Micro QA Documentation

Release 0.1

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Self Contained Automated Test Environment.

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CHAPTER 1

How to install micro-qa?

You can install micro qa in few different ways. The easiest option would be to install it on your laptop using VirtualBox.

1.1 Install using VirtualBox

- First install VirtualBox, if you are on Fedora then you can install it from rpmfusion repo.

```
# yum localinstall --nogpgcheck http://download1.rpmfusion.org/free/fedora/rpmfusion-free-release-$(
# yum install VirtualBox
```

- Then install Vagrant. You can do it with the following command.

```
# yum install https://dl.bintray.com/mitchellh/vagrant/vagrant_1.4.3_x86_64.rpm
```

- Fork the MicroQA project. To learn more about forking a project you can read this link.
- Clone your forked repo.

```
$ git clone https://github.com/your-username/micro-qa.git
```

- Go inside the git repo and run the following command.

```
$ vagrant up
```

This will download a virtual machine, boot it and install micro-qa inside that vm. The download need to happen only once, from next time it will reuse the downloaded files.

- After the above command you can access the micro-qa install by visiting: http://localhost:8080.

Note: At the end of **vagrant up** command, it will show you the IP of the VM with *ifconfig eth1* command. You can use that IP too in your browser.

1.2 Install using AWS or Eucalyptus

You can setup micro-qa on an AWS instance or Eucalyptus instance too.

- Install Vagrant. You can do it with the following command.

```
# yum install https://dl.bintray.com/mitchellh/vagrant/vagrant_1.4.3_x86_64.rpm
```

- Fork the MicroQA project. To learn more about forking a project you can read this link.

- Clone your forked repo.

```
$ git clone https://github.com/your-username/micro-qa.git
```

- Edit the following parameters in the Vagrantfile.

```
aws.access_key_id = "XXXXXXXXXXXXXXXXXX"
aws.secret_access_key = "YYYYYYYYYYYYYYYYYYYYYYYYYYYYYYY"
aws.instance_type = "m1.medium"
## This CentOS 6 EMI needs to have the following commented out of /etc/sudoers,
## Defaults    requiretty
aws.ami = "emi-1873419A"
aws.security_groups = ["default"]
aws.region = "eucalyptus"
aws.endpoint = "http://10.0.1.91:8773/services/Eucalyptus"
aws.keypair_name = "vic"
override.ssh.username ="root"
override.ssh.private_key_path ="/Path/to/.ssh/id_rsa"
```

- Install a “dummy” vagrant box file to allow override of the box with the ami/emi

```
$ vagrant box add centos https://github.com/mitchellh/vagrant-aws/raw/master/dummy.box
```

- Once inside the repository run **vagrant up –provider=aws**. This will run a virtual machine, and install MicroQA in your cloud.

```
$ vagrant up --provider=aws
```

- Login to MicroQA on your browser by visiting: http://<instance-ip>:8080

Deploy a Cloud or Application

This section of the documentation explains different deployment options from Micro QA project.

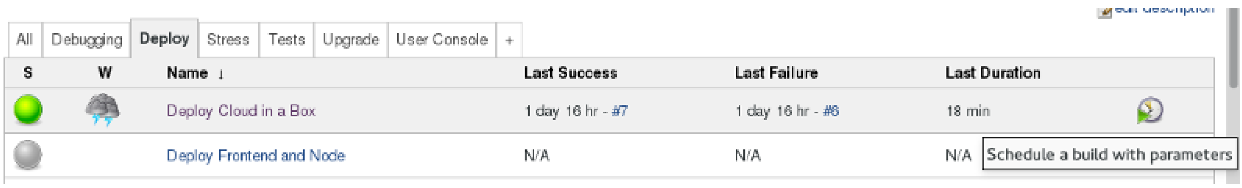
First click on the deploy tab and you will see different deployment options.

2.1 Deploy Eucalyptus Cloud in a box

Use this option to deploy Eucalyptus cloud in a single system. The target system should already have a freshly installed CentOS6.5. You need the root password and IP of the system.

