

# Study Plan Openstack Administration (OS-ADM)





#### **About This Course**

The focus of OpenStack Administration will be managing OpenStack using both the web-based dashboard and the command-line interface, in addition to managing instances and installing OpenStack using the Kolla-Ansible project tool. Essential skills covered in the course include configuring OpenStack; managing users, projects, flavors, roles, images, networking, and block storage; setting quotas; and configuring images at instantiation.



### Summary



**Training Duration:** 32 Hours (4 Days)

#### **Course Main Subjects**

- Launch an instance.
- Manage projects, quotas, and users.
- Manage networks, subnets, routers, and floating IP addresses.
- Create and manage block and object storage in the OpenStack framework.
- Customize instances with cloud-init.
- Deploy scalable stacks.
- Deploy OpenStack using a kolla-ansible tool



## **Target Audience**

System Administrators, Cloud Administrators, Developers, Site Reliability Engineer.

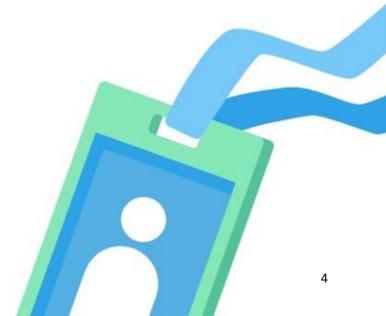
#### **Prerequisites**

Docker Administration (DO-ADM)

# **Learning Output**

The learning topics will assist participants in:

- 1. Understanding how to deploy Openstack.
- 2. Understanding Management Openstack Environment.
- 3. Troubleshoot instances issue
- 4. Preparation Exam COA



#### Requirements

Have a laptop/computer with min. specifications and installed tools:

Operating System	Windows, Linux, or MacOs
Processor	Intel Core i3
Memory	4 GB RAM
SSH Client	Termius / Putty / MobaXTerm
Text Editor	Sublime Text / VSCode
Browser	Chrome and Firefox
VPN (Optional)	https://client.pritunl.com/

#### **Facilities**

- Virtual machine (available until H+5 post training)
- Class materials (access 1 years)
- Certificate
- Recording (VITL)



# Certification

- Certificate of Course Completion
- Btech Internal Exam (optional)

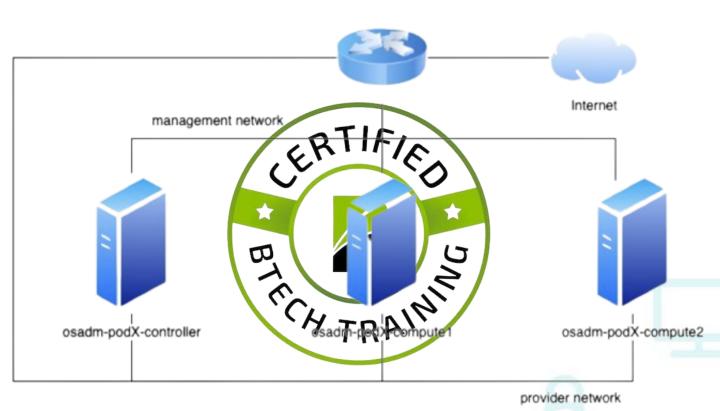


# **Learning Strategies**

- Theory
- Study Case
- Pre-Test & Post-Test
- Quiz
- Hands-on Lab
- Internal Exam (optional)



# **Training Topology**



# **Learning Modules**

Training Plan	
Topic	Outcome
IT Infrastructure	<ul> <li>Understand about Traditional IT architecture.</li> <li>Understand how cloud technology works and types.</li> </ul>
Openstack Overview	<ul> <li>Understand the role of openstack as laaS</li> <li>Understand the services available in openstack and their functions.</li> </ul>
Installing Openstack	<ul> <li>Perform the preparation needed to build openstack.</li> <li>Installing openstack using kolla-ansible</li> <li>Checking and testing access to openstack.</li> </ul>
Identity Management	Understand how to create Project, User, Access Role, and quota.
Openstack Operation via Dashboard Horizon	<ul> <li>Understand how to manage services in openstack such as images, flavors, networks, routers, and keypair through horizon.</li> <li>Understand how to run instances through horizon.</li> </ul>

Openstack Operation via CLI	<ul> <li>Understand how to manage services in openstack such as images, flavors, networks, routers, and keypair through CLI.</li> <li>Understand how to run instances through CLI.</li> </ul>
Managing Block Storage	<ul> <li>Understand the use of volumes on instances</li> <li>Adding volumes to instances</li> <li>Creating a bootable image on a volume.</li> </ul>
Managing Object Storage	<ul> <li>Understand the use of additional storage in openstack</li> <li>Adds additional storage access to instances</li> </ul>
Managing compute	<ul> <li>Adding compute to an openstack cluster.</li> <li>Performing compute reduction on an openstack cluster.</li> </ul>
Managing instances	<ul> <li>Performing specification size changes on instances.</li> <li>Migration instances between compute locations</li> <li>Run instances with compute specifications.</li> </ul>
Orchestration Resource Openstack	<ul> <li>Understand the concept of orchestration resources in openstack</li> <li>Can run orchestration instances in openstack</li> </ul>
Infrastructure as Code (IaC)	<ul> <li>Understand the concept of Infrastructure as Code (IaC) on IaaS.</li> <li>Can run IaC Tools to run a large number of instances.</li> </ul>
Btech Certified Openstack Administrator	Testing the competence of participants based on certain case studies

# Thank You

Another Course:

https://adinusa.id/pro-training