Power-Aware Security Protocols for the Internet of Things

Tiago Diogo

Instituto Superior Técnico, Avenida Rovisco Pais 1, Lisboa,
tiago.diogo@tecnico.ulisboa.pt

Abstract. The abstract should summarize the contents of the paper using at least 70 and at most 150 words.

Keywords:

1 Introduction

The Internet of Things (IoT) can be seen as web of interconnected devices that go from everyday wearable objects into fully deployed sensor networks. Despite the huge variety and characteristics of these devices, one thing that they all have in common in the constrained nature they're built uppon. In order to enable the massive deploy to be expected in the near future [1] *there bla bla bla*

2 Main Goals

3 Related Work

3.1 Protocol Analysis and Selection

3.1.1 Web Protocols

place here a study on web protocols, focus on http and show how it works and how spread it is. provide a study on resource consumption, laying the bed for the next section(iot protocols)

3.1.2 IoT Protocols

do a large analysis of mqtt, coap and 6lowpan protocols. provide tables with diferences between mqtt and coap from the study paper [1]

3.1.3 IoT Protocols Security and Improvements

[1] http://www.gartner.com/newsroom/id/2636073

related work regarding protocol improvements and security (citar aqui os papers fixes) coap security analysis (citar aqui que isto ainda não está a ir buscar sozinho e fazer à mão não pode ser)

3.2 Attack Analysis, Detection and Prevention

3.2.1 Internet Attacks

do some work identifying threats to the web in general

3.2.2 IoT Attacks

4 Proposed Solution

5 Work Evaluation

6 Work Planning

7 Conclusion

References

1. Ma, X., Valera, A., Tan, H.x., Tan, C.K.y.: Performance Evaluation of MQTT and CoAP via a Common Middleware. (April) (2014) 21–24