

# ROS - Creating a Simple Launch File

## ME 4140 - Introduction to Robotics - Fall 2016

1. A ROS system generally is comprised of several packages, nodes, and possibly other data files working together. Each node can be started separately after the roscore has started. However the nodes are often started all at the same time using a [launch file](#).
2. To create a launch file open a new text file. Save it inside of an existing package source directory. You could alternatively save it somewhere else in the workspace but note the path if you choose to do so.

```
$ gedit ~/workspace_name/src/package_name/src/file_name.launch
```

3. Type the following into your new file. This is XML, a standard markup language.

---

```
<launch>
  <node
    pkg="turtlesim"
    name="turtlesim_node"
    type="turtlesim_node"
    output="screen"
  >
</node>
<node
  pkg="ttu_turtle"
  name="ttu_publisher"
  type="ttu_publisher"
  output="screen"
  args="/cmd_vel:=/turtle1/cmd_vel"
>
</node>
</launch>
```

---

4. After the launch file is properly created you can run the launch file as follows.

```
$ roslaunch package_name file_name.launch
```

5. If the launch file is not in a package can run the launch file with the path instead.

```
$ roslaunch /path_to_file/file_name.launch
```

6. If there was not a previously running core running the one was started with the line above.