# Installation

1. Install Virtual Box : <https://www.virtualbox.org/wiki/Downloads> and Vagrant : <https://developer.hashicorp.com/vagrant/downloads?product_intent=vagrant>
2. Add VBoxManage.exe to the environment variable on the host machine (since vagrant scripts need to communicate with VBoxManage.exe to create VMs).

A screenshot of a computer

Description automatically generated

To determine the path of VBoxManage.exe go to properties of Virtual Box in the target section and copy the stated path to the environment variables.

1. Clone the GitHub repository which includes the vagrant file (script to automate creating VMs with Kubernetes services preinstalled): <https://github.com/techiescamp/vagrant-kubeadm-kubernetes> .
2. Navigate to the directory of the vagrant file after cloning the repo and run the command: vagrant up (to start running the script that automates creating the VMs previously mentioned).
3. Navigate to virtual box and access the machine via the vagrant credentials, username: vagrant, password: vagrant.
4. Create the nginx deployment YAML file:

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Description automatically generated

This YAML file is equivalent to a service descriptor specifying that 3 pods of nginx containers will be created with the nginx image version and the container port.

1. Create the deployment by running the YAML file through the kubectl command: kubectl create -f nginx-deployment.yaml