

RIDE - ROS IDE

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What is RIDE?

- An IDE for ROS
- Provides a way to visualize the data flow
- Encourages the development of self contained ROS packages
- Runs in a web browser
- Can be deployed to a robot running ROS or a web server
- Has a library of packages for use in development

What RIDE is not...

RIDE is not a visual programming environment. It provides a visual representation of the data flow, but all programming is done using Python.

RIDE is not an FSM. While RIDE might look like an FSM it does not show what state the package is in.

Using RIDE



RIDE for Education

- Introduction to Python using robots
 - Why Python - It is a language with relatively easy syntax and is still powerful enough to create major applications (ex. RIDE)
- Provides a library which can house packages for easy including
 - Difficult or Advanced topics can be provided to students
 - This way courses can be targeted at students' level

RIDE for Education (cont.)

- Instructors can see in realtime what students are doing since RIDE is realtime collaboration enabled.
- A RIDE project skeleton can be distributed
 - YAML file describing the connections and nodes to be used and empty python files
 - Students can then fill in the python files to provide the required functions

Availability of RIDE

- Can be included in a pre-configured virtual machine
- Is available online for robots with a public facing IP
- Can be installed into existing environments from Github
- Can run on or off the robot

What's Next

RIDE has a fully functional code editor waiting to be integrated into the main IDE, this will allow creation of Python nodes directly in RIDE.

Work is being done to provide a search for existing packages from repositories listed on the ROS website, with the ability to directly import the package into your library and project.