

Internet Of Things

Lab - 7

Aadhitya Swarnesh



25 September 2020

Aim :

To simulate the IoT Protocols : **6LoWPAN** and **CoAP** using **Contiki** Operating System using a **Cooja** simulator to demonstrate the concepts of IoT.

Software :

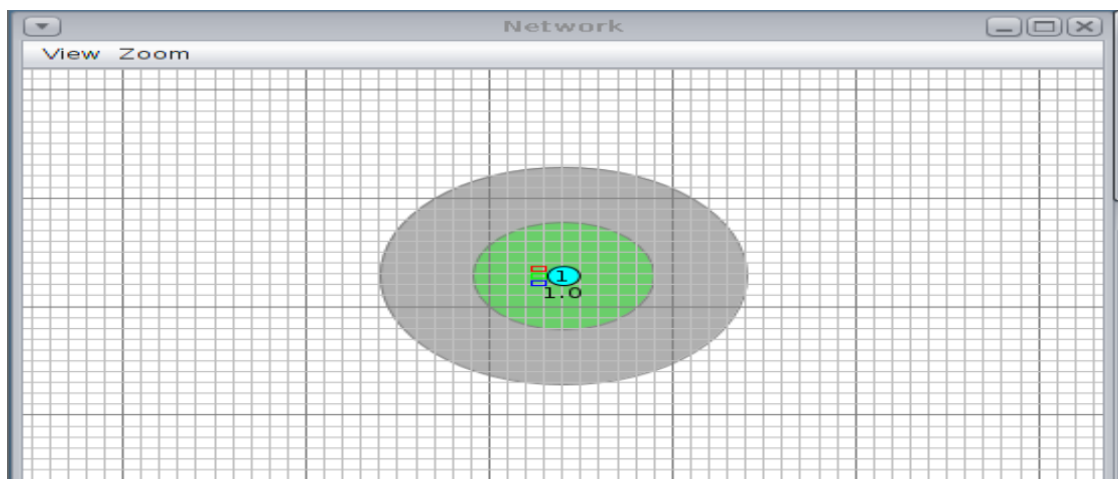
Contiki Operating System and **Cooja** simulator.

Methodology :

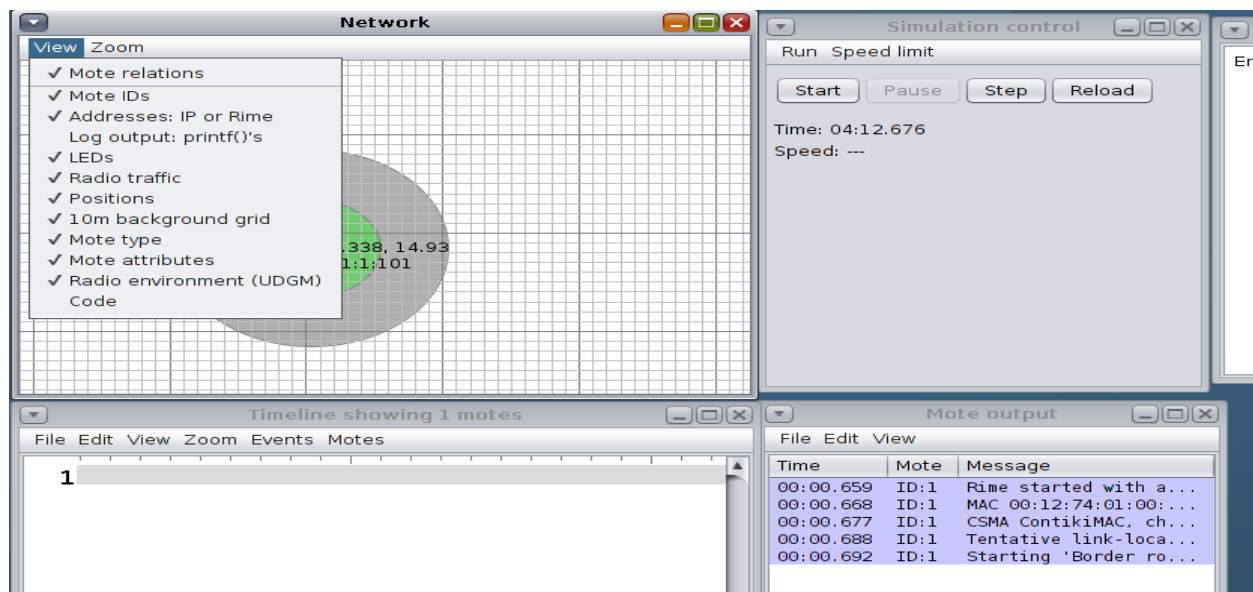
This video instructions are followed : <https://www.youtube.com/watch?v=gIPV3tUqsXw>

Simulation And Output :

