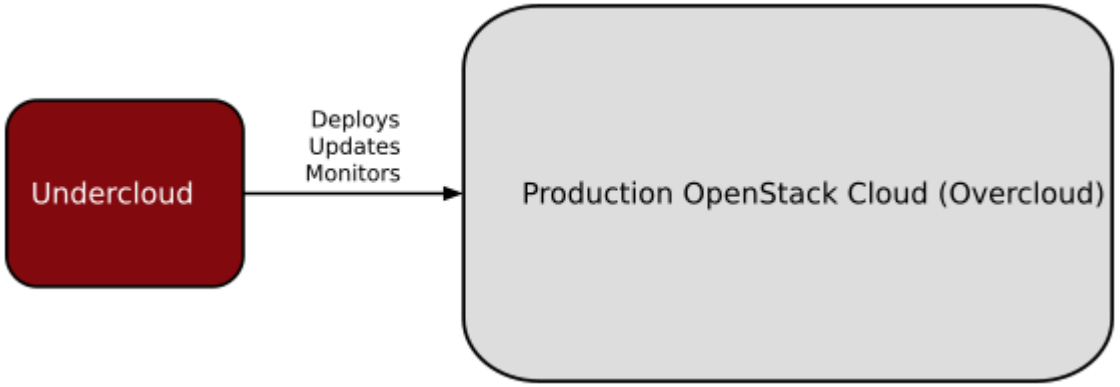
Module 8: Triple O

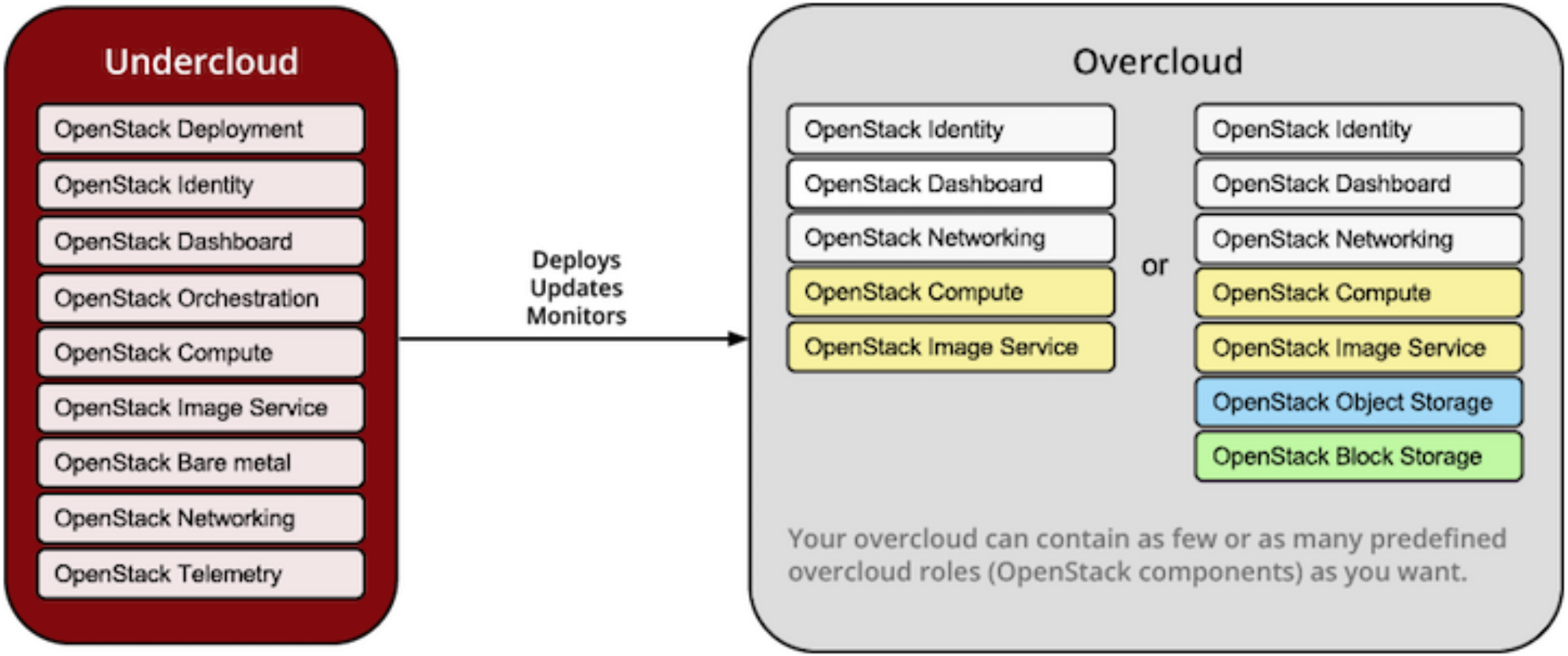
What is TripleO

TripleO is a community developed approach

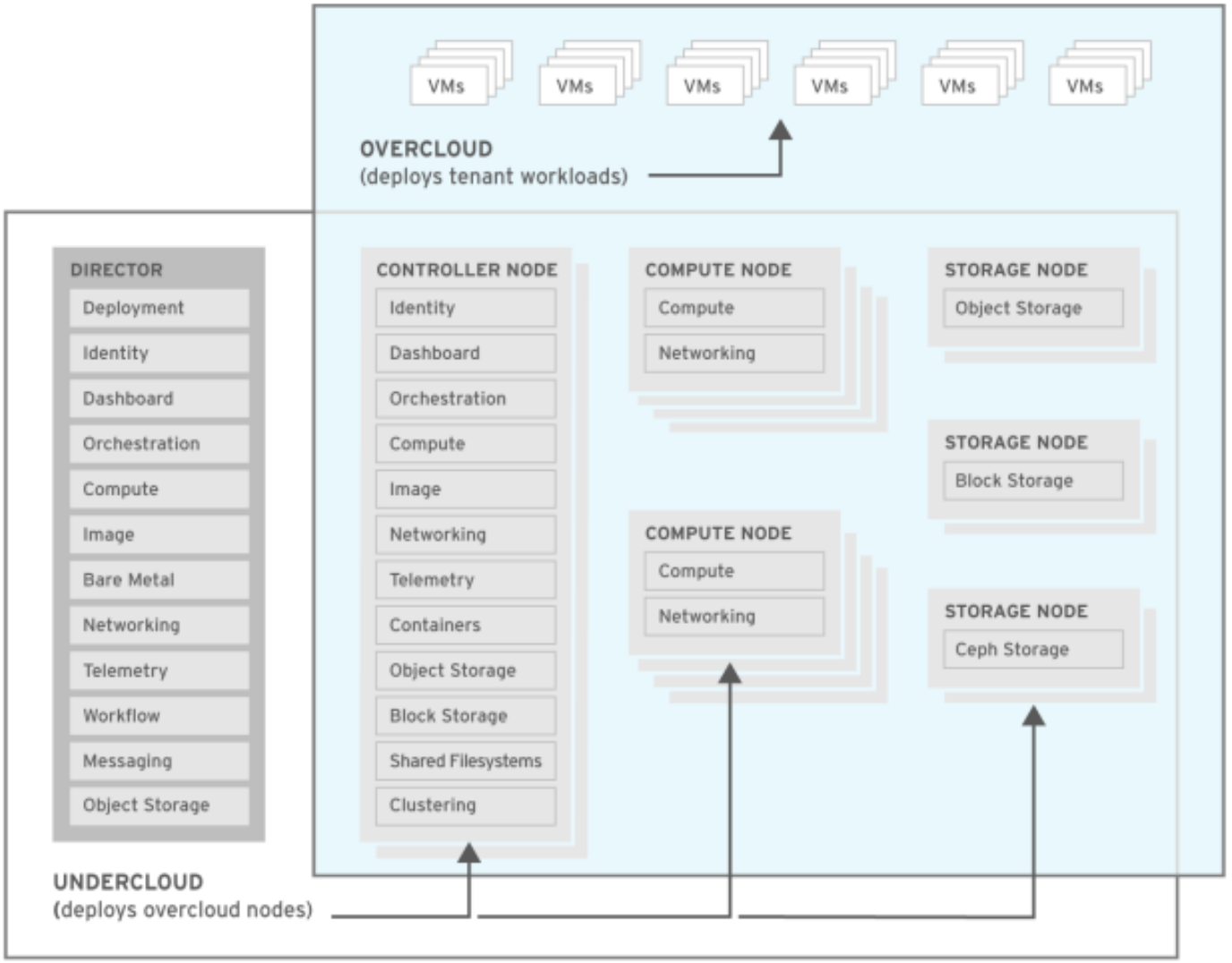
TripleO is the friendly name for “OpenStack on OpenStack”. It is an official OpenStack project with the goal of allowing you to deploy and manage a production cloud onto bare metal hardware using a subset of existing OpenStack components.



TripleO


Undercloud
OpenStack Deployment
OpenStack Identity
OpenStack Dashboard
OpenStack Orchestration
OpenStack Compute
OpenStack Image Service
OpenStack Bare metal
OpenStack Networking
OpenStack Telemetry
Deploys
Updates
Monitors
Overcloud
OpenStack Identity
OpenStack Dashboard
OpenStack Networking
OpenStack Compute
OpenStack Image Service
or
OpenStack Identity
OpenStack Dashboard
OpenStack Networking
OpenStack Compute
OpenStack Image Service
OpenStack Object Storage
OpenStack Block Storage
Your overcloud can contain as few or as many predefined overcloud roles (OpenStack components) as you want.

More Eloborated Diagram



Environment Setup

* **Standalone**

* **Virtual**

* **Baremetal**

Standalone Environment

TripleO can be used as a standalone environment with all services installed on a single virtual or baremetal machine.

The machine you are deploying on must meet the following minimum specifications:

- **4 core CPU**
- **8 GB memory**
- **60 GB free disk space**

Virtual Environment

TripleO can be used in a virtual environment using virtual machines instead of actual baremetal. However, one baremetal machine is still needed to act as the host for the virtual machines.

Virtual deployments with TripleO are for development and testing purposes only.

Barmetal Environment

TripleO can be used in an all baremetal environment. One machine will be used for Undercloud, the others will be used for your Overcloud.

To deploy a minimal TripleO cloud with TripleO you need the following baremetal machines:

1 Undercloud

1 Overcloud Controller

1 Overcloud Compute

Network Setup

> One Provisioning interface

> One External/Public interface

> One Power interface

Network Setup

> One Provisioning/Management interface

> One External/Public interface

> One Power interface

Setting Up Undercloud

> Setup the repositories

> Create stack user and sudo access

> Configure undercloud.conf file as per infrastructure

> Install undercloud

Configure undercloud for overcloud

- Creating images
- Setting up inventory json file
- Configure network boot
- Perform introspection