Technical University of Denmark

02228 Fault-Tolerant Systems

# Fault-Tolerant Cloud Computing Architectures

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# Chapter 1

# Introduction

In this report we will describe what cloud computing is, further we will give a detailed description of the architecture and fault-tolerant features of two cloud system, at last we will compare how the systems handle failures and discuss the pros and cons of these methods. As a result of the comparison, we will be able to conclude on what the systems do well and where they might be able to improve.

## 1.1 Scope

We will focus on the fault-tolerant features of the cloud computing architecture within the two selected cloud systems (Amazon Web Services and Google Cluster).

## 1.2 Cloud Computing

Brief description of what cloud computing is...

# Chapter 2

# Amazon Web Services

The Amazon Web Services, henceforth *AWS*....

## 2.1 Architecture

## 2.2 Fault-Tolerant Features

# Chapter 3

# Google Cluster

## 3.1 Architecture

## 3.2 Fault-Tolerant Features

# Chapter 4

# Comparison of Failure Handling

List of faults that the systems handle along with a description of how it's handled and why it works. If the methods for handling the failure differ, we will discuss the methods, highlighting their pros and cons.

# Chapter 5

# Conclusion

Conclude on our findings, focus on what the systems do well and where it might be possible to improve.

# Bibliography

[1] AWS Reference Architectures, *Fault Tolerance & High Availability*, 2014. `http://media.amazonwebservices.com/architecturecenter/AWS_ac_ra_ftha_04.pdf`