Requirements Specification

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Revision History

Revision	Date	Author(s)	Description
0.2	10.10.2019	RB NF TS KT	Filled in Environment & Operation sections
0.1	09.27.2019	KT	Document Creation

1 Introduction

2 Background

3 Overview

4 Environment

The environment that the software will preside in consists of modules to interact with **VMWare**, **AWS**, other virtual machine platforms and will also be interacting with authentication modules for those various platforms. The user will interact with the API's of these cloud services and authentication methods through a Django Web App. Lastly, the environment will consist of the application storing the selected virtual machines onto the user's local machine.
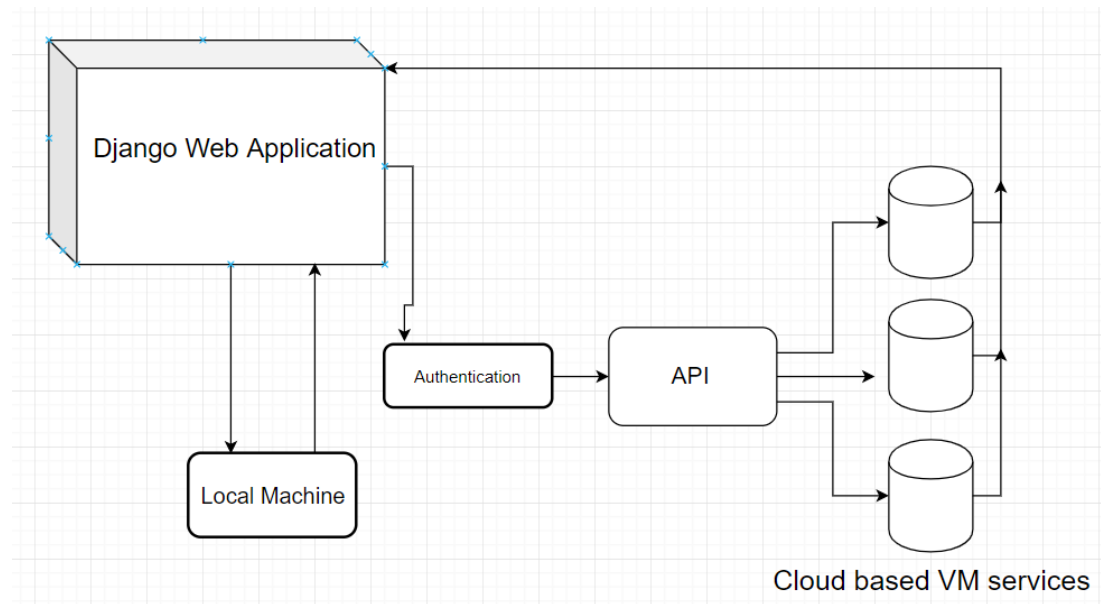

Figure 1: The application environment

4.1 VMWare (VSphere)

4.1.1 API'S

Use VMWare API that looks at file structs.

4.1.2 Download Protocol

Call downloads to download to local machine.

4.2 AWS

4.2.1 API'S

Use AWS API that looks at file structs.

4.2.2 Download Protocol

Call download API to download to local machine.

4.3 Authentication

The Application should retain a user's login token for the various platforms to minimize the frequency they need to authenticate to the different VM platforms. An option for them to log out of these sessions should also be provided.

4.3.1 VMWare Auth (SAML)

Use specific authorization based on the VMWare standard.

4.3.2 AWS Authentication

Use specific authorization based on the AWS standard.

4.4 Web Page

4.4.1 Django

Provide input box for URL: should also provide login and logout usage.

4.5 Download Structure

4.6 Database?

5 Operation

In the following sections the operation of the application will be described, including starting the application (invocation), the commands the application uses and finally, how to close or terminate the application.

5.1 Invocation

5.1.1 Web Application

5.2 Commands

5.2.1 Download

5.2.2 Load File Structure

5.2.3 Error Catching

5.2.4 Authentication

5.3 Termination

5.3.1 Logout User

5.3.2 Closing Application

References

A Appendix