

ACSE Quick installation guide

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1 Requirements

- Windows 10 build 14393 or above.
- The ACSE source code version 1.1.5 or above. This can be provided by your lecturer on the appropriate channels (e.g: BeeP).
- Microsoft Visual Studio Code

2 Installation of Windows Subsystem for Linux (WSL)

In order to provide a clean installation of the required binaries for the compiler to work, without the need to install a complete Virtual Machine on the System or to use the dual boot, the best option is to opt for the WSL. Windows Subsystem for Linux is a lightweight version of a Linux distro under Windows 10 environment. With it, the POSIX syscalls of the virtualized machine are on-the-fly translated into Windows NT system calls.

1. Press  + , type **powershell** and press  +  + . Insert the Administrator password if prompted.

2. Type:

```
Enable-WindowsOptionalFeature -Online -FeatureName Microsoft-Windows-Subsystem-Linux
```

and press . Reboot the computer if asked.

3. Go to the Microsoft Store Application and install a packaged Linux distro. Penguin or Ubuntu are recommended. Once opened the previous installed Linux distro and waited the environment to set up, choose a UNIX username and a password.

4. Install the required packages:

```
sudo apt update && sudo apt install gcc flex bison
```

5. In Windows, open Visual Studio Code and install the Remote - WSL extension. This will prevent you from installing `code` under Linux environment.
6. In Windows, open Explorer and type `\\wsl$\\<DISTRO_NAME>` in the search bar (for example: `\\wsl$\\Ubuntu`) and press `Enter`. Use this Virtual Server to access Linux folders.

3 First setup and usage of ACSE