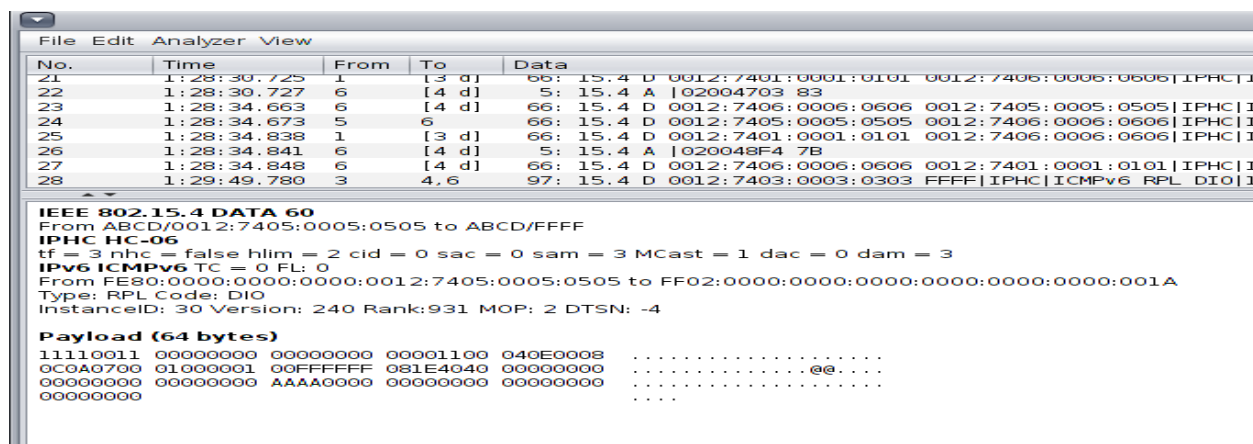
We Install the Contiki Operating System and then start the Cooja simulator. We select sky mote section, select the rpm-router and rpl-border-router to open the "border -router.c" file.



We compile then select a few motes.



We select a new mote and proceed with the same process.



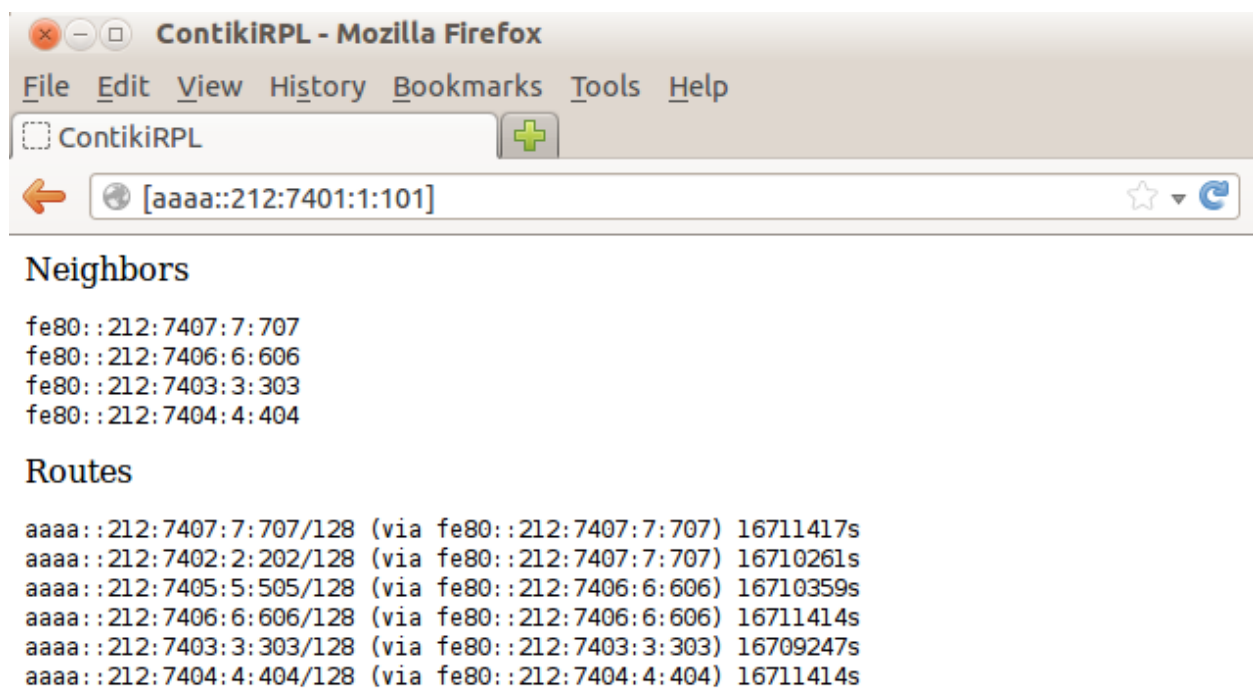
We then need to select the new terminal and then we have to give the commands :

cd../ ..examples/ipv6/rpl-border-router

At last we need to add the IPv-6 address to the browser

Then the sensors are selected from the post method of the and the sensors will be get through the post method.

Output :



Result :

Thus, with the help of Contiki and Cooja, we have made a simulation of the 6LoWPAN and CoAP protocols of IoT.