

---

Subject: Re: Faking X Display for IDL Bridge  
Posted by [jeffnettles4870](#) on Mon, 13 Sep 2010 14:39:10 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

On Sep 13, 10:30 am, Haje Korth <hajeko...@gmail.com> wrote:

> Hi,  
> I just had this great idea of forking IDL jobs on my 16-CPU server  
> using the IDL to IDL Bridge. The code runs great from the command line  
> but using a UNIX cron job I get the error message "IDL\_IDLBridge:  
> Unable to establish X Connection." To late did I understand the the  
> help that reads:  
>  
> "Warning: On UNIX systems, the IDL\_IDLBridge requires that the DISPLAY  
> environment variable be set to a valid X Windows display. If no  
> display is available, execution of the IDL\_IDLBridge will halt, with  
> error messages that include:IDL\_IDLBridge: Unable to establish X  
> Connection."  
>  
> The requirement for an X display seems silly, as my code does not  
> display anything. Is there a way to fake the existence of an X window?  
> Or did I just wasted my time coding this feature?  
>  
> Haje

I'm not a linux expert by any means, so forgive me if this is stupid,  
but couldn't you just set the display env't variable anyway whether  
you use it or not? It does seem silly that you have to set it whether  
or not you use it, but is there any harm in just setting it?

On another note, how difficult was it to code up the IDL\_IDLBridge  
forking? I've thought about this myself but haven't really dived into  
doing it other than a few (failed) half-hearted stabs.

Jeff

---

---

Subject: Re: Faking X Display for IDL Bridge  
Posted by [Foldy Lajos](#) on Mon, 13 Sep 2010 15:05:21 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

On Mon, 13 Sep 2010, Haje Korth wrote:

> Hi,  
> I just had this great idea of forking IDL jobs on my 16-CPU server  
> using the IDL to IDL Bridge. The code runs great from the command line  
> but using a UNIX cron job I get the error message "IDL\_IDLBridge:  
> Unable to establish X Connection." To late did I understand the the  
> help that reads:

>  
> "Warning: On UNIX systems, the IDL\_IDLBridge requires that the DISPLAY  
> environment variable be set to a valid X Windows display. If no  
> display is available, execution of the IDL\_IDLBridge will halt, with  
> error messages that include:IDL\_IDLBridge: Unable to establish X  
> Connection."  
>  
> The requirement for an X display seems silly, as my code does not  
> display anything. Is there a way to fake the existence of an X window?  
> Or did I just wasted my time coding this feature?  
>  
> Haje

vncserver is your friend.

regards,  
Lajos

---

Subject: Re: Faking X Display for IDL Bridge  
Posted by [Haje Korth](#) on Mon, 13 Sep 2010 15:06:08 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

Jeff,  
coding the bridge was not that difficult after googleing a few  
examples, some of which were found in this news group. The code I ended  
up using is given below.

I am trying to set the display variable but I must be doing this  
wrong as it is not working. I am also looking at Xvfb per David  
Fannings web site, but I am not smart enough to make it work.

Haje

```
obridge=objarr(nproc)
for chain=0,nproc-1 do obridge[chain]=obj_new('idl_idlbridge')

for chain=0,nproc-1 do begin
  j=i+chain
  if (j lt cnt) then begin
    fname=files[idx[j]]
    obridge[chain]->setvar,'fname',fname
    obridge[chain]->execute,'idl_process,fname',/nowait
  endif
endfor

for chain=0,nproc-1 do while obridge[chain]->status() ne 0 do
```

wait,0.0001

```
obj_destroy,obridge  
obridge=objarr(nproc)  
for chain=0,nproc-1 do obridge[chain]=obj_new('idl_idlbridge')
```

On Sep 13, 10:39 am, "Jeff N." <jeffnettles4...@gmail.com> wrote:

> On Sep 13, 10:30 am, Haje Korth <hajeko...@gmail.com> wrote:

>

>

>

>> Hi,

>> I just had this great idea of forking IDL jobs on my 16-CPU server  
>> using the IDL to IDL Bridge. The code runs great from the command line  
>> but using a UNIX cron job I get the error message "IDL\_IDLBridge:  
>> Unable to establish X Connection." To late did I understand the the  
>> help that reads:

>

>> "Warning: On UNIX systems, the IDL\_IDLBridge requires that the DISPLAY  
>> environment variable be set to a valid X Windows display. If no  
>> display is available, execution of the IDL\_IDLBridge will halt, with  
>> error messages that include:IDL\_IDLBridge: Unable to establish X  
>> Connection."

>

>> The requirement for an X display seems silly, as my code does not  
>> display anything. Is there a way to fake the existence of an X window?  
>> Or did I just wasted my time coding this feature?

>

>> Haje

>

> I'm not a linux expert by any means, so forgive me if this is stupid,  
> but couldn't you just set the display env't variable anyway whether  
> you use it or not? It does seem silly that you have to set it whether  
> or not you use it, but is there any harm in just setting it?

