
Subject: Re: make_rt for 32 and 64 bit applications?
Posted by [David Fanning](#) on Thu, 30 Jul 2009 13:31:28 GMT
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MichaelT writes:

> I have 32-bit-IDL running under 32-bit-Vista.
>
> From the description of make_rt it did not become quite clear to me
> whether or not it is possible to compile a 64-bit app on my system
> just by using the /Win64 keyword? Or do I need the 64-bit IDL for
> this?

My understanding of making run-time versions of IDL is that you must have each and every flavor of machine you wish to make a run-time version of. It's a gigantic pain and typically involves deleting about 50 pirated movies on your college student's machine so you can install IDL and make a version for a machine you don't personally own. :-(

Cheers,

David

--

David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: <http://www.dfanning.com/>
Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: make_rt for 32 and 64 bit applications?
Posted by [MichaelT](#) on Thu, 30 Jul 2009 15:22:48 GMT
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OK, thanks. So it is like I expected :-(

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> involves deleting about 50 pirated movies on your college
> student's machine so you can install IDL and make a version
> for a machine you don't personally own. :-(
:-)

Cheers,
Michael

Subject: Re: make_rt for 32 and 64 bit applications?

Posted by [pook41](#) on Fri, 31 Jul 2009 00:28:27 GMT

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On Jul 31, 12:22 am, MichaelT <michael.theus...@googlemail.com> wrote:

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>
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>> for a machine you don't personally own. :-(
>
> :-)
>
> Cheers,
> Michael

Michael,

If this question relates to AviStack, I run 64 bit IDL under Vista,
and can probably help you out
if you can't source a 64 bit version of IDL.

Andrew (currently in sunny Cairns, North QLD)

Subject: Re: make_rt for 32 and 64 bit applications?

Posted by [penteado](#) on Fri, 31 Jul 2009 04:53:28 GMT

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On Jul 30, 10:31 am, David Fanning <n...@dfanning.com> wrote:

> MichaelT writes:
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> for a machine you don't personally own. :-(

Actually, I found it to be possible to make the runtime versions for
other machines (in some cases, at least), selecting it with the
make_rt arguments. That is in recent versions of IDL, at least (I do

not remember it being possible in older ones).

But it takes a trick to it, which I did not see mentioned in the documentation: The result of the runtime build should contain, among other things, a directory with the IDL binaries. In the case of linux 32, for instance, it is in `idl71/bin/bin.linux.x86`, inside the directory made by `make_rt`. But when `make_rt` is run for a machine incompatible with the host, that directory will be missing, even though all other files and directories are made (even the `.exe`, `.ini` and `.inf` files for the Windows version when built in Linux, for instance).

However, there is a solution for this problem: the contents of that IDL bin directory seem to be independent of the program being compiled, so all it takes is to get a copy of that from some runtime built in the target architecture, and copy it into the proper place. But it gets better: if that directory (in the case of Win32, `bin.x86`) is copied into the IDL installation's bin directory (in the case of Linux, `itt/idl71/bin`, which is where `bin.linux.x86_64` and `bin.linux.x86` reside), then `make_rt` notices it and puts them into the runtime.

So now that I have copied the `bin.x86` and `bin.x86_64` from Windows runtime builds into my Linux `itt/idl71/bin`, I simply use the proper switch in `make_rt`, and it makes the whole finished product to use in Windows. I have only done that to make Windows (32 and 64) runtime versions from Linux. Maybe I will try it in the other direction, and also see if I can find a Mac to test with.

It may be that your Win32 IDL already contains the Win64 binaries (mine, installed in Vista 64, has both), in which case `make_rt` would already have everything it needs, so you would only need to select the `win32` or `win64` keyword.

Subject: Re: `make_rt` for 32 and 64 bit applications?
Posted by [penteado](#) on Fri, 31 Jul 2009 05:07:34 GMT
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On Jul 31, 1:53 am, pp <pp.pente...@gmail.com> wrote:

> On Jul 30, 10:31 am, David Fanning <n...@dfanning.com> wrote:
>

>> MichaelT writes:

>>> I have 32-bit-IDL running under 32-bit-Vista.

>

>>> From the description of `make_rt` it did not become quite clear to me
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> incompatible with the host, that directory will be missing, even
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> and .inf files for the Windows version when built in Linux, for
> instance).
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> However, there is a solution for this problem: the contents of that
> IDL bin directory seem to be independent of the program being
> compiled, so all it takes is to get a copy of that from some runtime
> built in the target architecture, and copy it into the proper place.
> But it gets better: if that directory (in the case of Win32, bin.x86)
> is copied into the IDL installation's bin directory (in the case of
> Linux, itt/idl71/bin, which is where bin.linux.x86_64 and
> bin.linux.x86 reside), then make_rt notices it and puts them into the
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> (mine, installed in Vista 64, has both), in which case make_rt would
> already have everything it needs, so you would only need to select the
> win32 or win64 keyword.

```

By the way, not all files in the IDL installation's bin directory are needed. Only those listed in manifest_rt.txt, which lives in idl71/bin/

make_rt. So if you do not have the binaries for the platform you want to build for, you could go to ITT's website, get the installation file for that platform, and copy only those listed in the manifest into the proper directory inside itt/idl71/bin.

Subject: Re: make_rt for 32 and 64 bit applications?

Posted by [David Fanning](#) on Fri, 31 Jul 2009 05:36:18 GMT

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pp writes:

> By the way, not all files in the IDL instalation's bin directory are
> needed. Only those listed in manifest_rt.txt, which lives in idl71/bin/
> make_rt. So if you do not have the binaries for the platform you want
> to build for, you could go to ITT's website, get the installation file
> for that platform, and copy only those listed in the manifest into the
> proper directory inside itt/idl71/bin.

Did I mention the whole thing is a gigantic pain in the ass?
(Linux and Windows are relatively easy, by the way. Have you added a Mac version yet?)

Cheers,

David

P.S. Let's just say if someone who understands this were to build and put IDL virtual machines for the various platforms in a publicly accessible place, the world would be much better for it. :-)

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: make_rt for 32 and 64 bit applications?

Posted by [Michael Galloy](#) on Fri, 31 Jul 2009 20:07:52 GMT

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pp wrote:

> On Jul 30, 10:31 am, David Fanning <n...@dfanning.com> wrote:
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> (mine, installed in Vista 64, has both), in which case make_rt would
> already have everything it needs, so you would only need to select the
> win32 or win64 keyword.

I successfully just made an uber-installation on Mac OS X including
Mac-Intel 32/64-bit, Linux 32/64-bit, and Windows 32-bit. Applications
made with MAKE_RT there should be able to run on any of those platforms
-- I tested Mac-Intel 64-bit, Linux 32-bit and Windows 32-bit and they
all worked fine. Cool! (Of course the output was 430+ MB.)

Mike

--

www.michaelgalloy.com

Associate Research Scientist

Tech-X Corporation
