
Subject: java bridge question

Posted by [Antonio Santiago](#) on Fri, 25 Nov 2005 08:24:26 GMT

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Hi group,

I don't know if any of you has had the same problem with the "idljavabrc" file. The problem is:

(1) If I use the sentence:

JVM Classpath = \$CLASSPATH:\$HOME/some_java_class_file

The idl (6.1) doesn't find the class.

(2) If I use the sentence with absolute path all is right:

JVM Classpath = \$CLASSPATH:/path/to/some_java_class_file

Any ideas??

PD: I'm working on linux with IDL6.1.

--

Antonio Santiago Piñerez

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(www: http://www.grahi.upc.edu/santiago)

(www: http://asantiago.blogspot.org)

GRAHI - Grup de Recerca Aplicada en Hidrometeorologia

Universitat Politècnica de Catalunya

Subject: Re: Java Bridge Question

Posted by [David Fanning](#) on Wed, 13 Sep 2006 17:31:50 GMT

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David Fanning writes:

>

> I have modified the idljavabrc configuration file in IDL

> in the following way:

>

> JVM Classpath =

> \$CLASSPATH;C:\RS\IDL62\external\objbridge\java\jbexamples.jar

> JVM Classpath =

> \$CLASSPATH;C:\RS\IDL62\external\objbridge\java\TryGeometry.jar

I've noticed in my log file that this doesn't set put my TryGeometry.jar file on the JVM path, so I have modified the configuration file to this:

```
JVM Classpath = $CLASSPATH;C:\RS\IDL62\external\objbridge\java\
\jbexamples.jar;C:\RS\IDL62\external\objbridge\java\TryGeometry.jar
```

This sets my JVM Classpath to have the right jar files, but I get the same result when I try to create the object. :-(

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: Java Bridge Question

Posted by [pskellicker](#) on Thu, 14 Sep 2006 00:39:07 GMT

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I would suggest verifying what is in the .jar file:

```
> jar tf TryGeometry.jar
.. should dump out the class names in the jar file. Verify you have
a class called Point and not ("fanning.com.Point" or "point" or
"TryGeometry$Point")
```

Then verify that there is a public constructor for Point that takes 2 floats as parameters.

```
> javap -classpath TryGeometry.jar Point
Should dump out the public methods of Point.
```

ScottK

David Fanning wrote:

```
> David Fanning writes:
```

```
>
```

```
>>
```

```
>> I have modified the idljavabrc configuration file in IDL
```

```
>> in the following way:
```

```
>>
```

>> JVM Classpath =
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>> JVM Classpath =
>> \$CLASSPATH;C:\RS\IDL62\external\objbridge\java\TryGeometry.jar
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> I've noticed in my log file that this doesn't set put my
> TryGeometry.jar file on the JVM path, so I have modified the
> configuration file to this:
>
> JVM Classpath = \$CLASSPATH;C:\RS\IDL62\external\objbridge\java
> \jbexamples.jar;C:\RS\IDL62\external\objbridge\java\TryGeometry.jar
>
> This sets my JVM Classpath to have the right jar files, but
> I get the same result when I try to create the object. :-(
>
> Cheers,
>
> David
>
> --
> David Fanning, Ph.D.
> Fanning Software Consulting, Inc.
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Subject: Re: Java Bridge Question
Posted by [Mike Wallace](#) on Thu, 14 Sep 2006 06:37:58 GMT
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If I may ask, how are you creating the jar file? What do you see when you run "jar tf path\to\TryGeometry.jar"?

-Mike

Subject: Re: Java Bridge Question
Posted by [Nigel Wade](#) on Thu, 14 Sep 2006 12:38:13 GMT
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pskellicker@ameritech.net wrote:

> I would suggest verifying what is in the .jar file:
>
>> jar tf TryGeometry.jar
> .. should dump out the class names in the jar file. Verify you have
> a class called Point and not ("fanning.com.Point" or "point" or

```
> "TryGeometry$Point")
>
> Then verify that there is a public constructor for Point that takes 2
> floats as parameters.
>
>> javap -classpath TryGeometry.jar Point
> Should dump out the public methods of Point.
>
```

If the constructor was invalid/missing the error would be:

```
% Constructor Point::Point(float,float) not found
```

I would agree that you need to look at the structure of the jar. Did you include any paths in the jar? i.e. did you create the jar from the directory containing the class files and specify them as *.class, so that there is no preceding path? Java is very fussy about paths and packages, and the path must match the package declaration exactly.

```
jar tf TryGeometry.jar
```

should list at least:

```
META-INF/
META-INF/MANIFEST.MF
Point.class
```

--

Nigel Wade, System Administrator, Space Plasma Physics Group,
University of Leicester, Leicester, LE1 7RH, UK
E-mail : nmw@ion.le.ac.uk
Phone : +44 (0)116 2523548, Fax : +44 (0)116 2523555

