

kucomms building guide

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Building the kucomms project

In order to build the kucomms project you will to install some dependencies.

It will be necessary to install the packages needed to compile a kernel module for your platform, on the Fedora platform the package is called kernel-devel.

It will be necessary to install the gcc-c++ compiler and also the standard c++ library libstdc++.

To build the kucomms project, change to the top level kucomms directory and type **make**.

During the build process, the kucomms kernel module will be built and the kucomms userspace library will be built.

The next step is to type **sudo make install**. This step will install the userspace library and header files onto the host machine.

The final step is to type **sudo make depmod**. This step will install the kernel module into the correct location on the host machine.

Building the examples

In order to build the examples it is necessary to first perform the **make** and **sudo make install** steps mentioned above.

In order to build the examples type **make examples**.

Running the longest example

In order to run the longest example it is necessary to first build the examples as mentioned above. The next step is to type **sudo make depmod** in the top level kucomms directory as mentioned above.

Follow these steps to run the *kucomms_lib_longtest* userspace application :

```
cd kucomms/doc/examples/kernel-modules/kucomms_longtest
```

```
sudo make depmod
```

```
sudo modprobe kucomms
```

```
sudo echo kucomms_longtest > /sys/devices/virtual/kucomms/kucomms/create_device
```

```
sudo modprobe kucomms_longtest  
cd kucomms/doc/examples/userspace/kucomms_longtest  
sudo ./kucomms_lib_longtest /dev/kucomms_longtest
```

Building your own project

The steps for building and running your own project are the same as the steps for building and running the examples.

One approach would be to take a copy of one of the example projects and then delete all of the callback handler implementation and then make the project your own.

Another approach would be to use the example source and make files as a guide to what you have to do in your project.