

Lesson Plan

Managing your Lab

Summary

1. Stopping and Resuming Your Lab
2. Tearing Down and Recreating Your Lab

Stopping and Resuming Your Lab

The multipass utility offers stop and start functionality for safely freezing and resuming instances. You can use this if desired to free up resources from your lab host machine while you aren't working on the course.

If you haven't already done so, you can exit the host1 instance by using the exit command.

```
exit
```

Stop

Stopping instances is the recommended way to manage your lab. This allows you to save your progress, and later continue from where you left off. To do this stop all instances with the following command:

```
multipass stop --all
```

On some platforms, the stop action will crash and not proceed with shutting the instances down. This is an issue with Multipass that we expect to be resolved.

List

To confirm the stop has successfully completed, you can view the state of the instances managed by multipass using the list command:

```
multipass list
```

Example output:

Name	State	IPv4	Image
------	-------	------	-------

control	Stopped	--	Ubuntu 20.04 LTS
host1	Stopped	--	Ubuntu 20.04 LTS
node1	Stopped	--	Ubuntu 20.04 LTS
node2	Stopped	--	Ubuntu 20.04 LTS

Start

When you are ready to resume the course, you can simply start the instances from a suspended, or stopped state. The commands to start all instances can be found below. We recommend starting the instances in this order to cause minimum disruption to the Kubernetes control plane.

```
multipass start control
multipass start node1
multipass start node2
multipass start host1
```

Special Note Regarding Windows VMware Interactions

On Windows, if you're running an old version of VMware Workstation/Player you may find that VMware can not start your VMs after using multipass due to its use of Hyper-V. This has been fixed in the latest version of VMware Workstation and Windows 10. To workaround this issue, after stopping your multipass VMs, you can switch the Hyper-V feature off using the following command:

```
bcdedit /set hypervisorlaunchtype off
```

After rebooting your computer, VMware should now be able to launch your Virtual Machines once again. To toggle the feature back on again to resume your certification lab you can use the following command:

```
bcdedit /set hypervisorlaunchtype auto
```

After rebooting your computer once again, you can start the instances in multipass as normal and continue the certification program labs.

Tearing Down and Recreating Your Lab

If you get your Lab into a bad state, you might find the quickest way to get you back on track is to tear down and recreate your lab.

Tear Down

Start by deleting all instances:

```
multipass delete --all
```

Instances after they're deleted are still stored in multipass, but in a deleted state. This is an implementation detail of multipass, this means the instances are gone from the virtualization layer, but still stored in multipass. To fully delete the instances (similar to a trash / recycle bin on desktop platforms), we must purge the instances:

```
multipass purge
```

Recreate

Please follow the Lab Setup, Installing Calico, and Installing the Sample Application steps when recreating your lab, as well as any additional information found in the introduction to the week section.

Note that while the course is designed to have self-contained modules, each module may build on the results of the previous module. As such at the beginning of each week, steps will be provided to bring your lab to a minimum configuration state required to proceed with the week. If you encounter any trouble related to this, please let us know in the #academy channel on [Calico Users](#) Slack.