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Subject: Remotely running IDL on a Mac using X11  
Posted by [Patrick V. Ford](#) on Wed, 17 Dec 2008 02:57:34 GMT  
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Greetings,

I am (occasionally) using IDL on a MacOS X 10.5.6, and I want to set it up so a person I am collaborating with can access my Mac, which is considerably more powerful than his PC laptop. I believe I have solved the issues with port forwarding through my firewall/vpn box and getting the Mac configured to accept the ssh -X logins.

Not being a unix person, I am now at a point where I can open a remote (severe) X11 shell and enter CLI commands, but I don't know how to open/run IDL from the X11 shell and see the GUI. Some of this may be due to paths being needed to be set.

I would greatly appreciate advice on how to get this functioning. It is probably simple once I know.

Thanks

Patrick Ford, M.D.  
Pford\*@bcm.tmc.edu

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Subject: Re: Remotely running IDL on a Mac using X11  
Posted by [Patrick V. Ford](#) on Thu, 18 Dec 2008 13:54:43 GMT  
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On Dec 18, 7:41 am, "T.H." <timhoagl...@gmail.com> wrote:  
> On Dec 17, 10:33 pm, "pfo...@bcm.tmc.edu" <pf...@bcm.tmc.edu> wrote:  
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>> On Dec 17, 7:30 am, Jeremy Bailin <astroco...@gmail.com> wrote:  
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>>> If IDL is installed in /Applications/itt/idl, then make sure that /
>>> Applications/itt/idl/bin is in your path, and type:
>
>>> idlde
>
>>> (you can do "echo $PATH" to see what the path looks like... if it's
>>> not there, then add it with "export PATH=$PATH:/Applications/itt/idl/
>>> bin" if you're using a Bourne-style shell like sh or bash or "setenv
>>> PATH $PATH:/Applications/itt/idl/bin" if you're using a C-shell style
>>> shell like csh or tcsh)
>
>>> -Jeremy.
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>> The path made it work on the local machine. Over my LAN, when I logged
>> in using ssh -X or ssh -Y, I got the following error message when I
>> typed in idlde:
>
>> _RegisterApplication(), FAILED TO establish the default connection to
>> the Window Server, _CGSDefaultConnection() is NULL.
>
>> Below is what my ssh_config file looks like. Do I need to change it?
>
>> #    $OpenBSD: ssh_config,v 1.22 2006/05/29 12:56:33 dtucker Exp $
>
>> # This is the ssh client system-wide configuration file. See
>> # ssh_config(5) for more information. This file provides defaults for
>> # users, and the values can be changed in per-user configuration files
>> # or on the command line.
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>> # Configuration data is parsed as follows:
>> # 1. command line options
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```

```

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>> comprehensive
>> # list of available options, their meanings and defaults, please see
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>> # ssh_config(5) man page.
>
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>> # ForwardAgent no
>> # ForwardX11 yes
>> # RhostsRSAAuthentication no
>> # RSAAuthentication yes
>> # PasswordAuthentication yes
>> # HostbasedAuthentication no
>> # GSSAPIAuthentication no
>> # GSSAPIDelegateCredentials no
>> # GSSAPIKeyExchange no
>> # GSSAPITrustDNS no
>> # BatchMode no
>> # CheckHostIP yes
>> # AddressFamily any
>> # ConnectTimeout 0
>> # StrictHostKeyChecking ask
>> # IdentityFile ~/.ssh/identity
>> # IdentityFile ~/.ssh/id_rsa
>> # IdentityFile ~/.ssh/id_dsa
>> # Port 22
>> # Protocol 2,1
>> # Cipher 3des
>> # Ciphers aes128-cbc,3des-cbc,blowfish-cbc,cast128-
>> cbc,arcfour,aes192-cbc,aes256-cbc
>> # EscapeChar ~
>> # Tunnel no
>> # TunnelDevice any:any
>> # PermitLocalCommand no
>
>> Thanks
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>> pf
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> It looks like X11 is turned on on the server side but it also needs to
> be turned on on the client side. Does the Windows PC you are trying
> to connect from have an X-server application installed and running?
> For example, I always use Xming. Start it before connecting to the
> remote machine.

```

I was trying it from a Mac Mini on my LAN at home with X11. I could get xclock and xeyes running, but they didn't need a path change.

When I have time, I will try it from a pc running vista.

Thanks

pf

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Subject: Re: Remotely running IDL on a Mac using X11  
Posted by [karo03de](#) on Thu, 18 Dec 2008 14:20:37 GMT  
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You will not be able to run the GUI, which is displayed under Apple Window system. That is only with ScreenSharing possible.  
However the terminal version will work. Type idl and ...  
Regards  
Karsten

Am Wed, 17 Dec 2008 03:57:34 +0100 schrieb pford-@bcm.tmc.edu  
<pford@bcm.tmc.edu>:

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>  
> Patrick Ford, M.D.  
> Pford\*@bcm.tmc.edu

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Erstellt mit Operas revolutionärem E-Mail-Modul: <http://www.opera.com/m2/>

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Subject: Re: Remotely running IDL on a Mac using X11  
Posted by [Patrick V. Ford](#) on Thu, 18 Dec 2008 20:37:00 GMT  
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>> # GSSAPITrustDNS no
>> # BatchMode no
>> # CheckHostIP yes
>> # AddressFamily any
>> # ConnectTimeout 0
>> # StrictHostKeyChecking ask
>> # IdentityFile ~/.ssh/identity
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```

```
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> For example, I always use Xming. Start it before connecting to the
> remote machine.
```

Below is information I received from RSI. I have not had the opportunity to try it out yet, so I cannot verify that it works.

