Setup Jaeger on Centos in MOC

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March 14, 2018

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1 Introduction

This document is to illustrate an example of how to setup Jaeger on Centos in MOC. The setup involves 2 VMs, VM6 and VM7. Setup would involve Jaeger and Docker on both VMs.

To demonstrate an understanding, I am deploying HOTRod on the VMs. Front end of HOTRod would be on VM6 and All other components would be on VM7.

This would demonstrate my understating of HOTRod and Jaeger in the attempt to trace HOTRod application.

2 SSH Into VMswith respect to current configuration

'ssh centos@128.31.25.229 -A' ssh into VM1
'ssh centos@192.168.100.5 -A' ssh into VM6
'ssh centos@192.168.100.6 -A' ssh into VM7
Password: 1234 for VM 6 and VM 7

3 Install Docker on Centos

Followed Document for installing Docker on Centos from: `https://docs.docker.com/install/linux/docker-ce/centos/#os-requirements`.

'sudo dockerd' to start Docker daemon
'sudo' attempt the following command to run docker `https://jaeger.readthedocs.io/en/latest/getting_started/`

4 Show Docker Jaeger GUI

The GUI is shwon on `http://localhost:16686`. To show this GUI, use X11 with Firefox from VM1 to VM6/7. Steps here can be mirrored in VM6.

1. Setup X11 on local Computer

2. Changes to `/etc/ssh/sshd_config` in VM7 should be:

   ```
   AllowAgentForwarding yes
   X11Forwarding yes
   ```

3. "sudo yum install xorg-x11-xauth xterm" install X11 on server VM 1

4. "systemctl enable sshd.service" to allow sshd.service

5. "systemctl restart sshd.service" restart sshd.service for ssh_config to work

6. "systemctl status sshd.service" check status if you want

7. "ssh -X centos@192.168.100.6 -A" into VM 7 and run firefox to see GUI ("sudo yum install firfox" if needed)

8. "sudo yum groupinstall GNOME Desktop" to allow display

9. "sudo yum groupinstall 'X Window System' "to sitnall X11

10. "sudo yum install xorg-x11-xauth" on VM7 for x11 authentication

11. "sudo yum search xorg-x11"

12. In VM 7 sudo vim .bashrc and add "export DISPLAY=localhost:10.0"

13. The .bash_profile should look like

    ```
    # .bash_profile

    # Get the aliases and functions
    if [ -f ~/.bashrc ]; then
            . ~/.bashrc
    fi

    PATH=$PATH:$HOME/.local/bin:$HOME/bin:
    export PATH
    export GOBIN="$HOME/projects/bin"
    export GOPATH="$HOME/projects/src"
    ```

5 Deploy HOTRod on Centos

As a key element, install *GO* **1.10 or newest** on VMs, follow the instrucations on `https://www.digitalocean.com/community/tutorials/how-to-install-go-1-7-on-centos-7`.

Install *shasum* for checking if GO is downloaded correctly. (Skipped in this case)

Now get HOTROD

1. install git "sudo yum install git"

2. Follow the `https://github.com/jaegertracing/jaeger/tree/master/examples/hotrod`

3. for installing go dep, "go build -o $GOPATH/src/github.com/TrueFurby/go-callvis/"