Reader and Java had a large number of dependencies. I saved into a file the names of all packages that got installed, and more details about the error messages at each point. Let me know if you want to see those.

As I remember, when I did a similar install in another system, installing Skype from its repository had a similar effect as installing Adobe Reader.

In addition to adding Tech Tips to the website, once you determine all libraries that are needed in addition to a default install of the main distributions, this information should be incorporated into the install script. That is, it should try to determine which is the current distribution. Then, it finds the distribution is one of those it knows, it should test for the presence of the known additional dependencies, and report the missing ones.

In the case of F12, testing for the distribution can be done looking for the file /etc/system-release, which contains

Fedora release 12 (Constantine)

And I guess the same is present also on older versions of Fedora (I know it is in F11). Then, in Fedora systems, simple rpm query commands can be used to find out if the other libraries are installed.

Subject: Re: IDL installation tip for Linux

Posted by BLemire@ittvis.com on Fri, 22 Jan 2010 22:32:31 GMT

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On Jan 21, 5:04 pm, pp <pp.pente...@gmail.com> wrote:

- > I just tested it. I installed F12 from the install DVD, and selected
- > even less than the default packages. That is, in the package selection
- > screen shown at
- >
- > <http://docs.fedoraproject.org/install-guide/f12/en-US/html/s 1-pkgsele...>
- >
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> 7.1'
>
> That got idl -32 to work. Then, for idlde -32 to work, it was
> necessary:
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> dependencies, and report the missing ones.
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> for the file /etc/system-release, which contains
>
> Fedorarelease12(Constantine)
>

> And I guess the same is present also on older versions of Fedora (I
> know it is in F11). Then, in Fedora systems, simple rpm query commands
> can be used to find out if the other libraries are installed.

Thank you for providing this information. If you would be willing to email me the file that you saved I will make sure it gets into the appropriate hands.

Best,

Brandon
BLemire@ittvis.com
