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**Course: Linux Administration (CIS-245-O1A)**

**Subject: Containers CentOS**

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**Date: 12/02/2021**

**How to install Docker CentOS**

**Docker is an open-source containerization platform. It enables developers to package applications into containers. Able to run on any machine with docker installed regardless of the operating system.**

**As always, we start going in root mode. We type su root and our password.**

**Texto

Descripción generada automáticamente**

**We start with the command sudo dnf config-manager --add-repo=https://download.docker.com/linux/centos/docker-ce.repo**

**Texto

Descripción generada automáticamente**

**Then we check the repo**

**Texto

Descripción generada automáticamente**

**We will get something like this picture. Then we force the installation of docker with the nobest option.**

**sudo dnf install --nobest docker-ce**

**Texto

Descripción generada automáticamente**

**We type Y**

**Texto

Descripción generada automáticamente**

**We type Y again**

**Texto

Descripción generada automáticamente**

**And we finish with this part.**

**This command is for installing the latest version of Docker**

**sudo dnf install https://download.docker.com/linux/centos/7/x86\_64/stable/Packages/containerd.io-1.2.6-3.3.el7.x86\_64.rpm**

**Texto

Descripción generada automáticamente**

**We type Y and the installation will begin.**

**Then we just need to activate or enable the program sudo systemctl enable --now docker**

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**Make sure it is active with systemctl is-active docker**

**Texto

Descripción generada automáticamente**

**Make sure it is enabled systemctl is-enabled docker**

**Interfaz de usuario gráfica, Aplicación

Descripción generada automáticamente**

**systemctl status docker To see if docker is finally doing what it is supposed to do.**

**Interfaz de usuario gráfica, Texto

Descripción generada automáticamente**

**How to install Kubernetes CentOS**

**We start by adding the kubernet repository to our packages.**

**cat <<EOF > /etc/yum.repos.d/kubernetes.repo**

**[kubernetes]**

**name=Kubernetes**

**baseurl=https://packages.cloud.google.com/yum/repos/kubernetes-el7-x86\_64**

**enabled=1**

**gpgcheck=1**

**repo\_gpgcheck=1**

**gpgkey=https://packages.cloud.google.com/yum/doc/yum-key.gpg https://packages.cloud.google.com/yum/doc/rpm-package-key.gpg**

**EOF**

**Texto

Descripción generada automáticamente**

**Then we update the repo info just in case to proceed with the next step.**

**dnf upgrade -y**

**Texto

Descripción generada automáticamente**

**This take to much time but let it be.**

**We procced with the next command so kubernet can install the components it needs to operate dnf install -y kubelet kubeadm kubectl --disableexcludes=kubernetes** **Texto

Descripción generada automáticamente**

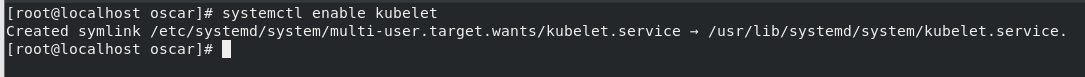
**To give each of your nodes a unique hostname, use this command:**

**sudo hostnamectl set-hostname master-node**

**sudo hostnamectl set-hostname worker-node**

**this is just to give them a name for the nodes.**

**Now we just need to activate the thing systemctl enable kubelet**

****

**Now we just start it**

**Texto

Descripción generada automáticamente**

**Then we start to configure it with this**

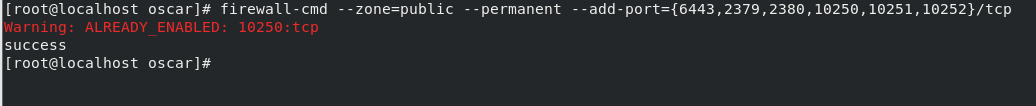
**kubeadm config images pull**

**Texto

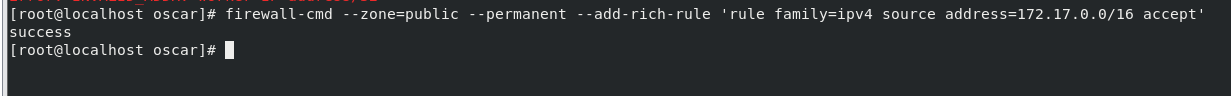
Descripción generada automáticamente**

**We open the ports to use kubernet**

**firewall-cmd --zone=public --permanent --add-port={6443,2379,2380,10250,10251,10252}/tcp**

****

**We allow the host from docker container firewall-cmd --zone=public --permanent --add-rich-rule 'rule family=ipv4 source address=172.17.0.0/16 accept'**

****

**Reload the firewall firewall-cmd –reload**

**Interfaz de usuario gráfica

Descripción generada automáticamente**

**We need to disable SeLinux because the containers need access to our host system, and it need to be configured under with a few premises. Which disables its security features.**

**sudo setenforce 0**

**sudo sed -i ‘s / ^ SELINUX = enforcing $ / SELINUX = permissive /’ / etc / selinux / config**

**Lastly, we need to disable swap in order for this to work.**

**sudo sed -i '/ swap / d' / etc / fstab**

**sudo swapoff -a**

**How to install Ansible**

**We start with the epel repo: yum install epel-release**

**Texto

Descripción generada automáticamente**

**Then, we do the installation**

**Texto

Descripción generada automáticamente**

**We type y and our installation is completed**

**We just need to check the version and that should be it. ansible --version**

**Texto

Descripción generada automáticamente**

**How to install Minikube CentOS**

**First, we download Minikube from the URL command.**

**curl -Lo minikube** [**https://storage.googleapis.com/minikube/releases/latest/minikube-linux-amd64**](https://storage.googleapis.com/minikube/releases/latest/minikube-linux-amd64)

**Imagen de la pantalla de un celular con letras

Descripción generada automáticamente con confianza media**

**Once this is completed, we just need to give the permission**

**chmod +x minikube**

**Texto

Descripción generada automáticamente**

**We just install Minikube with the following command**

**install minikube /usr/local/bin/**

**Texto

Descripción generada automáticamente**

**We start the minikube with this**

**minikube start --driver=none**

**Texto

Descripción generada automáticamente**

**And we finish by verifying the status**

**minikube status or minikube start**

**Texto

Descripción generada automáticamente**

**Overall, everything works. Minikube was not a problem and ansible either. I think the worst by default was the kubernet because it had so many things for the installation and configuration, but everything went fine at the end. The only thing that could mess me a little was the thing of how many pages it was supposed to be. I cut a lot of stuff but ended up with this many.**

**References**

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