

Hasdoc documentation

Version 1.0

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1. Minimum system requirements

- 4 GB RAM (for link stage)¹
- The more memory on your hard drive, the better²
- internet connection

For older computer hardware, it will be possible to increase the memory in the SWAP partition or to add it in a non-physical way, which, if desired, can run temporarily until the system restarts.

The following command in Linux can be used to check if the second line contains any memory:

```
free -m
```

if the last column of the first row does not even exceed 4 GB (about 4096 MB), and the SWAP memory is equal to 0, it is worthwhile to immediately execute the following commands:

```
sudo su
cd /var
touch swapfile
chmod 600 swapfile
dd if=/dev/zero of=/var/swapfile bs=1024k count=1000
mkswap /var/swapfile
swapon /var/swapfile
exit
```

If after executing the command:

```
swapon -show
```

a newly created place will appear, then you can start the compilation stage. **Once the hasdoc compilation is complete**, it's a good idea to clean up the previous steps with the following commands:

```
sudo su
swapoff /var/swapfile
rm /var/swapfile
exit
```

The above tutorial is modelled on the content of the website:

<http://www.linuxandubuntu.com/home/how-to-create-or-increase-swap-space-in-linux>

1 docs.wxwidgets.org/3.0/page_introduction.html#page_introduction_requirements

2 docs.wxwidgets.org/3.0/page_introduction.html#page_introduction/requirements

2. Installation of dependencies

There are several dependencies without which it will not be possible to start or build correctly. Some of them may be optional, but in order to minimize the risk of error, it is advisable to install them. Below is a list of packages whose names may vary slightly depending on the Linux distribution:

- git
- pkg-config
- webkitgtk2
- wxgtk2
- libglu
- g++ (dla Windows – MinGW, dla MacOS X – Developer Tools)
- ghc w wersji 8.2.2 lub nowszej
- ghc-libs
- stack
- wkhtmltopdf

For Windows you can download these dependencies from the following pages:

- git - <https://git-scm.com/download/win>
- Haskell Platform 8.2.2³ – <https://haskell.org/platform/windows.html>
- wkhtmltopdf – wkhtmltopdf.org/downloads.html
- MinGW – sourceforge.net/projects/mingw-w64
- wxWidgets in version 3.0.4 or below (install in the path C:\Libs\wxWidgets\3.0.4) – <https://www.wxwidgets.org/downloads>

For wxWidgets in Windows, you will probably need to run additional commands after installation to make the library detectable by wxHaskell. You can find a description of the additional steps on the page:

wiki.haskell.org/WxHaskell/Windows#wxWidgets_3.0_and_wxHaskell_3E.3D_0.92

3 github.com/wxHaskell/wxHaskell

3. Project downloading

The project is located on the Github website, from which you can clone it with one command using the "git" program. The program will download the project to the path in which "git" is currently active:

```
git clone https://github.com/juliagoda/hasdoc
```

4. Remarks

To ensure stability for the current version of the software, the wxHaskell module was downloaded from <https://github.com/wxHaskell/wxHaskell> from the commit number: *b7ac21d1dba48076dc7538d1967a14d59cf6b615* . This module can be found in the main hasdoc and hasdoc-gen catalogues. The stack.yaml files contain references to these paths.

It is also required to build in a path that does not contain white characters (e.g. spaces). It is worth changing the path to another one or overwrite the white characters in the directories.

If an "out of memory" error nevertheless occurs during the building process, you can create a swap file with a larger capacity than you currently have and try again.

5. Building and installation of the project

In the main directory of the hasdoc project, you have to perform the following commands with the help of stack:

```
stack setup && stack build
```

Once the construction is complete, it must be completed:

```
stack install hasdoc
```

However, if you want to install the files in a different place than the default one, you can use this option:

```
stack install --local-bin-path your_selected_path
```

You can also run the program without installation with:

```
stack exec hasdoc
```

or in Windows:

```
stack exec hasdoc-exe
```

6. Uninstalling a project

The project is uninstalled from the system by going to the path previously specified by the command "stack install --local-bin-path your_selected_path" or in the default path. The default path can be recalled by command:

```
stack path --local-bin
```

7. Problems - links

Over time, more solutions will appear here:

Troubleshooting

<https://wiki.haskell.org/WxHaskell/Troubleshooting>

„ Error: wx-config not found, please install wx-config before installing wxc „

Installation of wxgtk2 or another version:

<https://stackoverflow.com/questions/24103475/unable-to-install-wx>

„ <command line>: can't load .so/.DLL for: stdc++ (addDLL: could not load DLL) ”

<https://stackoverflow.com/questions/6687254/problem-running-wxhaskell-windows/10077872>

„ setup: Missing dependency on a foreign library:

** Missing C library: wx_macu-2.8 ”*

<https://stackoverflow.com/questions/3644502/wxhaskell-fails-because-it-depends-on-wx-macu-2-8>

„ C:\wxWidgets-3.0.2\lib\gcc_dll\mswud\...: getDirectoryContents: does not exist (The system cannot find the path specified.)

cabal: Leaving directory '.' „

<https://stackoverflow.com/questions/38419108/how-to-install-wxhaskell?rq=1>

„ c:/program files/haskell platform/2014.2.0.0/mingw/bin/./lib/gcc/x86_64-w64-mingw32/4.6.3/./.././../x86_64-w64-mingw32/bin/ld.exe: cannot find -lwx collect2: ld returned 1 exit status „

<https://stackoverflow.com/questions/31216967/linker-error-while-building-statically-linked-wxhaskell-application?rq=1>

„ wx-config Error: wxWidgets hasn't been found installed at 'C:\MinGW\msys\1.0\local'. „

<https://stackoverflow.com/questions/22005678/how-to-install-wxhaskell-on-windows-with-mingw-msys/27210384>