Flow Virtual Networking

Software-defined networking for hybrid clouds

Key Benefits

- Logically isolate virtual networks without changing underlying physical networks
- Open and extensible
- Provide secure, networking multi-tenancy
- Easily segment any logical, virtual network
- Network consistency across clouds
- A unified network framework for all workloads
- Self-service for developers and app owners
- Quickly spin-up isolated test and dev environments
- APIs available for a fully automated experience
- Simplify underlying physical network configuration and management

Product Overview

The influx of data and applications have created vast, complex physical networks that require management, security and monitoring across clouds. Traditionally, private and public clouds have been constrained by just-in-time network availability and deployment challenges that led to network silos and security gaps.

Flow Virtual Networking from Nutanix delivers security, automation and software-defined networking (SDN) that simplifies the creation and configuration of virtual networks without time-consuming manual configurations of physical networks, routing or IP address assignment.

Flow Virtual Networking uses virtual private clouds (VPCs) to provide public cloud-like network features and multi-tenancy inside your Nutanix hyperconverged infrastructure (HCI) to automate and define core services like DHCP, NAT, routing, and security policies from the Nutanix Prism Central multi-user cluster manager.

Flow Virtual Networking leverages AHV virtualization to bridge your workload networks and easily extends your data and applications to public clouds using Nutanix Cloud Clusters (NC2).

Flow Virtual Networking Connects All Your Clouds

Flow Virtual Networking makes software-defined networks easy to implement and use across all your clouds. Built into Nutanix, Flow Virtual Networking leverages powerful enterprise networking features without high complexity or cost.

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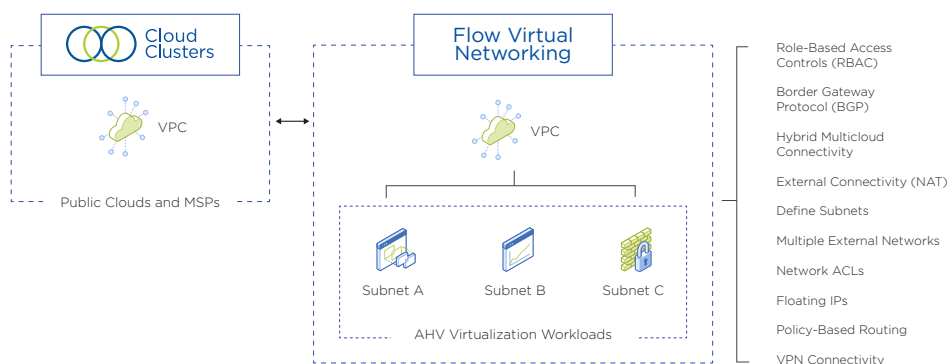
Features and Unique Capabilities

- **VPCs:** Create logically isolated namespace zones using VPCs.
- **Subnet creation:** Enable broadcast domains using your own IP prefixes.
- **Multiple external networks and connectivity:** Connect to two different external networks at the same time using network address translation (NAT) or routed networks.
- **Hybrid cloud connectivity across networks:** Easily stretch Layer 2 traffic across different VPCs for disaster recovery, partial failover, active/active sites, or bridging to a physical network.
- **Border Gateway Protocol (BGP) routing:** Quickly and easily route and peer networks using the BGP standard.
- **Role-based access:** Assign granular roles and permissions to VPC networks for multiple levels of security access protecting critical network operations
- **Network access control lists (ACLs):** Manage policy-driven access controls to allow or deny communication between subnets.
- **Floating IPs:** Provide a 1:1 external IP connection with NAT to a user VM (UVM).
- **Policy-based routing:** Redirect traffic between subnets to a virtual appliance for additional processing or inspection.
- **VPN connectivity:** Encrypted VPN tunnels ensure security to remote sites and between VPCs.

Product Advantages

- **Simplified deployment:** Spin-up and run Flow Virtual Networking for VM workloads in a few clicks. No extra software required.
- **Automate configurations:** VPC networking enables configurations and details to span private or public clouds without complex changes.
- **Isolate workloads with networks:** Isolation using VPCs ensures workloads and VMs can be quickly and logically separated for testing, development, compliance, and security.
- **Networking that extends to all clouds:** Flow Virtual Networking overlay networks preserve, manage and extend the same networks across clouds with simple integration to public clouds like Azure and AWS, enabling a true hybrid cloud.
- **Deep ecosystem support:** Key ecosystem partnerships ensure that Flow Virtual Networking can easily extend networks without creating management headaches.
- **Multi-Tenant capabilities :** Ensure strict compliance with multiple, segmented networks managed within the same cluster without buying extra hardware.
- **Self-service network creation:** Enable and allow users to create their own networks within the parameters you define.

Usage and Licensing

Flow Virtual Networking is included within the following Nutanix licenses:

Nutanix Cloud Infrastructure (NCI)

- Pro
- Ultimate

Nutanix Cloud Platform (NCP)

- Starter
- Pro
- Ultimate

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