Running a CEPH-Cluster on a containerized infrastructure

Use case: distributed mySQL-database

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Setting up and operate a storage cluster with high availability is a complex task. Modern paradigmass a containerization and orchestration are a way of abstracting away some complexity. However, and a cluster in a stateless and ephemeral containerized environment poses some problems. In the lowing paper these problems are identified and scrutinized. The use case will be a mySQL database such will be stored on a CEPH cluster comprised of docker based daemons.

1 Introduction

- 1.1 CEPH Based storage cluster
- 1.2 Containerization
- 1.3 Deploying
- 1.4 Databases
- 1.5 Scope of the problem and definition of research goal

2 Setting up CEPH on Docker

- 2.1 System Architecture
- 2.1.1 CRUSH Fail mode
- 2.1.2 Issue with Docker Image
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3 Database considerations

- 3.1 Architecture of mySQL
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4 System Analysis

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5 Conclusion

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