Universitat Politècnica de Catalunya

GRAU EN ENGINYERIA DE SISTEMES TIC

CONFIGURATION MANUAL: CONFIGURABLE WI-FI AP

Communication Systems

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1 CONFIGURATION

It is required to have the python packages *sqlite3, flask, pyping* and *UFW* installed for *Linux*.

1. For the creation of the AP we will use graphical application nm-connection-editor, which is already pre-installed in Ubuntu. Once in the app, we add a new connection, where we define an SSID, select access point mode, and determine our wi-fi network interface. In wireless security, we select the type of security WPA and WPA2 and we will put a password.

   Once created what we have to do is activate it, for this in the Ubuntu wireless configuration there is an option where it allows you to activate the wireless access point, all we have to do is put the name of the connection and the password of the connection that we have created for the access point, and our pc will enter access point mode.

2. Create the database by running *python3 db.py* in the *DataBase* directory

3. Change the path of the database file in the *models.py* file in the *WebServer* directory. To change it run *pwd* in the *DataBase* directory and paste the output + '/siscom.db' into the *database* variable of the *models.py* file.

4. Run the main server program with *sudo python3 __init__.py* in the *WebServer* directory.

Once the server is running, network traffic will be denied until a user is created on the web and is on time. To access the web, search the browser for the address *http://IP of the computer:5000/* and it will take you to the website. The password and password is "ADMIN" in both upper and lower case. Once inside, there are the options to create, delete, modify user data. On the main page, the users that connect and disconnect will be shown, as well as in the terminal where the server is running.