

Micrium Example Project

µC/OS-III on Linux

Ubuntu 15.04

Toolchain	Version
Eclipse-GNU	3.8.1

Product	Version
µC/OS-III	3.05.01
µC/CPU	1.30.02
µC/LIB	1.38.01

1 Configuring the Build Environment

In order to run μ C/OS-III on Linux, the maximum realtime priority for processes must be increased. For the following step, you must acquire root access. Modify `/etc/security/limits.conf` by adding the following line, replacing “username” with your login name:

```
username - rtprio unlimited
```

Once you save the changes, log out of your original session and then log back in.

2 Extracting the Project

The example project will be delivered as a compressed archive file. Change to its directory and enter the following commands to extract it:

```
gzip -d Micrium_POSIX.tar.gz
tar -xf Micrium_POSIX.tar
```

You should end up with a folder called “Micrium” which contains the source code and project files.

3 Importing the Project into Eclipse

This project requires the Eclipse IDE with the CDT plugin installed. Make sure to log in as the user you specified in `/etc/security/limits.conf`. Open Eclipse, go to `File→Import...`, select “General→Existing Projects into Workspace”, and click “Next>”. Make sure “Select root directory:” is highlighted and then click on “Browse”. Navigate to the location where the “Micrium” folder is and then double-click to open it. Click on “OK” to display a list of the projects available under the folder. You should see a project called “POSIX_OS-III”; make sure the checkbox next to it is selected. Finally, click “Finish” to import the project into your workspace.

4 Building and Running

Right-click the “POSIX_OS-III” in your Project Explorer window and select “Build Project”. Once the build finishes, right-click the project again and select “Debug As→Local C/C++ Application”. If Eclipse asks you to open the Debug perspective, click “Yes”. In the Debug perspective, press F8 to run the application. A message will be printed to the console every second to let you know that μ C/OS-III is running.