

NetReady: Network Readiness

Release draft (65386cb)

OPNFV

April 19, 2016

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Project NetReady, https://wiki.opnfv.org/display/netready/NetReady

Abstract OPNFV provides an infrastructure with different SDN controller options to realize NFV functionality on the platform it builds. As OPNFV uses OpenStack as VIM, we need to analyze the capabilities this component offers us. The networking functionality is provided by a single component called Neutron, which hides the controller under it, let it be Neutron itself or any supported SDN controller. As NFV wasn't taken into consideration at the time when Neutron was designed we are already facing several bottlenecks and architectural shortcomings while implementing our use cases.

The NetReady project aims at evolving OpenStack networking step-by-step to find the most efficient way to fulfill the requirements of the identified NFV use cases, taking into account the NFV mindset and the capabilities of SDN controllers.

	Date	Description
History	22.03.2016	Project creation
	19.04.2016	Initial version of the deliverable uploaded to Gerrit

Definition of terms

Different SDOs and communities use different terminology related to NFV/Cloud/SDN. This list tries to define an OPNFV terminology, mapping/translating the OPNFV terms to terminology used in other contexts.

- **NFV** Network Function Virtualization
- **NFVI** Network Function Virtualization Infrastructure; totality of all hardware and software components which build up the environment in which VNFs are deployed.
- **VIM** Virtualized Infrastructure Manager; functional block that is responsible for controlling and managing the NFVI compute, storage and network resources, usually within one operator's Infrastructure Domain, e.g. NFVI Point of Presence (NFVI-PoP).
- **Virtual Machine (VM)** Virtualized computation environment that behaves very much like a physical computer/server.
- **Virtual network** Virtual network routes information among the network interfaces of VM instances and physical network interfaces, providing the necessary connectivity.
- **VNF** Virtualized Network Function. Implementation of an Network Function that can be deployed on a Network Function Virtualization Infrastructure (NFVI).

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