Report: ToDo Web Service

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Introduction

In order to be compliant with the scope of the project and with the suggestions of the professors, the real implementation differs from the drafted in various aspects that are presented below.

App Scenario

The app scenario is the same, but instead of having an Angular front-end application, we focus only on the back-end and middleware components.

App Basic Components

The application is composed of the following main components:

- **Load Balancer** - NGINX application used to balance traffic for optimizing resource utilization, maximizing throughput, reducing latency, and ensuring fault-tolerant configurations.
- **Business Logic Server** - Ruby on Rails REST API that applies business logic on data
- **Database Server** - PostgreSQL server that acts as a remote RDBMS

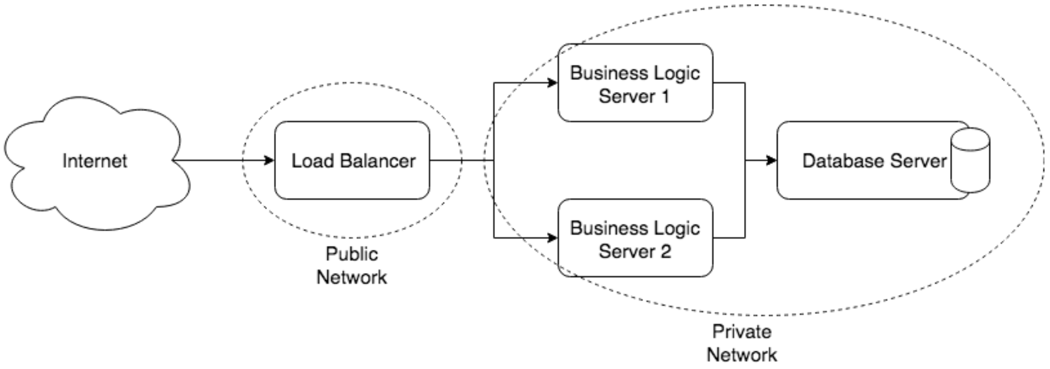
Implementation

The implementation is quite the same. The main differences are the following:

- Load Balancer flavour changed from m1.small to ds1G with 1GB of RAM
- Two networks are interconnected with the same router that is being used to reach the internet instead of having two of them.
- No replication of the Volumes was performed.

Diagram

In order to complete the vision of the entire infrastructure we provide a diagram of it.



In order to check project applications code, infrastructure configuration and deployment scripts check the Github repo at: https://github.com/neboduus/openstack-distributed-ws