Subject: Re: Java Bridge Question
Posted by [David Fanning](#) on Thu, 14 Sep 2006 13:25:46 GMT
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pskellicker@ameritech.net writes:

```
> I would suggest verifying what is in the .jar file:
>
>> jar tf TryGeometry.jar
> .. should dump out the class names in the jar file. Verify you have
> a class called Point and not ("fanning.com.Point" or "point" or
> "TryGeometry$Point")
>
```

> Then verify that there is a public constructor for Point that takes 2
> floats as parameters.
>
>> javap -classpath TryGeometry.jar Point
> Should dump out the public methods of Point.

Sigh... Ok, I'm in that "learn everything at once" stage.

When I downloaded the JAVA distribution, it came with the NetBeans IDE, which is what I have been using to edit, build, and run my JAVA programs. According to the NetBeans documentation, when you "build" a project, it creates a "package" of the objects in its "dist" directory. This is, in fact, where I find the TryGeometry.jar file.

So, I agree I need to examine the contents of this file. But I don't know how to access the "command line" where these commands are to be run. I've tried the Windows command line, but these commands are not recognized as valid commands.

There is a disconnect, obviously, between the book I am using to learn JAVA and the NetBeans IDE. (Not to mention errors in the book, which I am learning to recognize, but which nevertheless slow me down.) The book assumes a command line, too, but doesn't mention how to install it. (If that is what one does with it.) It does suggest the JDK as a way to access these commands, and I certainly have that, but don't have the foggiest idea what to do with it or how to send a command to it.

I could probably spend 7-8 hours trying to figure this out and become an expert in the damn thing in the process, or maybe some kind soul can give me a clue. :-)

Cheers,

David

--

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Subject: Re: Java Bridge Question

Posted by [David Fanning](#) on Thu, 14 Sep 2006 13:50:41 GMT

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David Fanning writes:

- > So, I agree I need to examine the contents of this file.
- > But I don't know how to access the "command line" where
- > these commands are to be run. I've tried the Windows
- > command line, but these commands are not recognized
- > as valid commands.

OK, I added the JDK to my PATH and the commands now work from the command window. When I examine the contents of my TryGeometry jar file, I get this:

```
tryGeometry/  
tryGeometry/Line.class  
tryGeometry/Main.class  
tryGeometry/Point.class
```

I don't know WHY the tryGeometry here starts with a lowercase t instead of the UPPERCASE T I've used every other damn place, but that apparently is the problem! Now I can successfully create my object in IDL!

```
IDL> obj = obj_new("IDLJAVAOBJECT$TRYGEOMETRY_POINT", $  
"tryGeometry.Point", 0.25, 0.25)
```

Sigh... What a lot of work. Thanks, everyone, for your help. Now, on to the next BIG thing... :-)

Cheers,

David

--

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Subject: Re: Java Bridge Question

Posted by [Mike Wallace](#) on Thu, 14 Sep 2006 15:01:58 GMT

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- > OK, I added the JDK to my PATH and the commands now work
- > from the command window. When I examine the contents of

> my TryGeometry jar file, I get this:
>
> tryGeometry/
> tryGeometry/Line.class
> tryGeometry/Main.class
> tryGeometry/Point.class
>
> I don't know WHY the tryGeometry here starts with a lowercase
> t instead of the UPPERCASE T I've used every other damn place,
> but that apparently is the problem! Now I can successfully
> create my object in IDL!

The tryGeometry directory in your jar file should correspond to the package declaration in your java files. I'm not familiar with NetBeans, but it may have automatically added the package line for you when you created a new Java file. By convention package names in Java begin with a lowercase letter so the IDE may have lowercased the package name without you noticing.

Since we're already on the topic, I'd like to take this moment to give a plug for Eclipse -- the best Java IDE out there. :-)

-Mike

Subject: Re: Java Bridge Question
Posted by [David Fanning](#) on Thu, 14 Sep 2006 15:13:45 GMT
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Mike Wallace writes:

> The tryGeometry directory in your jar file should correspond to the
> package declaration in your java files. I'm not familiar with NetBeans,
> but it may have automatically added the package line for you when you
> created a new Java file. By convention package names in Java begin with
> a lowercase letter so the IDE may have lowercased the package name
> without you noticing.

