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Monitoring and deploying services on edge devices

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RESUMO

Lorem ipsum em Português.

Palavras-chave: Palavras-chave (em Português) ...

ABSTRACT

Lorem ipsum in english.

Keywords: Keywords (in English) ...

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INTRODUCTION

1.1 Context

Nowadays, the Cloud Computing paradigm is the standard for development, deployment and management of services, it has proven to have massive economic benefits that make it very likely to remain permanent in future of the computing landscape. It provides the illusion of unlimited resources available to services, and has changed the way developers, users and businesses rationalize about applications [1]. Currently, most software present in our everyday life such as Google Apps, Amazon, Twitter, among many others is deployed on some form of cloud service.

However, currently, the rise in popularity of mobile applications and IoT applications differs from the centralized model proposed by the Cloud Computing paradigm. When all computations reside in the data center (DC), far from the source of the data, problems arise: from the physical space needed to contain all the infrastructure, the increasingly amount of bandwidth needed to support the information exchange from the DC to the client, the latency in communication between to the DC, has directed us into a post-cloud era where a new computing paradigm emerged, Edge Computing.

1.2 Motivation

Edge computing takes into consideration all the computing and network resources along the path from the data source to the DC, it resolves the increasing need for supporting interaction between IoT applications and cloud computing systems [2]. Since data is effectively being consumed closer to where it is being produced, decentralizing computation has many benefits for end-users and business owners: novel applications that take into account the locality of computations for functionality, faster response times for end users,

enabled through the deployment of microservices that are composed and inter-connected over both edge and cloud infrastructures.

Understanding how

1.3 Expected Contribution

MOTIVATION

2.1 What is the problem

RELATED WORK

3.1 Topology Management

3.1.1 Random overlays

3.1.2 Structured overlays

3.1.3 Self-adapting overlays

3.2 Aggregation

3.2.1 Types of aggregation

3.2.2 Relevant aggregation protocols

3.3 Resource Discovery

3.4 Offloading computation to the edge

PLANNING

4.0.1 Proposed solution

4.0.2 Scheduling

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A P Ê N D I C E



APPENDIX 2 LOREM IPSUM



ANNEX 1 LOREM IPSUM