

Node-Red Installation Guide

Prerequisites

To install Node-RED locally you will need to install the latest but a stable version version of Node.js.

Installation with npm

To install Node-RED you can use the npm command:

```
npm install -g --unsafe-perm node-red
```

That command will install Node-RED as a global module along with its dependencies. You can confirm it has succeeded if the end of the command output looks similar to:

```
+ node-red@1.1.0
added 332 packages from 341 contributors in 18.494s
found 0 vulnerabilities
```

Start Node-Red

Once installed as a global module you can use the node-red command to start Node-RED in your terminal. You can use Ctrl+C or close the terminal window to stop Node-RED.

```
$ node-red
Welcome to Node-RED
=====
30 Jun 23:43:39 - [info] Node-RED version: v1.1.0
30 Jun 23:43:39 - [info] Node.js version: v10.21.0
30 Jun 23:43:39 - [info] Darwin 18.7.0 x64 LE
30 Jun 23:43:39 - [info] Loading palette nodes
30 Jun 23:43:44 - [warn] rpi-gpio : Raspberry Pi specific node set inactive
30 Jun 23:43:44 - [info] Settings file : /Users/nol/.node-red/settings.js
30 Jun 23:43:44 - [info] HTTP Static : /Users/nol/node-red/web
30 Jun 23:43:44 - [info] Context store : 'default' [module=localfilesystem]
30 Jun 23:43:44 - [info] User directory : /Users/nol/.node-red
30 Jun 23:43:44 - [warn] Projects disabled : set editorTheme.projects.enabled=true to enable
30 Jun 23:43:44 - [info] Creating new flows file : flows_noltop.json
30 Jun 23:43:44 - [info] Starting flows
30 Jun 23:43:44 - [info] Started flows
30 Jun 23:43:44 - [info] Server now running at http://127.0.0.1:1880/red/
```

You can then access the Node-RED editor by pointing your browser at <http://127.0.0.1:1880>.

The log output provides you various pieces of information:

- The versions of Node-RED and Node.js
- Any errors hit when it tried to load the palette nodes
- The location of your Settings file and User Directory
- The name of the flows file it is using.

For Mosquito broker, download 1.14 version of Mosquito, unzip it and places the unzipped folder in C drive. Now go to the folder where files of mosquito folder are placed in command prompt and run the following command:

Mosquito -v

This will turn on the broker and to confirm whether its working or not, cross-check your output in CMD with the one given below:

```
1624503181: mosquitto version 1.4.14 (build date 2017-07-10 23:55:18+0100) starting
1624503181: Using default config.
1624503181: Opening ipv6 listen socket on port 1883.
1624503182: Opening ipv4 listen socket on port 1883.
```

Install Node-Red Dashboard, MQTT, and HTTP nodes from palette. Import the JSON file by clicking on the top right menu box and hit the Import bottom from the dropdown. Select project file and wait for the nodes to be loaded.

Deploy it and inject the sensor value. Debugger window will show the results.