

Short Guidance for Pre-processing Layer

The code provided in the folder is the template created from PEACH Pre-processing layer, powered by Apache NiFi. The following are the steps of how to recreate the orchestration for the pre-processing system.

Step 1 – Download Apache NiFi bundle

The current template was made by using Apache Nifi 0.7.0. You are advised to download the stable version from <https://nifi.apache.org/download.html>.

Step 2 – Configuring NiFi nodes

Apache NiFi uses a master-slave pattern for its distributed systems. It is up to you to decide how many nodes you want to have. Please carefully follow the instructions given in this website https://docs.hortonworks.com/HDPDocuments/HDF1/HDF-1.2/bk_AdminGuide/content/clustering.html

Step 3 – Running Apache NiFi instance(s)

To run NiFi in your machine, it can be done by using the following shell command:

```
bin/nifi.sh run
```

To run NiFi as background process, please use the following shell command:

```
bin/nifi.sh start
```

Finally, to install NiFi as a service in your machine, the following command should be used:

```
bin/nifi.sh install
```

As the default, the web interface is listening on port 8080, but it can be changed by modifying the web HTTP port number in `conf/nifi.properties` file. Note that if you are using more than one node, such commands should be used for each.

Step 4 – Using the template

The template is provided in XML format. This can be imported through the web interface. Please follow carefully the instructions listed here <https://nifi.apache.org/docs/nifi-docs/html/user-guide.html> in sections “Importing a Template” and “Instantiating a Template”.