It appears to have done just this. The odd thing though, is that the name is spelled differently just about *everywhere*! When I look in the Projects window, under "Source Packages" it is spelled "trygeometry". Go figure.

> Since we're already on the topic, I'd like to take this moment to give a
> plug for Eclipse -- the best Java IDE out there. :-)

Well, if you believe rumours, we are ALL going to be

using this soon. Guess I better go download it and start getting used to it...You available this afternoon? I'll probably have questions. :-)

Cheers,

David

--

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Subject: Re: Java Bridge Question

Posted by [David Fanning](#) on Thu, 14 Sep 2006 15:19:25 GMT

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David Fanning writes:

> Well, if you believe rumours, we are ALL going to be
> using this soon. Guess I better go download it and start
> getting used to it...You available this afternoon? I'll
> probably have questions. :-)

Here is my basic problem:

"By collaborating and exploiting core integration technology, tool producers can leverage platform reuse and concentrate on core competencies to create new development technology."

I don't have the foggiest idea what the hell this means! :-(

Cheers,

David

--

David Fanning, Ph.D.

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

Subject: Re: Java Bridge Question

Posted by [Maarten\[1\]](#) on Thu, 14 Sep 2006 15:37:22 GMT

David Fanning wrote:

> Here is my basic problem:

>

> "By collaborating and exploiting core integration
> technology, tool producers can leverage platform
> reuse and concentrate on core competencies to
> create new development technology."

>

> I don't have the foggiest idea what the hell this means! :-(

I'd file it under "Management bullshit", and just try to use Eclipse. I
think that that MBS piece is meant to otehr developers who might
consider using Eclipse as a basis for their development environment
(i.e. someone at ITTVIS is trying to figure out what that really
means).

Maarten

Subject: Re: Java Bridge Question

Posted by [David Fanning](#) on Thu, 14 Sep 2006 15:59:56 GMT

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Folks,

Eclipse installed!! First line in the Overview:

"Eclipse is a kind of universal tool platform -
an open extensible IDE for anything and nothing
in particular."

Oh, oh. :-(

Cheers,

David

--

David Fanning, Ph.D.

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

Subject: Re: Java Bridge Question

Posted by [Mike Wallace](#) on Thu, 14 Sep 2006 16:21:27 GMT

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> Eclipse installed!! First line in the Overview:
>
> "Eclipse is a kind of universal tool platform -
> an open extensible IDE for anything and nothing
> in particular."
>
> Oh, oh. :-(

Don't knock it just yet. The plug-in capability is one of Eclipse's strongest features. They are actually one of the few products that handled plug-ins/extensibility correctly.

-Mike

Subject: Re: Java Bridge Question

Posted by [David Fanning](#) on Thu, 14 Sep 2006 16:34:53 GMT

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Mike Wallace writes:

> Don't knock it just yet. The plug-in capability is one of Eclipse's
> strongest features. They are actually one of the few products that
> handled plug-ins/extensibility correctly.

Oh, I'm not knocking it yet. (Although I do wish that whoever is writing their technical documentation would try to follow his own directions once.) I was just thinking that the description of the product reminded me of another piece of software I use frequently. In any case, I'm always in favor of humor in technical documentation. It's the only way to get through it, usually. :-)

Cheers,

David

--

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Subject: Re: Java Bridge Question

Posted by [David Fanning](#) on Thu, 14 Sep 2006 17:37:43 GMT

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Mike Wallace writes:

- > Don't knock it just yet. The plug-in capability is one of Eclipse's
- > strongest features. They are actually one of the few products that
- > handled plug-ins/extensibility correctly.

Alright, I admit it, it's pretty cool. If you want me in the next couple of months I'll be over at comp.lang.java, hanging out, learning JAVA.

Cheers,

David

P.S. Who said there wasn't life after IDL!?

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

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

Subject: Re: Java Bridge Question

Posted by [news.qwest.net](#) on Thu, 14 Sep 2006 19:07:58 GMT

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"David Fanning" <davidf@dfanning.com> wrote in message
news:MPG.1f7320e65f72c019989cc1@news.frii.com...

- > Here is my basic problem:
- >
- > "By collaborating and exploiting core integration
- > technology, tool producers can leverage platform
- > reuse and concentrate on core competencies to
- > create new development technology."
- >
- > I don't have the foggiest idea what the hell this means! :-(

Basically, a focus on core competencies presents challenges in the context of strategic decision-making oriented to market growth vectors.

Similarly, developing operational and conceptual learning means that management must concentrate on the operational imperative of increasing the

visibility of key business metrics.

I hope that clears it up!

Cheers,
bob
