

Towards Optimized Fog Computing Infrastructure

I. Abstract (*to be determined later*)

II. Introduction

A. Clouding history and the introduction of Fog computing.

1. The start of Cloud Computing.
2. The problems associated with the clouding architecture.
3. The introduction of Fog computing to resolve those problems.

B. Kubernetes

1. Kubernetes and Clouds.
2. Why Kubernetes is not compatible with Fog computing (briefly).

C. Organization

Explain organization of the report, what is included, and what is not.

III. Fog computing *State-of-the-art* and advantages over Cloud.

- A. Why Fog computing exists?
- B. What the problem resolved by Fog computing?
- C. Why Fog is the future? (IOT, end-to-end latency, location awareness).

IV. Kubernetes and Fog computing.

(Divided into sections that will be treated separately)

- A. The centralization and the impact on the performance.
- B. end to end latency is ignored.
- C. location awareness.

V. A location aware service in Kubernetes.

- A. Formulate specifically the problem of location awareness in the fog context.
- B. How we solve it, and what have been changed in Kubernetes.
- C. A brief explanation of our test-bed.
- D. our result if any.

VI. Conclusion. (*to be determined later*)

VII. Acknowledgement.