Network_Analysis Documentation

Release 0.5

2Max4

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A collection of useful scripts to analyse the local network and evaluate network speed and velocity

CHAPTER 1

User Guide

The Folder Data will contain all data that has been collected during the network tests (currently only ping test supported). All files that are stored in Data will not be deleted. Instead all new data will be appended to the existing existing file. Please make sure to not push your custom data collection to the GitRepo but include it in the .gitignore.

1.1 Getting Started

1. Clone the git repository.
2. Make sure Python 3.7 is installed in the system.
3. Install the required Python packages. This can be done using *sudo pip3 install -r requirements.txt*.
4. Run the test. This can be done using *sudo python3 run_test.py* along with the arguments. The list of valid arguments can be found by running *sudo python3 run_test.py –help*.
5. After running the test for desired amount of time, send keyboard interrupt by pressing *Ctrl + C* twice. The data should get stored in the *Data* folder while the graph should get stored in *webpage/figures* folder.
6. Open *webpage/index.html* in the browser to view the interactive graphs.

1.2 Run Network Analysis

1. Make sure to complete all steps from the section Getting Started
2. Run network test with weekly email reporting by using a gmail account: *sudo python3 network_cli.py*
3. To get further information about possible options use *sudo python3 network_cli.py –help*

1.3 Getting started with the GUI

1.3.1 Prerequisites

You'll need PyQt5 and other libraries from requirements.txt

1.3.2 Running

Navigate to the project's root folder, and run *python3 network_qt5.py* with root priviledges.

CHAPTER 2

Dev Guide

For everyone who is interested in being part of this project - feel free to grab an open issue. The project is hosted at https://github.com/2Max4/Network_Analysis. Generally, it is a good idea to first check whether someone else is already working on this issue and offer him help. If you've got any questions - always feel free to ask them.

Important: Please make sure to ALWAYS do your Pull Requests on Branch Testing - if everything runs smoothly, we will merge it to the master.

CHAPTER 3

MIT License

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CHAPTER 4

Indices and tables

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