Exercise 1.

Install Ansible and set up ssh keys

# Launching the Ansible Training Environment

## Log into the builder environment

1. Log in to the Ansible Training virtual machine called “builder” as root
2. cd into the “labenv” directory in root’s home

## Build ansible “control node” image

1. cd into the “controlnode” directory under “labenv”
2. Run the command “./build.sh”
3. It is going to take some time, ca. 2-3 minutes
4. Check the images with the command “podman images -a”

## Run the “control node” container

1. Run the command “./run.sh” in the same “controlnode” directory
2. Check the running container with the command “podman ps -a”

## Build ansible “managed host” image

1. cd into the “managedhost” directory under “labenv”
2. Run the command “./build.sh”
3. Check the images with the command “podman images -a”

## Run the “managed host” containers

1. Run the command “./run.sh” in the same “managedhost” directory
2. Check the output IP and MAC addresses, they should all be different
3. Make note of the 3 IP addresses, we will need them later (e.g. 10.88.0.11, 12, 13)
4. Check the running containers with the command “podman ps -a”

# Setting up SSH keys

## Generate SSH keys on “controlnode”

1. Enter control node with the command “podman exec -it ansible bash”
2. Generate SSH keys with the command “ssh-keygen”
3. Answer with empty “Enter” to all three questions

## Copy public ssh keys into managed hosts

1. Issue the command “ssh-copy-id 10.88.0.11”
2. Answer “yes” for the known\_host fingerprint related question
3. Type in root password “root” when requested
4. Repeat 2 and 3 for the other two magaged host containers as well

# Install and test Ansible on control node

## Install Ansible

1. Run “dnf install -y ansible” on control node “ansible” host as root
2. Test the installation with “ansible –version”
3. Suppress the python version warning with the command:
4. printf “[defaults]\ninterpreter\_python=auto\_silent\n” > ansible.cfg

## Create inventory for the managed hosts

1. Create a textfile named “inventory” with the three IP addresses e.g. as follows:

[servers]

10.88.0.11

10.88.0.12

10.88.0.13

Test ansible ad-hoc command

1. Test that ansible can manage the hosts with the ping module as follows:
2. ansible -i inventory servers -m ping
3. Check ansible output for all three pong responses