

How to set up my system for VST 3

In order to build **VST 3** plug-ins, you need the source code of the **VST 3** (interface definition), a IDE /compiler, cmake and a VST 3 host application.

Get the source code

From the downloaded *vstsdk.zip* file

Download the **VST 3 SDK**: check [VST 3 SDK Download](#).

Unpack the zip file to a development folder on your computer.

From GitHub:

```
git clone --recursive https://github.com/steinbergmedia/vst3sdk.git
```

Get a IDE for development

For Windows

On **Windows**, we recommend you to use **Visual Studio C++** or **Visual Studio Code**. You can get it for free here <https://visualstudio.microsoft.com/free>.

For MacOS

On MacOS, a first choice is **Xcode** (available here <https://developer.apple.com/xcode/>).

For Linux

In order to build the SDK successfully, you need an Ubuntu-based **Linux** distribution. Other distributions might work as well, but are not tested.

1. Download Linux: <http://www.ubuntu.com> or <https://www.linuxmint.com>
2. Install it directly or in a virtual machine like Parallels
We used and tested on Ubuntu 20.04 LTS.

Package Requirements

Building the SDK examples requires installation of several package:

Required:

```
sudo apt-get install cmake gcc "libstdc++6" libx11-xcb-dev libxcb-util-dev  
libxcb-cursor-dev libxcb-xkb-dev libxkbcommon-dev libxkbcommon-x11-dev  
libfontconfig1-dev libcairo2-dev libgtkmm-3.0-dev libsqlite3-dev libxcb-  
keysyms1-dev
```



On Raspbian/Debian, replace "libxcb-util-dev" with "libxcb-util0-dev"

Optional:

```
sudo apt-get install subversion git ninja-build
```

A recommended IDE (optional): **QtCreator**

On this page:

- [Get the source code](#)
 - [From the downloaded vstsdk.zip file](#)
 - [From GitHub:](#)
 - [For Windows](#)
 - [For MacOS](#)
 - [For Linux](#)
- [Get a IDE for development](#)
 - [For Windows](#)
 - [For MacOS](#)
 - [For Linux](#)
- [Get cmake](#)
- [Get a VST 3 host application](#)

Related pages:

- [VST 3 Links](#)
- [Using cmake for building VST 3 plug-ins](#)

```
sudo apt-get install qtcreator
```

i You can also use the bash file "[setup_linux_packages_for_vst3sdk.sh](#)" included in VST3_SDK/tools folder!

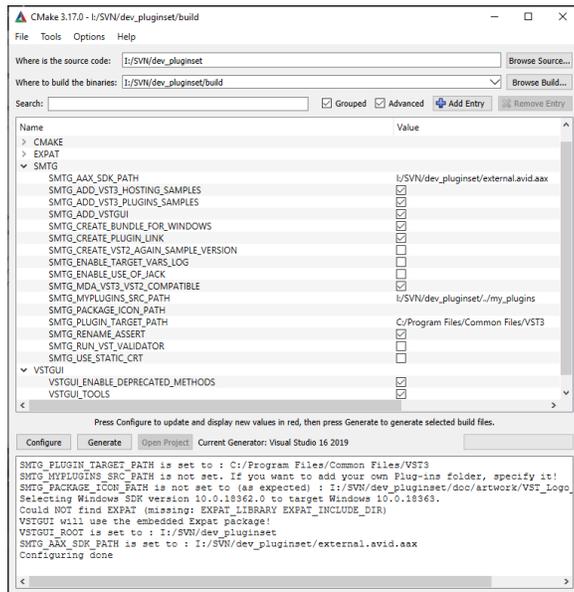
- i**
- Instead of **gcc** compiler, a recent version of **clang** compiler will also work!
 - **libgtkmm3** is required for **VSTGUI** and the **editorhost** example!
 - **Jack Audio** (<http://www.jackaudio.org>) is required for **audiohost** example!

Get cmake

In order to control the compilation process and create IDE project, **VST 3 SDK** uses the open-source and cross-platform tool **cmake**.

You can download cmake here: <https://cmake.org/download/> or use a package manager for your OS (Linux).

You can use it as command line or use cmake executable with GUI: cmake-gui included in the cmake package:



Get a VST 3 host application

You can use your favorite **VST 3** host application, see [here](#) for some examples or you can use the **VST 3 Plug-in Test Host** application included in the **VST 3 SDK**.