1.2 Connect to Cloudstack and Configure

You still need to define several parts of cloudstack that it uses as part of its security system.

Define a zone, pod, cluster. You can limit users to any of these levels of scope.

Within a pod you will define a network type. We will keep the Cloudstack network very basic.

And you will define the storage and hosts that are available to this pod and cluster.

To add these configurations you need to connect to cloudstack.

# Connecting to Cloudstack

Find the external IP address your outernetwork1 system has by checking Google Cloud Platform's VM Instances table.

We didn't choose to make the external IP address static, so it can be changed by Google every time the system is restarted.

Make sure iptables FORWARD rules don't conflict with what we are trying to accomplish. Logged into outernetwork1 as root user issue:

iptables -F

to flush (delete) any FOWARDing rules. Without doing this first, the attempt to DNAT based on the port number will fail.

From the address line in a browser issue:

http://<external IP address>:8080

You should get a login prompt. Respond to this with

username: admin

password: password

You will then be shown the first screen of a dialog you will use to configure your first zone.

## Configuring Cloudstack

Here is the configuration you will implement:

Configuration steps: (the answers a,b,c etc are in order by the REQUIRED (starred) entry box (more or less))

1. set a password for the admin account
2. zone
   1. basic
   2. zone1
   3. 8.8.8.8
   4. 8.8.8.8
   5. kvm
3. physical network
   1. accept all the defaults
4. pod
   1. pod1
   2. 172.16.10.1
   3. 255.255.255.0
   4. 172.16.10.11
   5. 172.16.10.20
5. guest traffic
   1. 172.1:wq!
   2. 6.10.1
   3. 255.255.255.0
   4. 172.16.10.30
   5. 172.16.10.50
6. cluster
   1. cluster1
   2. 172.16.10.2
   3. root
   4. <password you set for root user>
7. primary storage
   1. primary1
   2. cluster
   3. nfs
   4. 172.16.10.2
   5. /export/primary
8. secondary storage
   1. nfs
   2. secondary1
   3. 172.16.10.2
   4. /export/secondary

Launch zone

A sequence of events will be shown in a window.

The step "Adding host" can take a few minutes.

## Enable zone

At this point, your Cloudstack environment will start to come alive. But it can take a bit of time.

## System VMs

To track progress, you can select Infrastructure from the left Nav and then check on the 2 system VMs. You cannot do anything in Cloudstack until these VMs are "running" and the agent is "UP".

If the agents fail to come UP, it is probably due to system resources (cpu and or memory). You can add more to the cloudstackmgr1 VM and restart it.

Check the Dashboard (left Nav option) and see if you are low on any resources. The "Global Settings" cap most activities when these resources reach about 85%.

## Templates

Before you can deploy a VM in your Cloudstack environment, you need an OS template to apply. By default Cloudstack gives you a CentOS 5 template. This file has to be downloaded from the internet and then uploaded on storage so it can be accessed by Cloudstack.

To check where it is in the process do:

Images > Templates > select CentOS5 > select the Zones tab

On the Zones tab you are looking for two values: Status = Download Complete and Ready = Yes. You will not be able to use this image until these states are reached.