Lab - Getting Started with OpenStack

# Lab Purpose

This lab will help you get familiar with the OpenStack based lab environment.

# Learning Outcomes

1. Basic understanding of an Infrastructure as a Service (IaaS) cloud management platform such as OpenStack
2. Familiarity with the “Horizon” self-service dashboard interface accessible through the browser
3. Ability to launch a simple test virtual machine instance
   1. Creating key-pair
   2. Selecting “flavors”
   3. Creating a network on which the instance will be launched
   4. Accessing the Virtual Machine through the browser using HTML 5 consoles

## Relevant NICE Cybersecurity Framework Version NIST 800-181, TASKS and KSAs (<https://www.nist.gov/itl/applied-cybersecurity/nice/resources/nice-cybersecurity-workforce-framework>)

|  |  |
| --- | --- |
| **TASK(S)** | T0489 |
| **Knowledge ID** | K0056, K0230, K0056, K0336, K0610 |
| **Skill ID** | S0073 |
| **Ability ID** |  |

# Prerequisites

## Environment

1. You should have already received instructions on logging into the lab environment from your instructor
2. Any computer with Internet access should work. Latest versions of Chrome and Firefox browsers are preferable.

## Background Knowledge

1. Familiarity with virtualization concepts and basic working knowledge of Linux command line will be beneficial but not required.

# Lab Task 1: Login and explore the Horizon dashboard

1. A work in progress

# Lab Task 2: Launch an instance

## Spin up an instance of Ubuntu Linux

1. In the OpenStack Horizon user interface, navigate Compute🡪Images

# Submission Instructions

This lab has not submission requirements

# Further Learning/Links/Resources

1. https://docs.openstack.org/horizon/latest/user/log-in.html
2. https://docs.openstack.org/horizon/latest/user/launch-instances.html

End of Lab