File Uploading

On the server ApplicationManager and RDTManager take care of calls for apps and rdts respectively. This includes manipulating an RDT, deploying apps, launching an app and importing an rdt.

Importing Applications

To import apps follow the following process:

- 1. View the applications page.
- 2. Press the **browse** button.
- 3. Navigate to the location in which the application you would like to upload exists.
- 4. Use drag-select or crtl select to **select all** files pertinent to this application. Press okay. Note: here you must select all of the files for an application at once in order to upload it.
- 5. The files which you are about to upload will be displayed on the page. Review the files which you are going to upload.
- 6. Press "upload" and wait for the file to be uploaded.

Example Applications:

We have included example applications on our simulation to show off the usability and scope of effects which the way we have designed our applications allow for. These example applications are located within our tests folder under the folder testapp. Import all the files in that folder.

The two example applications which we have included are as follows:

- 1. **app1**: Allows you to increment and decrement a counter. All the files in the sub folder of this folder must be uploaded to the simulation. To upload this application upload it using the above process, including the files located in:

 NetworkSim/tests/testapp/app1
- 2. app2: This application allows one to search for different you-tube videos, and like them using the increment RDT. All the files in this sub folder must be uploaded to the simulation. To upload this application upload it using the above process, including the files located in:
 - NetworkSim/tests/testapp/app2

Importing RDTs

To import replicated data types follow the following process:

- 7. View the RDTs page.
- 8. Press the **browse** button.

- 9. Navigate to the location in which the replicated data type you would like to upload exists.
- 10. Use drag-select or crtl select to **select all** files pertinent to this replicated data type. Press okay. Note: here you must select all of the files for an replicated data type at once in order to upload it.
- 11. The files which you are about to upload will be displayed on the page. Review the files which you are going to upload.
- 12. Press "upload" and wait for the file to be uploaded.

The two example replicated data types which we have included are as follows:

- **1. rdt1:** increment RDT, allows for incrementing a counter. The files for this RDT are located under:
 - NetworkSim/tests/testrdts/rdt1
- 2. rdt2: decrement RDT, allows for decrementing a counter. The files for this RDT are located under:
 - NetworkSim/tests/testrdts/rdt2

All rdts require a package.json and <u>spec.md</u> as explained in the framework. The RDTs that Rio provided us uses several files such as the rdtinterface, counter, spec.md and package.json. The rdt1 and 2 have similar files. All of which should be imported.

Importing Test Script

To import replicated data types follow the following process:

- 13. View the Test Scripts page.
- 14. Press the **browse** button.
- 15. Navigate to the location in which the test script you would like to upload exists.
- 16. Use drag-select or ctrl select to **select all** files pertinent to this replicated data type. Press okay. Note: here you must select all of the files for an replicated data type at once in order to upload it.
- 17. The files which you are about to upload will be displayed on the page. Review the files which you are going to upload.
- 18. Press "upload" and wait for the file to be uploaded.

We have included an example test script which is as follows:

 test.json: This file performs a test on the simulation, interacting with RDTs, moving devices, and editing partitions. The file for this test script is located at: NetworkSim/scripts/test.json