The compiler installation page on our wiki is outdated, so I will guide you through the process.

First of all, I would recommend using **Ubuntu 12.04** (on a real or virtual machine) on which

you have administrative access.

The first thing you have to do is run:

sudo apt-get update

sudo apt-get upgrade

Next, you need to install some **dependencies**:

sudo apt-get install apache2 libapache2-mod-php5 php-pear clang gcc-avr avr-libc binutils-avr acl curl git

You should have no problem so far.

Now you must navigate to the apache www directory:

cd /var/www/

This is where you should clone the **compiler** repository found on **Github**:

git clone <https://github.com/codebendercc/compiler.git>

You should be able to see the **compiler** directory when listing the contents of the**/var/www/**folder.

Now we need to install the **compiler** (which is a **Symfony2** project - such projects are installed using **composer** **installer**).

Go to the **Symfony** folder:

cd /var/www/compiler/Symfony/

Then download **composer** and run the actual installation:

curl -s <http://getcomposer.org/installer> | php

php composer.phar install

During the installation, you will be asked to edit some **configs**, but the ones you really will need to change are:

* arduino\_cores\_dir (/opt/codebender/codebender-arduino-core-files):**/opt/codebender/arduino-core-files**
* external\_core\_files (/opt/codebender/external-core-files):**/opt/codebender/external\_cores**
* auth\_key (youMustChangeThis):**useAnyAuthKeyYouPrefer duinoblocks**

The last part of the installation is to make the **Symfony** **cache** and **logs** folders writable:

cd /var/www/

sudo chmod o+w -R compiler/Symfony/app/cache

sudo chmod o+w -R compiler/Symfony/app/logs

If you want to be able to use the **development mode** and access **debug info** from **Symfony**, then open

/var/www/compiler/Symfony/web/app\_dev.php

and comment out these two lines at the beginning of the file

header('HTTP/1.0 403 Forbidden');

exit('You are not allowed to access this file. Check '.basename(**FILE**).' for more information.');

You have installed the **Codebender compiler**.

You should be able to check your **compiler's status** from here:

<http://localhost/compiler/Symfony/web/app_dev.php/status>

which should return a **{"success":true,"status":"OK"}** response.

Next thing we need to do is download the **core files** needed by the **compiler**. You can read more about them on the

wiki, but for now we can stick to the process. You have to create a **codebender** directory inside **/opt** folder and clone

the two repositories containing the compiler core files in there:

cd /opt/

sudo mkdir codebender

cd codebender

sudo git clone <https://github.com/codebendercc/arduino-core-files.git>

sudo git clone <https://github.com/codebendercc/external_cores.git>

That should be the end of it.

If you try sending an **empty compilation request**

<http://localhost/compiler/Symfony/web/app_dev.php/yourAuthKey/v1>

you should get the following output:

**{"success":false,"step":0,"message":"Invalid input."}**

Now you can start reading the **Compiler API** page of the **wiki**, which will help you compile your

own Arduino sketches. There, you can find some basic examples demonstrating how you can send

compilation requests to your **compiler.**