

Prerequisites and Installation Instructions

1 — Last update: 2017/07/25

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1. NOTES

1. An Internet connection is necessary for this type of installation.
2. Users running Windows. Linux on their client machines must log on with Administrator permissions to complete the installation.
3. If you have a previous version of Python_BTS_Project on your computer, uninstall the program (see the Uninstalling section for uninstall instructions). Note that this method of removing Python_BTS_Project will affect/delete any data files created with previous installations. Once this is complete, proceed with the installation instructions.
4. No access rights required for the program. The program is open source software.

2. PREREQUISITES

1. Operating systems: Windows, Linux or OsX, min 2GB RAM, min 50 MB of HDD Space
2. Python 2.x and 3.x interpreters
3. Gnuplot
4. Flask (python framework) and Request

3. INSTALLATION

Please follow instructions below to install the Python_BTS_Project:

- [on Windows](#)
- [on Linux](#)
- [on OsX](#)

3.1. Windows

1. Download the program files from https://github.com/peterb91/Python_BTS_Project.git, and save them on your local drive.

2. Open cmd line:

- Ensure you have installed python 2.x and 3.x interpreters on your station (command: *where python*).
- If python 2.x or 3.x is missing, download required version of python from: <https://www.python.org/getit/> and install it following instructions on the website.
- Ensure you have Flask installed (follow this guide: <http://flask.pocoo.org/docs/0.12/installation/#windows-easy-install>)
- Ensure you have requests installed (command: *python3 -m pip install requests*)
- Install additional program Gnuplot for graph creation:
 - download gp426win32.zip from the following site: <http://sourceforge.net/projects/gnuplot/files/>
 - extract the file into "Name of folder". Open "My Computer" and find the file wgnuplot. It should be somewhere like: C:/Documents and Settings/username/Name of folder/gnuplot/bin
 - click on the icon for gnuplot.exe and install the program. During the installation you should check the "Add application directory to your PATH environment variable" option.
 - now you can use gnuplot in cmd line using command: *gnuplot*
- go to the directory where all files were downloaded (command: *cd directory_name_path* eg. *cd C:/Documents and Settings/username/Python_BTS_Project*).

Before running the algorithm, you are able to modify basic configuration file – *config_file.txt*, where you can modify target value, hysteresis, maximum increase and max decrease values and other details, as well as you can set if the program should send the data to the database via http or not (it is much faster with http disabled).

3. Run the program in cmd console using command: *type file.txt | python3 source.py* (where "file.txt" is file with data from terminals and stations and "source.py" is python file included in program pack. The most important is to make sure that file.txt exists and contains input data.

4. For generating graphs based on calculated data please use following command: *python2 chart_creation.py*

3.2. Linux

1. Download the program files from :https://github.com/peterb91/Python_BTS_Project.git, and save them on your local drive.

2. Open terminal:

- Ensure you have installed python 2.x and 3.x interpreters on your station (command: *whereis python*).
- Ensure you have Flask installed globally (command: *_ pip3 install flask_*)
- Ensure you have Requests installed (command: *pip3 install requests*)
- If python 2.x or 3.x is missing, download required version of python from: :<https://www.python.org/getit/> and install it following instructions on the website. For linux – ubuntu installation use command: *sudo apt-get install pythonx.x* (where x.x is version)
- Install additional program for graph creation (command: *sudo apt-get install Gnuplot*)
- Go to the directory where all program files are stored *cd folder_name_path* eg *cd /usr/Python_BTS_Project/*

Before running the algorithm, you are able to modify basic configuration file – *config_file.txt*, where you can modify target value, hysteresis, maximum increase and max decrease values and other details, as well as you can set if the program should send the data to the database via http or not (it is much faster with http disabled).

3. run the program using command: *cat file.txt | python3 source.py* (where “file.txt” is file with dataset and “source.py” is running program file). The most important is to make sure that file.txt exists and contains input data.

4. For generating graphs based on calculated data please use following command: *python2 chart_creation.py*

3.3. OsX

1. Clone the repository https://github.com/peterb91/Python_BTS_Project.git to any directory (command: `git clone https://github.com/peterb91/Python_BTS_Project.git`)

2. Open terminal:

- Ensure you python 2.x and 3.x interpreters installed on your station (command: *whereis python*).
- Ensure you have Flask installed globally (command: `_ pip3 install flask_`)
- Ensure you have Requests installed (command: *pip3 install requests*)
- If python 2.x or 3.x is missing, download required version of python from: [:https://www.python.org/getit/](https://www.python.org/getit/) and install it following instructions on the website. If you are using *homebrew* you can use commands *brew install python* and *brew install python3*
- Install additional program for graph creation – Gnuplot – from binary <http://ricardo.ecn.wfu.edu/pub/gnuplot/> or using homebrew: *brew install gnuplot*
- Go to the directory where all program files are stored `cd folder_name_path` eg `cd /usr/Python_BTS_Project/`

Before running the algorithm, you are able to modify basic configuration file – `config_file.txt`, where you can modify target value, hysteresis, maximum increase and max decrease values and other details, as well as you can set if the program should send the data to the database via http or not (it is much faster with http disabled).

3. run the program using command: `cat file.txt | python3 source.py`. The most important is to make sure that `file.txt` exists and contains input data.

4. For generating graphs based on calculated data please use following command: `python2 chart_creation.py`

4. UNINSTALLATION

1. Windows

- Remove all files from the folder where the program was downloaded/copied (right click and delete)

2. Linux

- Remove all files from directory where the program was downloaded/copied (terminal command: `rm`)
or remove directory if only program files are inside (command: `rm -r`)

3. OsX

- Remove all files from directory where the program was downloaded/copied (terminal command: `rm`)
or remove directory if only program files are inside (command: `rm -r`)

5. CONTACT

Support Team, contact via GitHub Issues:

https://github.com/peterb91/Python_BTS_Project/issues