## **Installing GrADS v2.0 on Microsoft Windows**

From OpenGrads Wiki

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The OpenGrADS distribution of the Windows version of GrADS comes in two flavors. Most users will be interested in the *Win32 Superpack*, which bundles the GrADS binaries, user defined extensions, and all else that is needed to run GrADS on Windows. For those experienced users working on a Cygwin (http://cygwin.com) environment, a lighter weight version is also available, although it requires the same level of setup as on a Linux platform.

## Downloading the software

These are available on sourceforge:

https://sourceforge.net/projects/opengrads/files/grads2

Starting with version **2.0.1.oga.1** The *Win32 Superpak* is now available with package grads2/<verion>/Windows. For previous versions, the Windows binary had their own package: grads2-windows. The i686-pc-cygwin binaries are also available in

the same directory.

## The Win32 Superpack

A full description of the *Win32 Supperpack* can be found in the Getting Started with Win32 GrADS (http://opengrads.org/doc/win32-v2) document. This distribution is designed as a *turn key* system and under normal circumstances it requires no configuration whatsoever. The distribution comes in the form of a self-installing EXE file or as a single ZIP file for those users who do not have the necessary privileges to install software. The *Win32 Superpack* is designed to be relocatable: one can move the whole GrADS20/ directory to a CDROM or memory stick and take it on the road. This feature is particularly useful for bundling the software in DVDs and CDROMs containing large datasets.

For ease of maintenance, this Windows release contains exactly the same X Windows code base used in the Linux/Unix versions. As such, it requires an X server to be installed on Microsoft Windows. In previous releases of Win32 GrADS the installation of this X Server was a separate step. And it was also inconvenient, because no reliable *free* X Server was available. In the past few years, though, the situation has changed. The Cygwin/X Project has produced a very stable free X Server, and more recently, the Xming project is producing a fast, small, (and relocatable) X server that builds natively on Win32 without the need for the Cygwin POSIX layer (which the main GrADS binaries still use). The Xming server is currently bundled with the *Win32 Superpack*.

To create the illusion of simplicity, each GrADS binary fires up the Xming server whenever it starts. (However, Xming is smart enough to keep only one copy of itself running at a time.) As in previous versions of Win32 GrADS, it detects its own location and sets the relevant environment variables (GADDIR, GASCRP, etc) automatically. As long as you keep the directory tree intact, no user intervention is necessary. However, if you want to take the OpenGrADS directory tree apart you can still do so, but in this case you will need to setup the environment variables yourself. See the notes on Installing GrADS on Linux/MacOS X/Unix for a description of the environment variables involved.

## **Binary installation for Cygwin users**

If you have Cygwin (http://cygwin.com) installed, then proceed to install the OpenGrADS Bundle which includes binaries, data and extension files as described on Installing GrADS on Linux/MacOS X/Unix. Starting with version **2.0.1.oga.1** the binary tarball that you want to download is grads-x.x.x-bundle-i686-pc-cygwin.tar.gz from

```
https://sourceforge.net/projects/opengrads/files/grads2
```

Look under the desired version, subdirectory Windows; for previous versions look under

```
https://sourceforge.net/projects/opengrads/files/grads2-windows
```

In addition, make sure that you install the X windows client libraries from the Cygwin repository, the usual way with Cygwin's setup.exe utility. The next step is for you install an X server. As you install the X11 client libraries you may want to install the Cygwin/X sever as well. Or else, download and install Xming from

```
http://sourceforge.net/project/showfiles.php?group_id=156984
```

Xming is fast, compact and easily relocatable. You can find more information about Xming here:

http://www.straightrunning.com/XmingNotes/

### FAQ/Known Issues

# When WiFi is turned OFF you get *Error in GXSTRT: Unable to connect to X server*

#### Status: Resolved.

Make sure you have the *loopback adapter* installed, otherwise you will not be on a network, will have no local IP address available, and thus no possibility to communicate with the X server. Installing a loopback adapter solves the problem. This can be done from the *Device Manager* in the Control Panel. Just choose "Add legacy hardware" from the "Action" menu there, click on Next, then choose "Install the hardware that I manually select from the list (Advanced)" and click Next, choose "Network adapters", then proceed to the next step and wait for the lists to be populated. Choose "Microsoft" as the manufacturer, and finally "Microsoft Loopback Adapter". Let the newly created adapter initialize and that should do the trick. (Thanks to Hernan Hesala).

### Where are the dynamic extensions we had in v1.9.0-rc1?

Status: Resolved.

Earlier versions of the OpenGrADS builds of GrADS v2 did not support dynamic extensions. As of v2.0.a3.oga.1 dynamic extensions are now included.

### Even after setting my firewall to grant GrADS and Xming access, grads stll does not start Xming automatically.

**Status:** *Issue appear to have been resolved with the February 25, 2008 build.* 

One solution is to prepare a small batch file to start Xming

c:\PCGrADS\Xming\Xming -multiwindow :7

and set the environment variable '*DISPLAY* to localhost:7.0. You can do this from the control pannel (see your installation instructions (http://opengrads.org /doc/win32/Getting\_Started.html#Install).)

### I miss the white screen with blue fonts of Win32e GrADS v1.8. How can I bring it back?

If you liked the previous rxvt based command line window you should be able to bring it back with something like:

rxvt -sb -sl 2048 -bg white -fg blue -fn fixedsys -e opengrads

You should be able to create a <code>rxvt</code> shortcut passing the options above. Instead of the <code>fixedsys</code> font (option <code>-fn</code> above), you can use any font you choose. I particularly like the *Monaco* font which is a Mac programming font. You can find a free version of *Monaco* for Windows here (http://www.lowing.org/fonts/Free/). Get file <code>MONACO.TTF</code>, install it from the Control Panel, and then use it with <code>rxvt</code>

```
rxvt -sb -sl 2048 -fn monaco -e opengrads
```

or whatever background (-bg)/foreground (-fg) color you like.

### I am a Linux/Unix user and find myself forced to use Windows. How can I make it more usable?

You may find this page (http://www.burningcutlery.com/derek/winsetup/) useful.

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