PF

---

Hey Patrick,

Yes, you should be able to run IDL this way, but it will only work in command line mode for IDL 7.0.

Typically the error you are receiving is caused because you need to use

X forwarding with IDL so that it can make use of the X windowing system.

To do this you would want to use the -X switch like so:

```
ssh -X username@x.x.x.x
```

Of course changing the x's to the IP address. Then once you are connected, open a second x11 terminal and type:

```
xhost +
```

Once logged into the machine you may also have to set up the DISPLAY environment variable. On a bash shell you would type (in the first terminal that you ssh-ed with):

```
export DISPLAY=x.x.x.x:0.0
```

But try it without doing this first because if you forget to set it back

to DISPLAY=:0.0 then when you try to use it locally, your X windows may

not display.

Or you could set up a user account for him on your machine, that way the DISPLAY variable would only be active in his user account.

The other alternative is to use a VPN connection. Google that and you can find free clients for it. This allows you to have a remote desktop connection which would allow him to work as if he were sitting at your machine, full GUI and all, then he could use the IDL workbench.

Sincerely,  
Josh Elliott  
Technical Support Engineer

--

ITT Visual Information Solutions  
303-413-3920  
support@ittvis.com

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Subject: Re: Remotely running IDL on a Mac using X11  
Posted by [Patrick V. Ford](#) on Thu, 18 Dec 2008 21:26:17 GMT  
[View Forum Message](#) <> [Reply to Message](#)

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On Dec 18, 8:20 am, Karsten <karo0...@gmail.com> wrote:

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> Erstellt mit Operas revolutionärem E-Mail-Modul:<http://www.opera.com/m2/>

Are you saying that no graphic display at all or no Mac OS X GUI? What I was aiming for is the Xwindows(X11) display that I see on my Mac with its Xwindows interface on a remote pc. Years ago, I had to work with a similar set up using SUN workstations. I am not particularly interested having the Mac experience remotely, but it really won't be much use to run IDL in a CLI if the windows created by the IDL app are not seen. The screen sharing solution using VNC while workable is not ideal since there are times I would like to be logged on and he may want to log on remotely on his account. Unless we are both working on the same thing, it just becomes a mess. Been there - done that when an administrator decides to do something on the pc I am trying to do work on - neither one gets anything done.

Regards,

PF

---

Subject: Re: Remotely running IDL on a Mac using X11  
Posted by [Marshall Perrin](#) on Thu, 18 Dec 2008 23:33:53 GMT  
[View Forum Message](#) <> [Reply to Message](#)

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pford-@bcm.tmc.edu <pford@bcm.tmc.edu> wrote:

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> much use to run IDL in a CLI if the windows created by the IDL app are  
> not seen.

Graphics display windows for plots and GUIs built with IDL widgets all work perfectly well over X11 between Macs. I use this all the time.

What you can't get to work remotely over X11 is the Eclipse-based IDLDE.

For that you'd need to use VNC or some similar screen-sharing solution.

Marshall

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Subject: Re: Remotely running IDL on a Mac using X11  
Posted by [Michael Galloy](#) on Fri, 19 Dec 2008 06:40:44 GMT  
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On Dec 18, 4:33 pm, Marshall Perrin <mper...@bantha.org> wrote:  
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This works just fine too (of course, it could be quite slow depending on the speed of your connection).

Mike

--

[www.michaelgalloy.com](http://www.michaelgalloy.com)  
Tech-X Corporation  
Associate Research Scientist

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Subject: Re: Remotely running IDL on a Mac using X11  
Posted by [karo03de](#) on Sun, 21 Dec 2008 00:18:46 GMT  
[View Forum Message](#) <> [Reply to Message](#)

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On 18 Dez., 22:26, "pfo...@bcm.tmc.edu" <pf...@bcm.tmc.edu> wrote:  
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> administrator decides to do something on the pc I am trying to do work
> on - neither one gets anything done.
>
> Regards,
>
> PF

```

Everything should be clear now:

```

ssh -Y user@host
idl
tvscldist(128)

```

should bring up the X window at least on a client with installed X11 and access restrictions solved. This is typically the case with Unixes and MacOSX 10.5.5 and above.

But which X window system is installed on the PC windows machine? You will need a running X windows system on the PC client! I have some time ago tried cygwin+X11, which is some sort of unix emulation on Windows. However, that needs some unix knowledge!

Regards  
Karsten

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Subject: Re: Remotely running IDL on a Mac using X11  
Posted by [M. Katz](#) on Sun, 21 Dec 2008 05:44:41 GMT  
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Here's one possible commercial alternative:

If the Mac running IDL is running the Server version of OS X, you might be able to use Aqua Connect

<http://www.aquaconnect.net/index.php>  
to serve Mac OS X to "thin clients" on any platform. It's different than VPN/Timbuktu/Apple Remote Desktop/etc. because the different users will \*not\* be sharing the same screen when both are logged in. I saw a demo of this program in action that was able to run on an iPhone (in addition to Windows, Linux, and Other Macs). One mode of this scheme is that an application, like a word processor, can be running just one time in memory, but multiple users would be using their own unique windows of the application.

Since I haven't used the program, I can't comment beyond the demo I saw.

M. Katz

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