**Create One-click Installer Assembly Deployment Guide**

**Revision History**

|  |  |  |
| --- | --- | --- |
| **Author** | **Revision Number** | **Date** |
| yedtoss | 1.0 | 03/08/2015 |
|  |  |  |
|  |  |  |

[Deployment Instructions](#h.30j0zll)

1. Organization of Submission

[2. Application Setup](#h.3znysh7)

[3. Rebuilding the Installer Instructions](#h.2et92p0)

[WINDOWS](#h.tyjcwt)

[MAC OS X](#h.3dy6vkm)

[LINUX](#h.1t3h5sf)

[General Guide about the installer build procedure](#h.4d34og8)

[4. Installation Instructions](#h.2s8eyo1)

[Windows](#h.17dp8vu)

[MAC OS X](#h.3rdcrjn)

[LINUX](#h.26in1rg)

[5. Usage](#h.lnxbz9)

[6. Resource Contact List](#h.35nkun2)

# **Deployment Instructions**

# **Organization of Submission**

docs/ Contains this deployment guides

src/ Contains the installer for MAC and Windows. The installer for Linux are self-contained in the

public installer.

src/installer\_links.txt Link to installer

finalfix.txt Notes for Final Reviewer

# **Application Setup**

Windows 7/8 64 bits

MAC OS X 10.10 64 bits

Linux/Ubuntu 14.04 64 bits

Inno Setup >=5.5.5 (<http://www.jrsoftware.org/isdl.php>) on Windows

Packages >=1.1.1 (<http://www.macupdate.com/app/mac/34613/packages>) on MAC OS X

Note the version of the OS

(Other version of OS might worked but not tested.)

# **Rebuilding the Installer Instructions**

$INSTALL\_DIR is used in the following to mean the root directory containing the files you get when you install the currently available installer for each os.

So to rebuild the installer for Windows, use the directory you got when installing the current Windows binary and similarly for Linux and MAC.

## **WINDOWS**

### *Recompiling NemohFortran and NemohPython*

* You need to make sure you based your new code on the one provided in

$INSTALL\_DIR/OpenWarp.

* Follow the docs/openwarp\_deployment.pdf instructions for Windows (section 5) to build a local copy.

In the above document replace **$NEMOH\_FORTRAN by** $INSTALL\_DIR/OpenWarp/NemohImproved/Nemoh

**$ROOT/src** should be replaced by $INSTALL\_DIR/OpenWarp/openwargui

The python version of nemoh should be $INSTALL\_DIR/OpenWarp/openwargui/nemoh

Anaconda should be $INSTALL\_DIR/OpenWarp/Anaconda

* Now copy the newly generated libnemoh.dll and libnemoh.dll.a to $INSTALL\_DIR/OpenWarp/Anaconda/DLLs. If your code needs any additional DLLS make sure to put them there

### *Repackaging the installer*

* Copy the directory src/Windows/installer to $INSTALL\_DIR such that $INSTALL\_DIR/OpenWarp and $INSTALL\_DIR/installer exists.
* Download and Install Inno Setup version equal or greater than 5.5.5 from <http://www.jrsoftware.org/isdl.php>
* Open $INSTALL\_DIR/installer/openwarp.iss with Inno Setup (You may double-click on the file)
* Inno Setup will open. Click on Build → Compile (menu). Once done the installer will be in $INSTALL\_DIR/OpenWarp/installer/Output/OpenWarp.exe

## **MAC OS X**

### *Recompiling NemohFortran and NemohPython*

* First you need to make sure you based your new code on the one provided in

$INSTALL\_DIR/OpenWarp.

* Follow the docs/openwarp\_deployment.pdf instructions for MAC OS X (section 6) to build a local copy

In the above document replace **$NEMOH\_FORTRAN by** $INSTALL\_DIR/OpenWarp/NemohImproved/Nemoh

**$ROOT/src** should be replaced by $INSTALL\_DIR/OpenWarp/openwargui

The python version of nemoh should be $INSTALL\_DIR/OpenWarp/openwargui/nemoh

Anaconda should be $INSTALL\_DIR/OpenWarp/anaconda

* Now copy the newly generated libnemoh.dylib to $INSTALL\_DIR/OpenWarp/anaconda/lib
* Then run in a terminal

install\_name\_tool -change "libnemoh.dylib" "../anaconda/lib/libnemoh.dylib" $INSTALL\_DIR/OpenWarp/openwarpgui/nemoh/solver\_fortran.so

### *Packaging the installer*

* Copy the directory src/MAC/installer to $INSTALL\_DIR such that $INSTALL\_DIR/OpenWarp and $INSTALL\_DIR/installer exists.
* Download and install Packages (version >= 1.1.1) from <http://www.macupdate.com/app/mac/34613/packages>
* Open $INSTALL\_DIR/OpenWarp/installer/OpenWarp with Packages (You can double-click on it)
* In the menu click on Build → Build or Type Command +B
* The installer will start building and once done the MAC OS X packages will be in $INSTALL\_DIR/OpenWarp/installer/build/OpenWarp.pkg

## **LINUX**

Here the file installer.sh is taking care of everything. In most cases you don't have to do anything extras in case the code is updated. Read "General Guide about the installer build procedure" to see the cases where you might need to update this file. In any case just make sure installer.sh and run.sh are accurate and can be used to install and run the new code in a clean system.