>

> On another note, how difficult was it to code up the IDL\_IDLBridge  
> forking? I've thought about this myself but haven't really dived into  
> doing it other than a few (failed) half-hearted stabs.

>

> Jeff

---

Subject: Re: Faking X Display for IDL Bridge

Posted by [Haje Korth](#) on Mon, 13 Sep 2010 15:13:27 GMT

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

---

Lajos,  
do you have usage instructions? I started vncserver and then IDL but I  
still get the message "cannot connect to X windows display"

Haje

On Sep 13, 11:05 am, FÖLDY Lajos <fo...@rmki.kfki.hu> wrote:

> On Mon, 13 Sep 2010, Haje Korth wrote:

>> Hi,

>> I just had this great idea of forking IDL jobs on my 16-CPU server  
>> using the IDL to IDL Bridge. The code runs great from the command line  
>> but using a UNIX cron job I get the error message "IDL\_IDLBridge:  
>> Unable to establish X Connection." To late did I understand the the  
>> help that reads:

>

>> "Warning: On UNIX systems, the IDL\_IDLBridge requires that the DISPLAY  
>> environment variable be set to a valid X Windows display. If no  
>> display is available, execution of the IDL\_IDLBridge will halt, with  
>> error messages that include:IDL\_IDLBridge: Unable to establish X  
>> Connection."

>

>> The requirement for an X display seems silly, as my code does not  
>> display anything. Is there a way to fake the existence of an X window?  
>> Or did I just wasted my time coding this feature?

>

>> Haje

>

> vncserver is your friend.

>

> regards,

> Lajos

---

Subject: Re: Faking X Display for IDL Bridge

Posted by [Foldy Lajos](#) on Mon, 13 Sep 2010 15:29:41 GMT

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

---

On Mon, 13 Sep 2010, Haje Korth wrote:

> Lajos,  
> do you have usage instructions? I started vncserver and then IDL but I  
> still get the message "cannot connect to X windows display"  
>  
> Haje

- login to the server  
- vncserver

this prints something like:

...

New 'X' desktop is server:1

...

- vncviewer server:1
- open a terminal, start your IDL job
- exit vncviewer (usually F8)
- logout

Any time later:

- login to the server
- vncviewer server:1
- check your output, ...
- exit vncviewer
- (vncserver -kill server:1 if your job is finished)
- logout

regards,  
lajos

---

Subject: Re: Faking X Display for IDL Bridge  
Posted by [Haje Korth](#) on Mon, 13 Sep 2010 17:52:34 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

Lajos,  
thanks for the additional input. With your help, I managed to get the system up and running. In case anyone is interested, the trick was to first fire up vncserver to set the password. Then, in the shell script that is called from the cron job, I first set "vncserver :20" to create the virtual x window and then also do "setenv DISPLAY machine\_name:20". IDL and the IDL\_IDLBridge will then no longer complain about the missing X connection. Problem solved, although I do believe that IDL should be more user friendly to this regard.

Thanks very much again for everyone's responses.

Cheers,  
Haje

On Sep 13, 11:29 am, FÖLDY Lajos <fo...@rmki.kfki.hu> wrote:  
> On Mon, 13 Sep 2010, Haje Korth wrote:  
>> Lajos,  
>> do you have usage instructions? I started vncserver and then IDL but I  
>> still get the message "cannot connect to X windows display"  
>

>> Haje  
>  
> - login to the server  
> - vncserver  
>     this prints something like:  
>     ...  
>     New 'X' desktop is server:1  
>     ...  
> - vncviewer server:1  
> - open a terminal, start your IDL job  
> - exit vncviewer (usually F8)  
> - logout  
>  
> Any time later:  
>  
> - login to the server  
> - vncviewer server:1  
> - check your output, ...  
> - exit vncviewer  
> - (vncserver -kill server:1 if your job is finished)  
> - logout  
>  
> regards,  
> lajos

---

---

Subject: Re: Faking X Display for IDL Bridge  
Posted by [wita](#) on Tue, 14 Sep 2010 07:35:41 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

Haje,

Have a look at the virtual framebuffer:  
<http://en.wikipedia.org/wiki/Xvfb>

This one allows you to have X display without a physical screen.

Allard

---

---

Subject: Re: Faking X Display for IDL Bridge  
Posted by [Haje Korth](#) on Tue, 14 Sep 2010 14:18:03 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

Allard,  
thanks for the tip. Xvfb was actually the first program that showed up  
on my google search and was also recommended on David Fanning's web

site. However, I was unable to make it work. It was probably due to my impatience. vncserver worked right away so I stuck with it.

Cheers,  
Haje

On Sep 14, 3:35 am, Allard de Wit <allard.de...@wur.nl> wrote:

> Haje,

>

> Have a look at the virtual framebuffer:<http://en.wikipedia.org/wiki/Xvfb>

>

> This one allows you to have X display without a physical screen.

>

> Allard

---