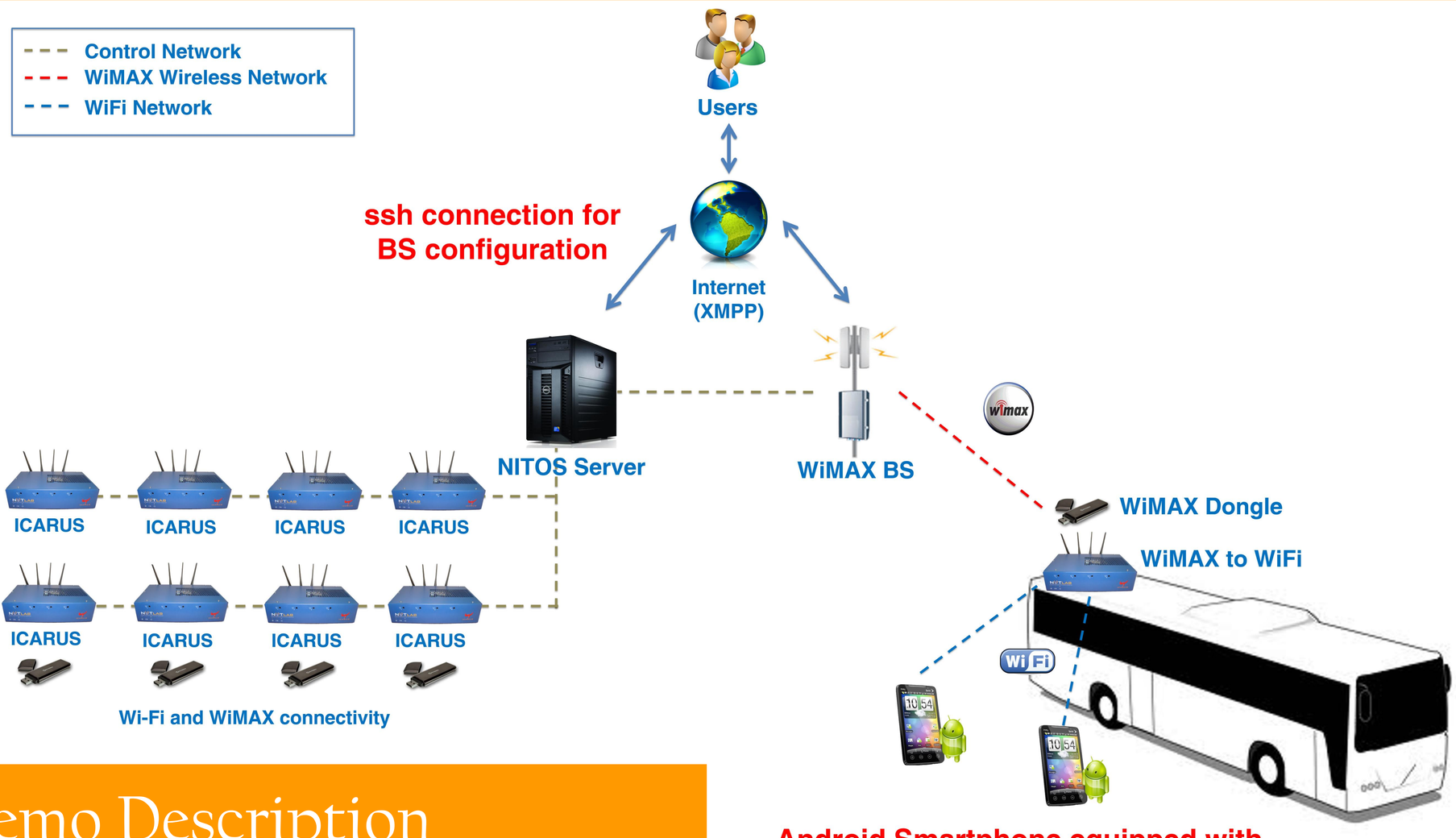
Demo
Wireless Experiments with Mobile Nodes

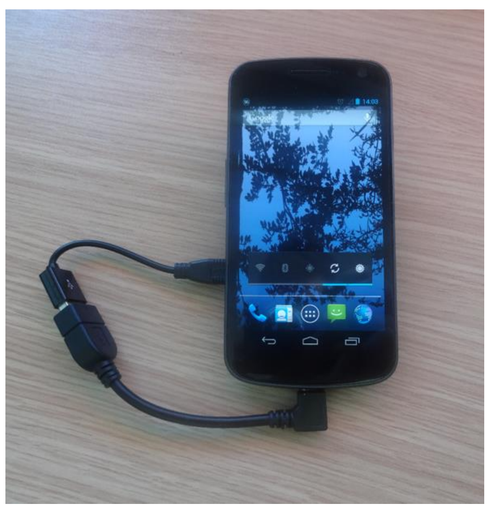
NITOS Uncontrolled mobility testbed setup

