

# Virtual Infrastructure Manager (OpenStack)

## OpenStack

OpenStack is the only virtual infrastructure manager in OPNFV. The role of the virtual infrastructure manager is to configure the compute, hypervisor and infrastructure network domains. When there is no SDN controller, it can also configure the underlying physical networks. However, in the OPNFV scenarios, OpenStack only deals with configuring virtual switches, ie, infrastructure networking.

OpenStack itself consists of a number of projects. This part will cover what OpenStack projects are used in OPNFV. The following table shows the OpenStack projects that different installers use.

OpenStack project	Apex	
Nova	✓	
Swift	✓	
Ceilometer	✓	
Neutron	✓	
Ironic	✓	
Glance	✓	
Trove	✓	
Neutron	✓	
Keystone	✓	
Heat	✓	

The [OpenStack APIs](#) that OPNFV uses are

API	Version	Comments
Bare Metal API	v1	
Block Storage API	v3	
Compute API		
Identity API	v3	Some installers also support v2
Image service API	v2	
Networking API	v2.0	
Object Storage API	v1	
Orchestration API	v1	

The following OPNFV projects are working on OpenStack.

Fault Management	Doctor	Doctor is enhancing the OpenStack fault management
Virtualized Infrastructure Deployment Policies	Copper	Copper is working on the OpenStack Congress project which is the OpenStack policy management component
Resource Management	Promise	Promise adds resource reservation component to OpenStack
VNF Event Stream	VES	VES defines and implements event format and event collector that works with other OpenStack components

Template Distribution Service	Domino	
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## Software Defined Networking (SDN)