**Mantessa Usage Guide:**

1. Using Censys to fetch data:
   1. Go to Scripts folder
   2. Update UID and SECRET in config.py after getting these from https://censys.io/account
   3. From terminal run: python fetch\_data\_from\_censys <date>
      1. Eg. fetch\_data\_from\_censys 20170207
      2. Date format is Year+Month+Day
2. Next install MySQL on your system (See MySQL Reference guide)
   1. Go to mantessa\_db folder from terminal
   2. Login to your MySQL instance
   3. From console run: source mantissa\_sql.sql to setup the database

**Building the Static IP dataset:**

1. From a new terminal window; Run: python generate\_db2.py <date>
   1. The above is to initialize the mantessa database and perform configurations for the first time.

For the remaining 6 months data, repeat the following:

1. Run: python update\_db.py <date>

Finally, from the mysql console do:

1. mysql> delete from mantessa where counter <= x;
   1. Here x is the number of days below which the ip addresses entries are considered non static.

**Finding failure:**

1. From a new terminal window; Run: python find\_failure.py <date>
2. Next Run: python query\_db.py <date>. This will dump all the ip,latitude,longitude

Combinations for which there may be a power failure in failure\_data folder.