### *Recompiling NemohFortran and NemohPython*

Not needed as the installer.sh take care of that automatically.

### *Packaging the installer*

You just need to compress the directory $INSTALL\_DIR.

## **General Guide about the installer build procedure**

OpenWarp is composed of three main parts: the Fortran part of Nemoh whose source is available in

$INSTALL\_DIR/OpenWarp/NemohImproved/Nemoh; the Python part of Nemoh whose source is available in $INSTALL\_DIR/OpenWarp/openwarpgui/nemoh and the OpenWarp GUI part whose source is available in $INSTALL\_DIR/OpenWarp/openwarpgui/openwarp.

If you do not update the Fortran part of Nemoh or the file $INSTALL\_DIR/OpenWarp/openwarpgui/nemoh/solver\_fortran.pyx then the only step you have to do to rebuild the installer is to package it directly. There is no need to do any re-compilation steps.

When you update the Fortran or $INSTALL\_DIR/OpenWarp/openwarpgui/nemoh/solver\_fortran.pyx you need to recompile them and copy the generated library in a well-defined location. See the relevant OS guide for more information.

In case you added some python dependencies not currently available, you would need to package them in the installer. For Linux you can update the relevant $INSTALL\_DIR/OpenWarp/openwarpgui /requirements.txt and it will be installed automatically by $INSTALL\_DIR/OpenWarp/installer.sh

For Windows and MAC OS X you would need to install those dependencies in the provided Anaconda site-packages available in $INSTALL\_DIR/OpenWarp/Anaconda and $INSTALL\_DIR/OpenWarp/anaconda respectively.

If you add some external libraries as dependencies you need to make sure they are available to end users. In Windows you can just copy them to $INSTALL\_DIR/OpenWarp/Anaconda/DLLs.

In MAC OS X you can just copy them to $INSTALL\_DIR/OpenWarp/anaconda/lib. Make sure there are static or update their dependencies using install\_name\_tool (You can see an example in the MAC OS X specific instructions).

For Linux/Ubuntu, it is preferred to use apt-get install to make those external libraries available to end users.

# **Installation Instructions**

Get the OpenWarp Installer from <https://drive.google.com/folderview?id=0B56WkDEeFyNHfmRZNmcyZjNWOTFfTzZabGgxZVdsQUg3Y3d6SXloWk8xMXo0bXhnSUVTOGM&usp=sharing>

The windows one is in the Windows directory

The MAC one is in the MAC directory

The Linux one is in the Linux directory

## **Windows**

* Download the Windows binary of OpenWarp and double-click on it to start the installation procedure.
* To run the OpenWarp GUI later go to the directory where you install it and double-click "run.bat". See section 5 of this document for more information.

NB: OpenWarp GUI is known not to work with Internet Explorer. So you must use Chrome or Firefox

with the url http://127.0.0.0.1:8386/index.html.

If you get a cookie error open the url in private navigation

## **MAC OS X**

* Download the MAC OS X packages and right-click on it. Then select Open in the contextual menu to install it.
* To run the OpenWarp GUI later, go to the directory where you install it and double-click "run" or "run.sh". See section 5 of this document for more information.

NB:

If you get a cookie error open the url (http://127.0.0.0.1:8386/index.html) in private navigation

## **LINUX**

* The Linux installation is a little different from other OS. You need to make sure you are connected to Internet the first time you want to install it at least.
* Extract the OpenWarp GUI in a folder and in a terminal run "bash installer.sh". (You can double-click to install if you extracted it to an ext4 file system). You will be asked for your sudo password. Make sure to enter it.
* To run the installer later on, enter the folder where you had extracted the OpenWarp and run "bash run.sh". See section 5 of this document for more information.

NB:

If you get a cookie error open the url (http://127.0.0.0.1:8386/index.html) in private navigation

This is known to happen in some configuration of Firefox

# **Usage**

To launch the application on Windows, go to where you have installed it (by default C:\Program Files (x86)\OpenWarp) and double-click "run.bat"

You can then access the GUI using the url http://127.0.0.0.1:8386/index.html

Don't use Internet Explorer as it is known not to work with the GUI.

To launch the application on Linux, go to where you have installed it (The directory where you extracted the archive) from a terminal and run "bash run.sh"

You can then access the GUI using the url http://127.0.0.0.1:8386/index.html

To launch the application on MAC OS X, go to where you have installed it (by default /Applications/OpenWarp) and double-click on "run" file

You can then access the GUI using the url http://127.0.0.0.1:8386/index.html

Now start reading from section 7 to section 9 of the deployment docs/openwarp\_deployment.pdf in order to verify and use the application.

The test\_files can be get from $INSTALL\_DIR/OpenWarp/test\_files where $INSTALL\_DIR is the directory where you installed the application.

The user data where simulation files are stored is located in OpenWarpFiles/user\_data inside your home directory.

# **Resource Contact List**

|  |  |
| --- | --- |
| **Name** | **Resource Email** |
| yedtoss |  |