

Facilities AP Client Count

1. Purpose

To store the number of wireless clients connected to each access point on campus.

2. Server access

Server: statifi.netops.yorku.ca

User: statclcn

Password: n3t0psgrafana!

3. Code Information

Program location: /home/statclcn/bin/apclientcount/insert_all_client_count_data.py

API Calls

<https://dnac11.netops.yorku.ca/dna/system/api/v1/auth/token>

<https://dnac11.netops.yorku.ca/dna/intent/api/v1/membership/{siteId}>

<https://dnac11.netops.yorku.ca/dna/intent/api/v1/device-health>

Description:

This program makes api calls to dnac every 5 minutes to retrieve all access point information on keele campus. This data includes the ap name, ap status (UP/DOWN), number of wireless clients connected at the given time and more. Once this data is retrieved it is then inserted into the database.

4. How to run code

Under `/home/statclcn/bin/apclientcount/`

Add the `DNAC_USER=username` to `.env`

Add the `DNAC_PASS=password` to `.env`

Run ``screen -r apclientcount``

Run ``python3 insert_all_client_count_data.py``

Potential Issues: if the campus runs into network issues, the code may crash

5. Database

From the server you can access the database as follows:

- Run ``sudo su - postgres``
- Run ``psql``
- Run ``\d apclientcount``

6. Research student access

To allow database to Prabjhee Singh, a read only user account was created:

Username: prabh18

password: greent345

Furthermore, the following line was added to `/etc/postgresql/14/main/pg_hba.conf`

`host apclientcount prabh18 10.80.192.180/32 scram-sha-256`

This may need to be edited as Prabjee reported that he wasn't being assigned 10.80.192.180 when connected to the VPN.

7. Future work

Automatically delete 3 month or older data to prevent database size of growing forever