



INDINF10 – DEBUGGING WITH ECLIPSE

Microcontroller



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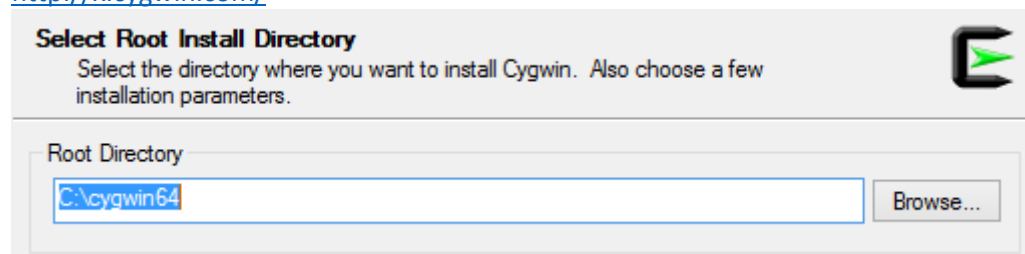
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X-Server

Cygwin

Installation

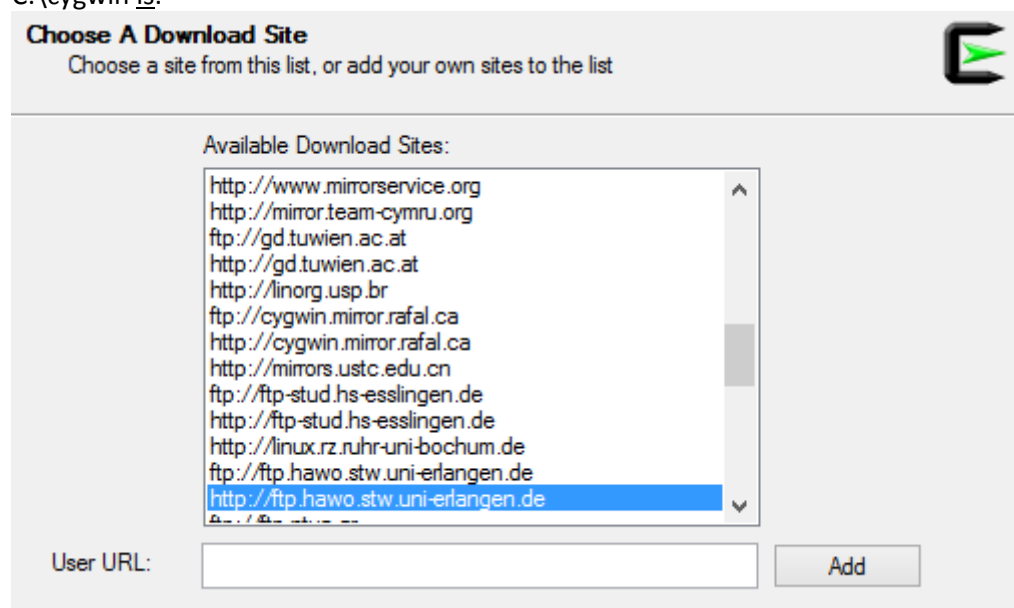
<http://x.cygwin.com/>



Select Root Install Directory
Select the directory where you want to install Cygwin. Also choose a few installation parameters.

Root Directory:

Root directory should be without spaces, e.g. C:\Program Files is NOT valid on the other side C:\cygwin is.



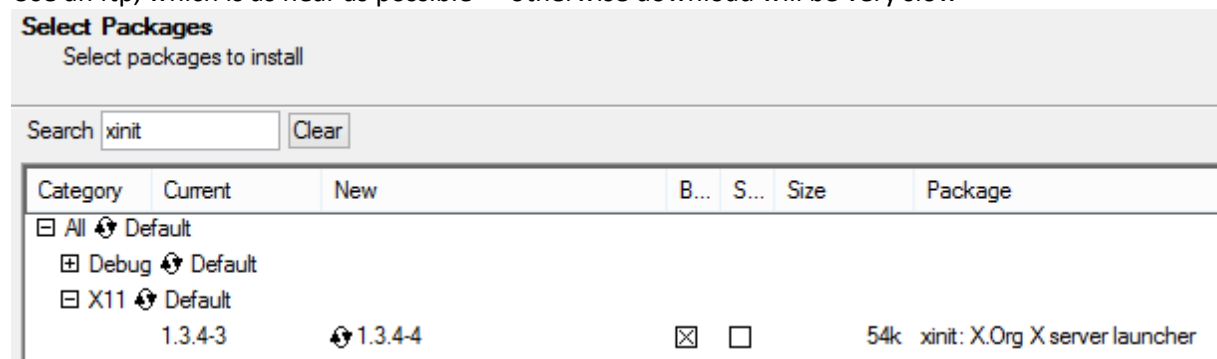
Choose A Download Site
Choose a site from this list, or add your own sites to the list

Available Download Sites:

- <http://www.mirror-service.org>
- <http://mirror.team-cymru.org>
- <ftp://gd.tuwien.ac.at>
- <http://gd.tuwien.ac.at>
- <http://linorg.usp.br>
- <ftp://cygwin.mirror.rafael.ca>
- <http://cygwin.mirror.rafael.ca>
- <http://mirrors.ustc.edu.cn>
- <ftp://ftp-stud.hs-esslingen.de>
- <http://ftp-stud.hs-esslingen.de>
- <http://linux.rz.nuhr-uni-bochum.de>
- <ftp://ftp.hawo.stw.uni-erlangen.de>
- <http://ftp.hawo.stw.uni-erlangen.de>

User URL:

Use an ftp, which is as near as possible -> otherwise download will be very slow



Select Packages
Select packages to install

Search

Category	Current	New	B...	S...	Size	Package
<input type="checkbox"/> All	Default					
<input type="checkbox"/> Debug	Default					
<input type="checkbox"/> X11	Default					
	1.3.4-3	1.3.4-4	<input checked="" type="checkbox"/>	<input type="checkbox"/>	54k	xinit: X.Org X server launcher

Install *xinit*

Configuration

Enable X11 forwarding on the remote machine

```
~/etc/ssh/ssh_config" 54L, 1691C
```

Edit the `ssh_config` file in the root directory of your ssh-provider, and enable x11-forwarding e.g.

```
Host *  
# ForwardAgent no  
# ForwardX11 yes  
# ForwardX11Trusted yes
```

See this thread <http://superuser.com/questions/310197/how-do-i-fix-a-cannot-open-display-error-when-opening-an-x-program-after-sshi>

Usage

Open the Cygwin terminal, which is usually in *Cygwin/bin/mintty*

```
C:\cygwin64\bin>mintty.exe -
```

Open it with the `-` argument as you can see above.

A terminal will open up and you may type in *startxwin*.

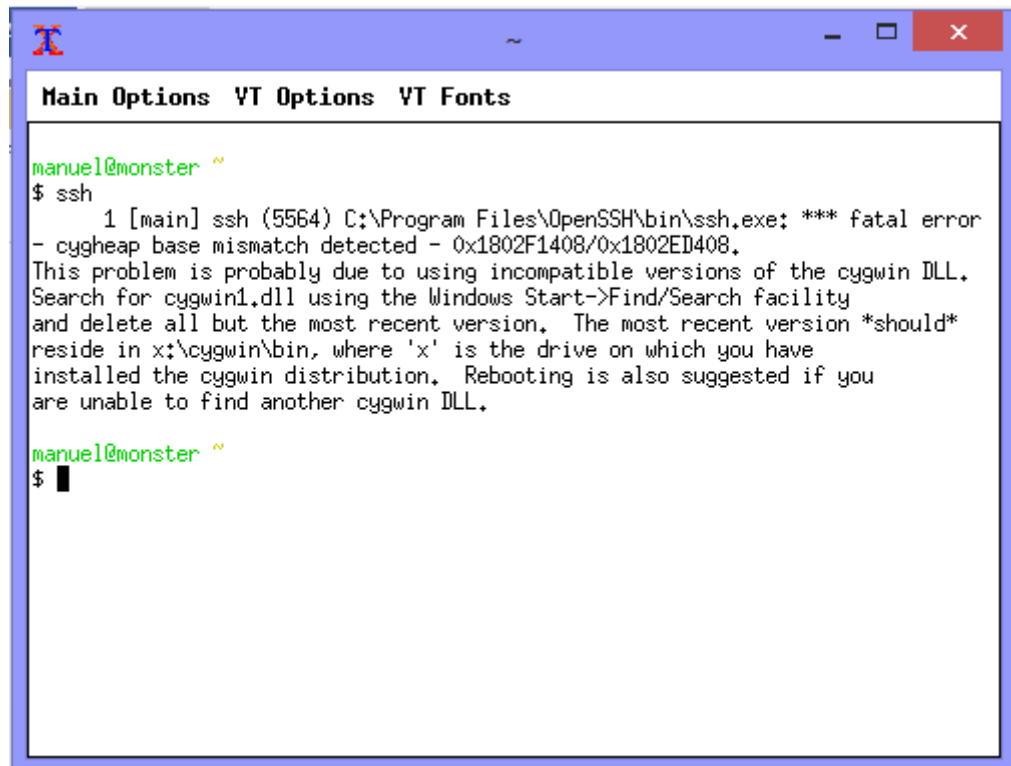
Another terminal will open up and you can now start your ssh-connection e.g. as follows.

```
- ssh -Y username@hostname
```

You can now start any GUI Application you want and it will be printed on your X-Server.

Troubleshooting

Ssh fatal error



ATTENTION, backup your *ssh/bin/cygwin1.dll* before continuing.

Copy the *cygwin1.dll* from the bin directory of your Cygwin root directory (*Cygwin/bin*), to your ssh bin directory (*ssh/bin*).

Untrusted X11 forwarding

```
$ ssh -X schueler@school
schueler@school's password:
Warning: untrusted X11 forwarding setup failed: xauth key data not generated
Warning: No xauth data; using fake authentication data for X11 forwarding.
Linux sqldb 3.2.0-4-amd64 #1 SMP Debian 3.2.65-1 x86_64
```

Use *-Y* instead of *-X*, because *-Y* uses trusted X11 forwarding, see this Thread

<http://serverfault.com/questions/273847/what-does-warning-untrusted-x11-forwarding-setup-failed-xauth-key-data-not-generated>