Note: Remember to install **ntp** service in the target system and start the service before you start deploying.

First click on the right most column for scheduling a build with parameters.



S	W	Name ↓	Last Success	Last Failure	Last Duration
●		Deploy Cloud in a Box	1 day 16 hr - #7	1 day 16 hr - #8	18 min
●		Deploy Frontend and Node	N/A	N/A	N/A

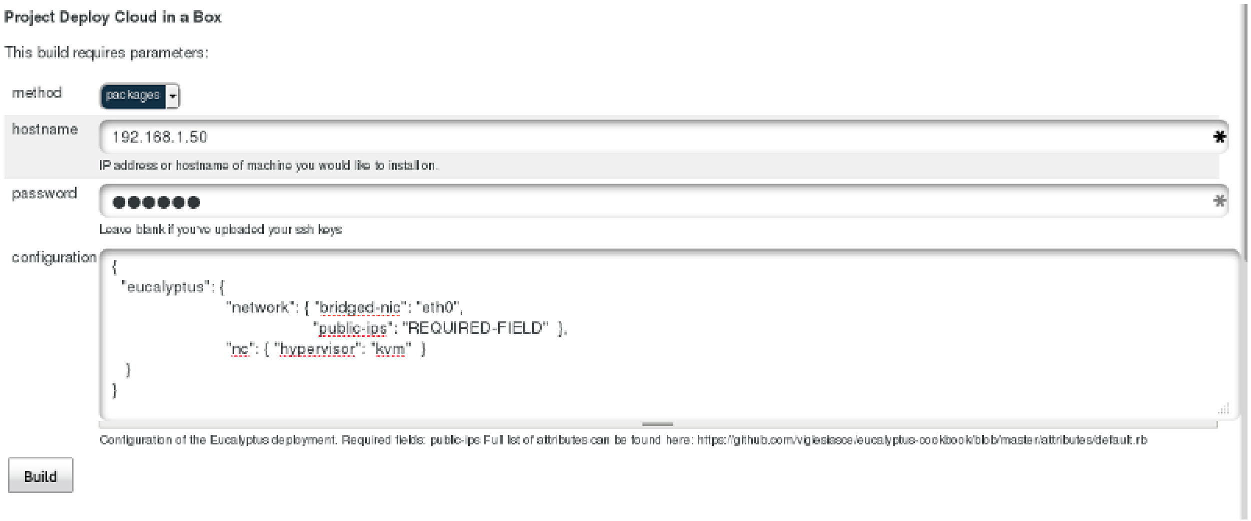
Schedule a build with parameters

This will open up a form which has a few basic questions for you. It can install both from *packages* (which is RPM packages) and also from direct git checkouts (source).

Enter the **hostname** and **password** of the target system. Remember to edit the configuration which is basically a JSON text. You will have to update the bridged-nic of the system (that is the NIC to be used for bridge) and public ip range. An example of the JSON data can be like the following.

```
{
  "eucalyptus": {
                            "network": { "bridged-nic": "eth0",
                                                  "public-ips": "192.168.1.100-192.168.1.150"  },
                            "nc": { "hypervisor": "kvm"  }
   }
}
```

After filling up all required fields just hit *Build* button and check the console output. At the end you will have Eucalyptus cloud deployed in the target which will be ready for use.



Project Deploy Cloud in a Box

This build requires parameters:

method: packages

hostname: 192.168.1.50

IP address or hostname of machine you would like to install on.

password: ●●●●●●

Leave blank if you've uploaded your ssh keys

configuration:

```
{
  "eucalyptus": {
                      "network": { "bridged-nic": "eth0",
                                      "public-ips": "REQUIRED-FIELD"  },
                      "nc": { "hypervisor": "kvm"  }
   }
}
```

Configuration of the Eucalyptus deployment. Required fields: public-ips Full list of attributes can be found here: https://github.com/viglesiasce/eucalyptus-cookbook/blob/master/attributes/default.rb

CHAPTER 3

Indices and tables

- *genindex*
- *modindex*
- *search*