Chapter 9
Hands-On Vagrant

Khaleel Ahmad
Maulana Azad National Urdu University, India

Masroor Ansari
Maulana Azad National Urdu University, India

ABSTRACT

A vagrant is a freeware tool that facilitates to easily manage and configure multiple virtual machines. The main goal of its creation is to simplify the environment maintenance in a large project with multi technical tasks. It provides the better manageability and maintainability for the developers and prevents needless maintenance and improve the productivity for development using simple functions. Vagrant supports almost all main languages for the development, but it is written in the Ruby language. Vagrant was initially supported by Virtual Box, but the version 1.1 has the full vital support for VMware, KVM and other virtualization environment as well as for the server like Amazon EC2. It supports many programming languages such as C#, Python, PHP and JavaScript to enhance the project efficiency. Recently, version 1.6 may serve as a fully virtualized operating system due to the added support for Docker containers.

1. INTRODUCTION

In January 2010, Mitchell Hashimoto started it as a personal project and released the first version in March 2010. Engine Yard announced to sponsor the Vagrant project in October 2010. In March 2012, the first stable version "Vagrant 1.0" was released. In November 2012, an organization "HashiCorp" by Mitchell came to give the full attention and improvement in the development of Vagrant. Nowadays

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Hashi is focusing to develop the e-commerce support and offers professional training support for the Vagrant.

A Vagrant is a freeware application/tool for building and developing a portable environment. Mostly the latest release and newest tools are tested by a test environment. It is, the less time consuming in redeveloping the Operating System. A Vagrant is really tied to VirtualBox to manage and handle the Virtualization. A Vagrant takes actions as the dominant configuration for deploying/handling many reproducible virtual environments with the identical configuration.

It plays the role just like a tool in the Ubuntu Linux environment to set up a wide-ranging virtual improvement environment that is generally quoted to as a VDE. It reduces the amount of time spent needed to rebuild the Operating System as a core configuration for end user deeds. It also allows the easy manageability VDEs by means of identical configuration. Installation of VirtualBox at the same period is important and basic requirements being its central configuration built into the main Vagrant product.

To set up and configure, an online Linux Server is needed with a proper and suitable IP address and a method for connecting it. GoDaddy was recommended Virtual Private Server, at the time of start up for newer users, or a full applicable Server for taking total control. Some different types of SSH client as Google, PuTTY (Windows) or Terminal (Mac) is needed for connecting the Server.

Installation

A Vagrant is easy to download and install on standard distribution of Linux, Windows and Mac OS X. Setup process is not complex.

Configuration

Needs to create a file for the project that describes your machine type, the software that is mandatory for the installation, and an approach to make the machine accessible. Needs to save this file with project code (“Vagrant 1” n.d.).

System Requirements

1. Virtual Box
2. Vagrant
3. Putty for windows and Terminal for MAC OS