

## Singularity with WSL 2.0

This tutorial aims to install Singularity 4.0.2 on your Windows machine and is in most parts a direct extract from the `INSTALL.md` of that release. **This tutorial may be out of date**, so check the `INSTALL.md` if you are using a different release.

### Prerequisites

#### 1. Activate WSL

In a Windows PowerShell, run following command as an administrator. You can get an administrator PowerShell by clicking the Windows icon, searching for „PowerShell“, and right-clicking the application and selecting „*Run as administrator*“.

```
wsl --install
```

WSL will then be available from your Start menu.

#### 2. Install Dependencies

The first thing to do is to update your Linux distribution (the default WSL distribution is Ubuntu, if you change it this command may be different):

```
sudo bash -c 'apt update && apt upgrade -y'
sudo apt install -y \
    autoconf \
    automake \
    cryptsetup \
    git \
    libfuse-dev \
    libglib2.0-dev \
    libseccomp-dev \
    libtool \
    pkg-config \
    runc \
    squashfs-tools \
    squashfs-tools-ng \
    uidmap \
    wget \
    zlib1g-dev
```

Then install `go`. If you have `go` installed previously, be sure to remove `/usr/local/go` first.

```
export VERSION=1.21.4 OS=linux ARCH=amd64
sudo rm -rf /usr/local/go
wget -O /tmp/go${VERSION}.${OS}-${ARCH}.tar.gz
```

```
https://dl.google.com/go/go${VERSION}.${OS}-${ARCH}.tar.gz
sudo tar -C /usr/local -xzf /tmp/go${VERSION}.${OS}-${ARCH}.tar.gz
# make go available for usage:
echo 'export PATH=$PATH:/usr/local/go/bin' >> ~/.bashrc
source ~/.bashrc
```

## Install Singularity

All Singularity releases can be found here: <https://github.com/sylabs/singularity/releases>

We will continue with 4.0.2, so we will fetch and compile the code. After successful compilation it will be installed on your system:

```
wget -O /tmp/singularity-ce-4.0.2.tar.gz
https://github.com/sylabs/singularity/releases/download/v4.0.2/singularity-ce-4.0.2.tar.gz
tar -C /tmp -xvf /tmp/singularity-ce-4.0.2.tar.gz
cd /tmp/singularity-ce-4.0.2
make -C builddir && sudo make -C builddir install
```

Your Singularity installation can now be tested via

```
singularity --version
```

If everything went well, the output should be

```
singularity-ce version 4.0.2
```

From: <https://hpc.tu-berlin.de/> - **HPC-Cluster-Dokumentation**

Permanent link: [https://hpc.tu-berlin.de/doku.php?id=hpc:tutorials:singularity:singularity\\_with\\_wsl&rev=1727456644](https://hpc.tu-berlin.de/doku.php?id=hpc:tutorials:singularity:singularity_with_wsl&rev=1727456644)

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