MiCADO infrastructure set-up

prerequisite:

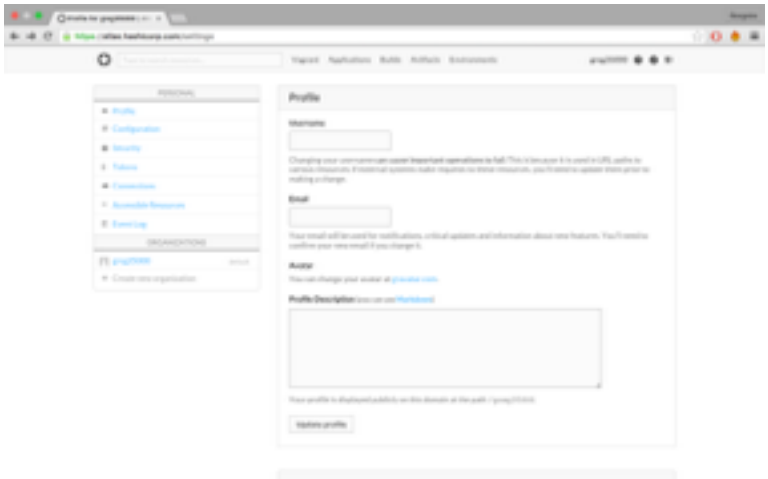
- Atlas account: https://atlas.hashicorp.com/
- CloudBroker account: https://cloudsme-prototype.cloudbroker.com/

Introduction:

This document will help the administrator to set up his own MiCADO infrastructure. Currently the version of the infrastructure is 0.01 and it's not currently for Production use, but it's a great tool for development use.

- First step: creation of a new Atlas key.

Log in with your Atlas account and go to https://atlas.hashicorp.com/settings



click on Token which will direct you to this:

give a name to your token and clic on Generate Token.

this will create a token that you will have to copy and keep it as it won't be displayed after you close the window.

- Second step: update of the necessary config files

you will need to update the consul configuration file ***config.json*** by adding the Atlas token, then Atlas infrastructure name and the consul encrypted key.

you can produce the consul encrypted key by using the consul binary which is inside the compressed file, using it as follow: consul keygen

the config.json is as follow:

```
{
        "server":true,
        "bootstrap_expect":2,
        "data_dir":"/var/consul",
        "node_name":"manager",
        “encrypt”:”consul encrypted key",
        "bind_addr":"31.171.246.150",
        "datacenter":"DSCR",
        "log_level":"err",
        "addresses":{
                "http":"0.0.0.0"
        },
        "enable_syslog":true,
        "atlas_join":true,
        “atlas_infrastructure”:”Atlas infrastructure name",
        “atlas_token":"Atlas infrastructure token"
}
```

the public key of the admin should be put inside the authorizedkey file located in the ssh directory of the manager. Create each packaged (ie manager/node/proxy) using the format tar.gz calling it input.tar.gz and putting everything apart from the deploy.sh script that will be used to installed the instances on CloudBroker.

Third step: creation of a new softwares in CloudBroker

- clic on new software and fill the field with the name you want to give and the version.
- then clic on “Save software and proceed to executable creation”

- fill the Binary field with the executable that will be executed when the job is launch. (it should be name executable.sh)
- then clic on “Save executable and deploy software”
- if a port needs to be open to access the instance (ie 22) add it in the Expert Options

- choose the option “I have an installation script and I would like CloudBroker Platform to generate the image”

- choose the image wanted by selecting the different option with the drop down menu. (best to use x86_64 ubuntu 14.04). The installation directory should be (/opt/DSCR_manager or /opt/DSCR_node or /opt/proxy depending on which software you are creating)
- upload the installation script which is deploy.sh.

- go to Expert Options and upload the install.tar.gz file
- once the files uploaded clic on “Save package and proceed to deployment generation”

- choose the base-deployment (best to use linux from CloudSigma) take the smallest flavour (an image can always scale up but not down)
- clic on “Proceed to deployment generation”

- we can see the job running. When the job is done clic on “Activate software”

FIRST USE,

launch a permanently running instance of the manager.

ssh to the manager (if on CloudSigma, use the port 2222)

- set up file to be able to launch instances through the manager instance.

modify cbcredentials file inside /opt/manager_DSCR/input directory by changing it to your credentials, and you’re all set up.