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Omnet++ installation

We need Omnet++ version 4.6. You can download it [here](#) and follow the installation instructions. There is an installation guide included in the doc directory.

SVN location

https://epos.lisha.ufsc.br/svn/makers/tstp_simulation

This branch contains the Castalia framework with TSTP and other WSN protocols.

Setup and compile Castalia

You need to have Omnet++ in your path. You can do it like so:

```
□□□□□□
```

```
$ cd <omnet_dir> $ source setenv
```

Then generate Castalia's makefile:

```
□□□□□□
```

```
$ cd tstp_simulation/Castalia/Castalia $ ./makemake
```

Opening Castalia on Omnet++ IDE

This is optional, although very useful. You can edit the files on other editors and compile/run via command line.

Taken from <https://groups.google.com/forum/#!topic/castalia-simulator/yUFddPDMhdQ>

1. Create new Omnet++ Project: File -> New -> Omnet++ Project.
2. Choose a project name. For example "castaliaTest" and click next.
3. Select Empty project and click Finish
4. Right click on the newly created Omnet++ project (castaliaTest) and choose Import
5. Select General -> File System and click Next
6. Click Browse and search for your Castalia-3.2 directory (or whatever name you have for castalia's root) and click OK
7. Click on "Select All" button and then Finish.
8. You should now see the directory hierarchy under the project castaliaTest
9. Right click above the project name (castaliaTest) -> Properties.
10. In the emerging window, expand OMNeT++ on the left side menu, and then select "NED Source Folders".
11. Expand the project name and mark "Simulations" and "src" directories as NED Source Folders. Click OK.

Using on SV15

The (cli) environment is configured at sv15@lisha.ufsc.br. You can access it at `/export/tstp_simulation`. This contains a copy of the SVN tree, along with omnet at `/export/tstp_simulation/omnetpp-4.6`.

Running a simulation

There is a `run.sh` script at the `tstp_simulation/Castalia/` directory, which runs your simulation and automatically saves the full setup and results. Read the script for details.