



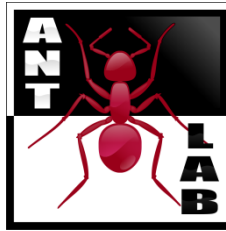
Politecnico di Milano

Advanced **N**etwork **T**echnologies **Lab**oratory



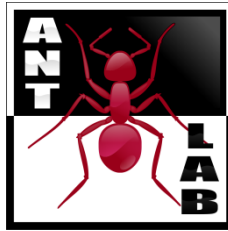
Challenge

Home challenge #1: Sniffing



Home Challenge #1

- ❑ Download the ***homework1.pcap*** file from WeBeep (already present in the vm)
- ❑ Analyse the traffic with wireshark or with something else
- ❑ Answer the following questions:
(ignore all malformed packet)



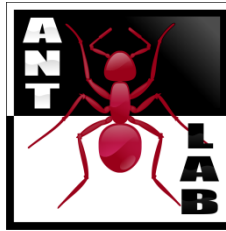
Questions

COAP

- 1) What are the differences between the request with MID: 53533 and the one with MID: 42804
- 2) What is the response of message No. 2428, if any?
- 3) How many **replies** to **requests of type confirmable**, **having result code "Content"** are received by the client "localhost"?
- 4) How many GET requests, **excluding OBSERVE requests**, have been directed to non existing resources?

MQTT

- 5) How many messages containing the topic "factory/department*/+" are published by a client with user password: "admin"?
Where * replaces only the dep. number [0-9], e.g. factory/department1/+, factory/department2/+ and so on.
(* is **NOT** an MQTT wildcard)



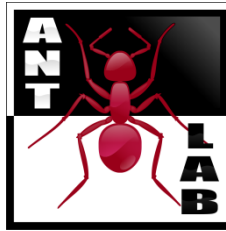
Questions

MQTT

- 6) How many clients connected to the public broker "mosquitto" have specified a will message?
- 7) How many publishes with QoS 2 don't receive the PUBREL?
- 8) What is the average Will Topic Length specified by clients with empty Client ID?
- 9) How many ACKs received the client with ID "6M5H8y3HJD5h4EEscWknTD"? What type(s) is(are) it(them)?
- 10) What is the average MQTT message length of the CONNECT messages using mqttv3.1 protocol? Why messages have different size?

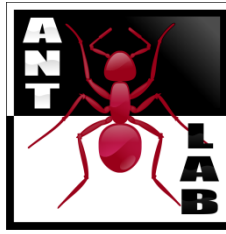
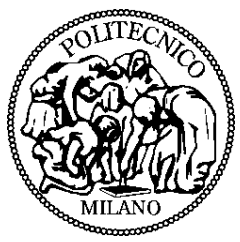


Challenge deliverable



What to deliver:

- A PDF containing motivated responses:
 - + filters and/or code, if used
- Your names + **person code**



Homework Info

How:

- Upload the .pdf file on the folder #1 on WeBeep "Consegne" folder (first challenge)

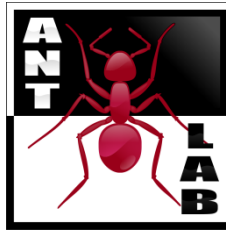
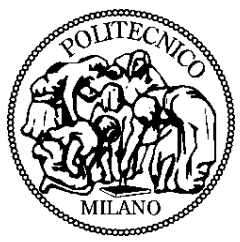
Pdf name:

2-team: **<personcode1>_<personcode2>.pdf**

Single: **<personcode>.pdf**

E.g.: 10692911_10692912.pdf

NB: files without name/personcode or in a weird format won't be corrected (=0 points)



Homework Deadline

- ❑ **Strict** Deadline:
April 11, 2022 @23:59
- ❑ Max 2 people
- ❑ Up to 1 point

Good Luck!