

# Yet Another VPS

## Self-provisioning, Self-management, and Self-sharing Virtual Machines

Zuoxiu Xing, Software Systems Engineering, University of Regina

### Introduction

The Yet Another VPS provides private servers available to students and staff.

It is a web portal that can utilize OpenStack API to add additional features including user self-service deployment ability, virtual machine ownership, etc.

### Materials and methods

Two used PC as the infrastructure.

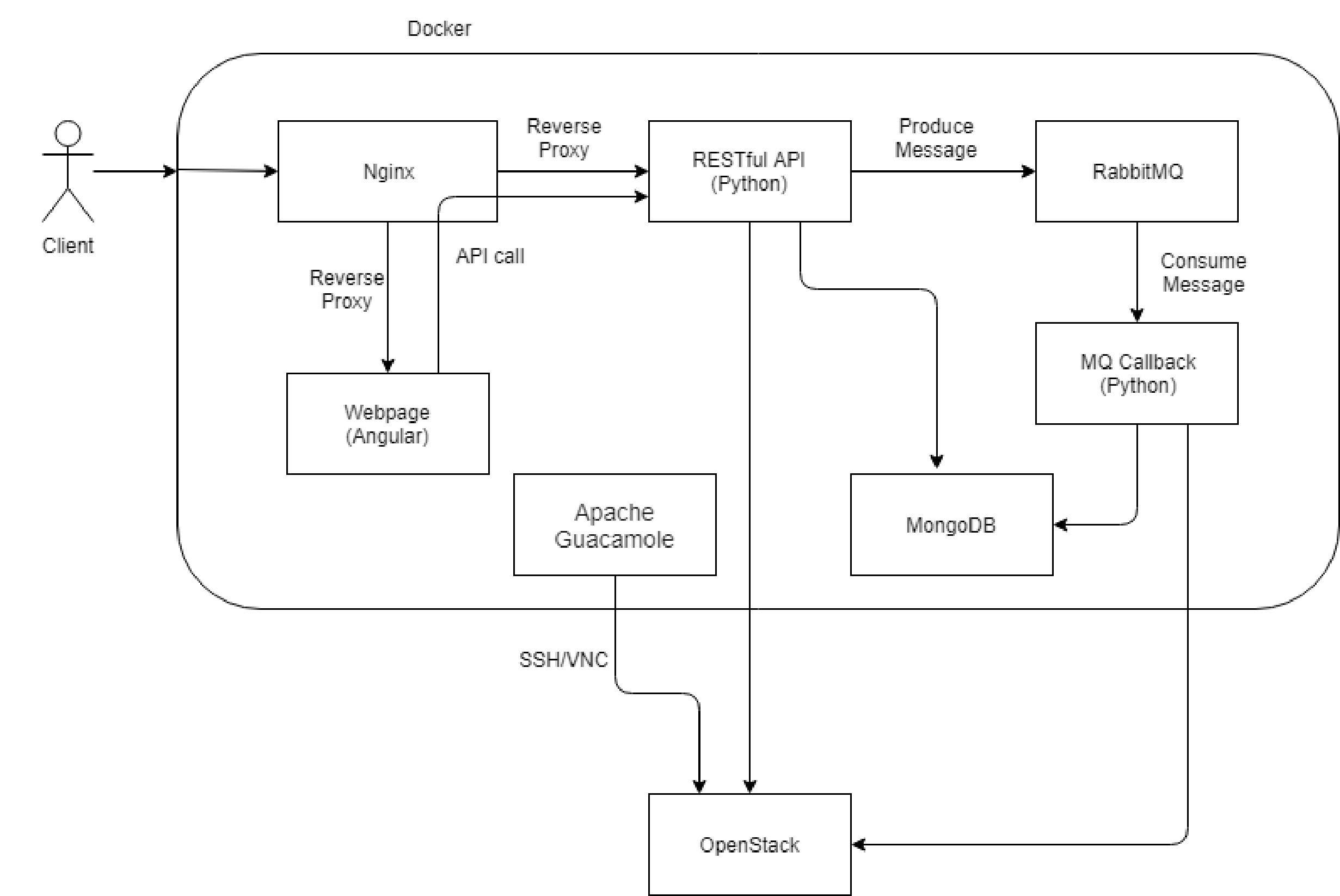
Own library utilizing OpenStack SDK to control OpenStack.

RESTful API allowing communication between frontend and backend.

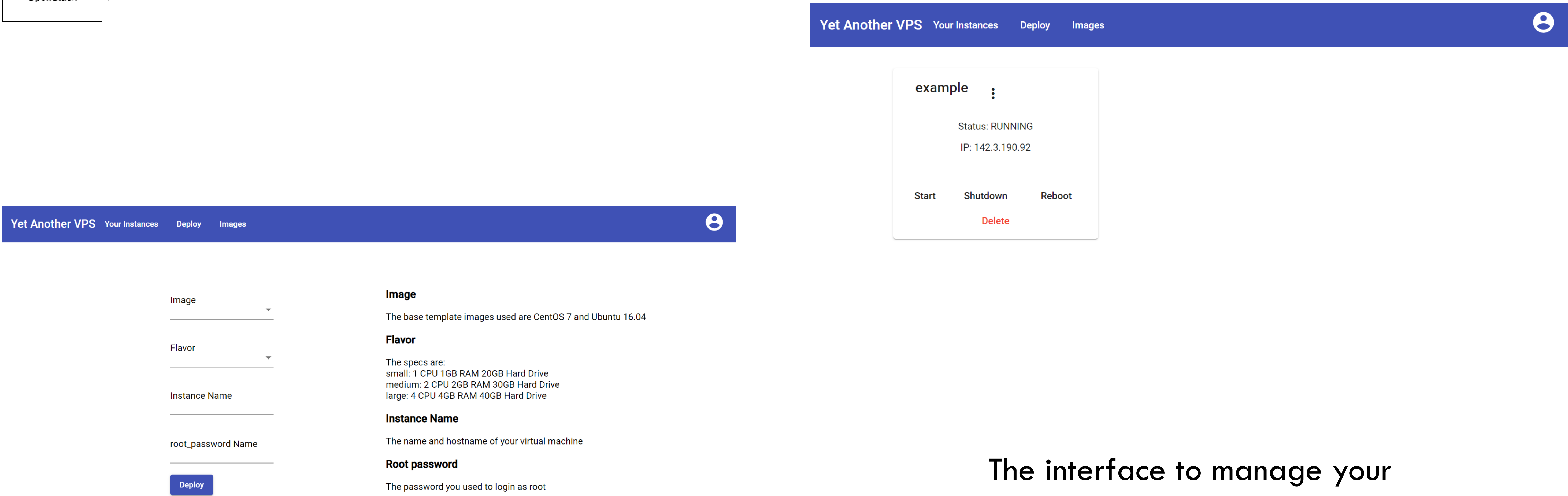
Frontend user interface developed with Angular.



### Results



Nginx as the gateway  
Webpage hosts the frontend  
RESTful API controls backend  
RabbitMQ as the buffer  
MongoDB stores special data  
Guacamole runs remote protocol client on browser  
OpenStack serves virtual machine



The interface to deploy a virtual machine

The interface to manage your virtual machine