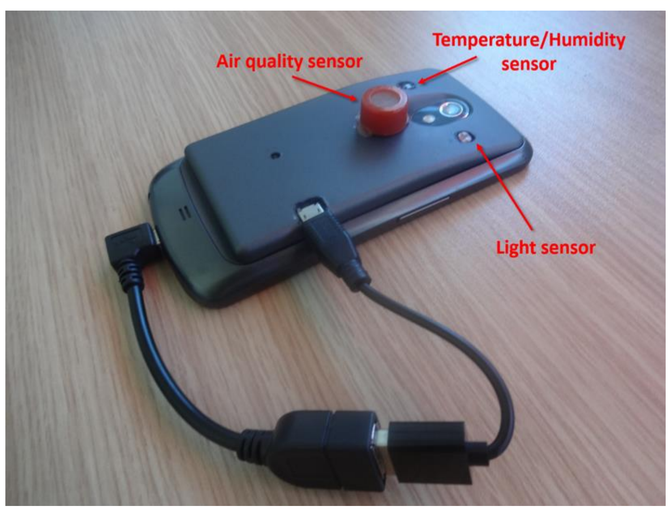


Demo Description

- The bus is equipped with one NITOS node, used as a WiMAX to WiFi bridge.
- We connect our Android phone prototype on the WiFi AP and use UTH's monitoring application.
- As the bus moves throughout the city, we collect measurements from the phone's sensors and push them back over the WiMAX link to the NITOS server.
- Using the information collected, we depict each unique measurement on a Google Map.
- The whole experiment is instrumented by the state-of-the-art control and management framework, OMF, and its measurement library, OML.

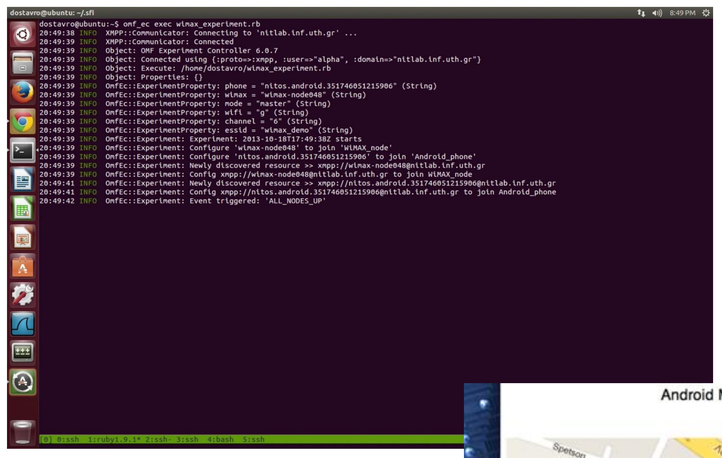
Phone Prototype

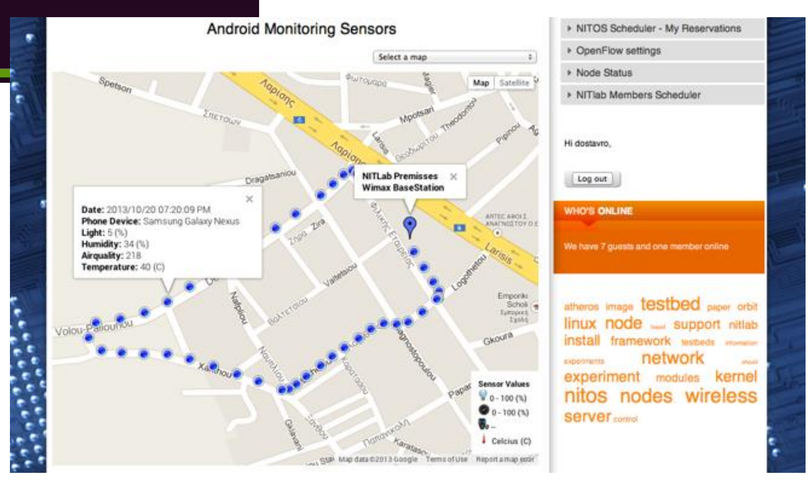




- The phone is using multiple sensors mounted on it.
- The measurements are stored on the phone if no connection to the NITOS server is available.
- When the connection is back, all the gathered measurements are uploaded to the NITOS server.
- An OML-enabled Android application is used to collect the measurements
- A Dedicated OMF Resource Controller used on the Android phone, developed by UTH.

Experimental Results





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