Infinity SD-IPAM

Struggling With Network Automation?

The shift from traditional network architectures to the software-defined world is gaining momentum. As new automated processes are being introduced to unleash service agility, data centers and service providers operating at scale are quickly realizing that commonly used spreadsheets and other traditional IP Address Management solutions are creating a bottleneck into their automated service architectures. As any automated process is only as efficient as its weakest link, the traditional IPAM solutions can destroy the Return on Investment (ROI) of an entire service automation program.

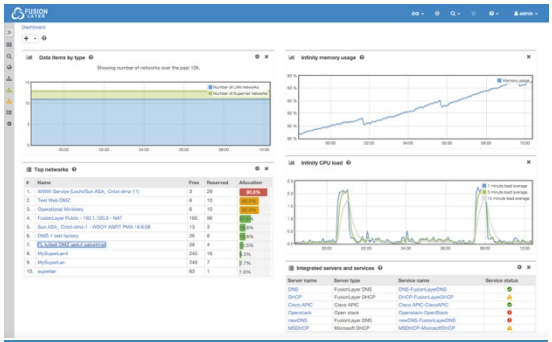
Software-Defined IPAM (SD-IPAM) Comes to Rescue

FusionLayer Infinity is the world's first Software-Defined IP Address Management (SD-IPAM) solution that enables unified management and provisioning of all network resources such as blocks, networks and release parameters. With off-the-shelf connectors that enable plug-and-play integrations with popular orchestrators and controllers via REST APIs, it integrates seamlessly with virtually any service automation architecture.

In addition to its patented business logic for provisioning free network prefixes and release parameters such as IP addresses, names and Unique Identifiers (UID) in multitenant environments, FusionLayer Infinity comes with a hybrid database architecture employing both NoSQL and PostgreSQL databases. Thanks to this groundbreaking solution architecture, FusionLayer Infinity provides up to a x25 scalability advantage over old-school IPAM solutions, allowing tens of millions of objects to be managed and provisioned centrally by a single SD-IPAM system.

Features:

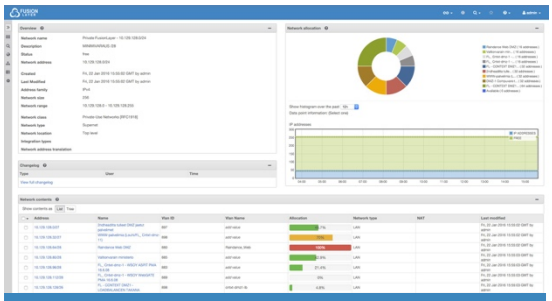
- Unparalleled scalability – up to x25 scalability advantage
- Simplified User Experience (UX) designed for multitenancy
- Supports network overlap and role-based access control
- Northbound REST API with patented business logic for:
  - Provisioning release parameters (IPs, UIDs, names)
  - Provisioning free networks/prefixes (SDN, SD-WAN)
  - Supports Cisco, RedHat, Microsoft, OpenStack, HPE, & VMware
- Southbound integration with built-in connectors supporting:
  - SDN controllers from Cisco and Nuage Networks
  - Integrated DNS and DHCP server instances
  - Automated Unique ID (UID) generation for NFV Native support for IPv4, Pv6 and dual-stack



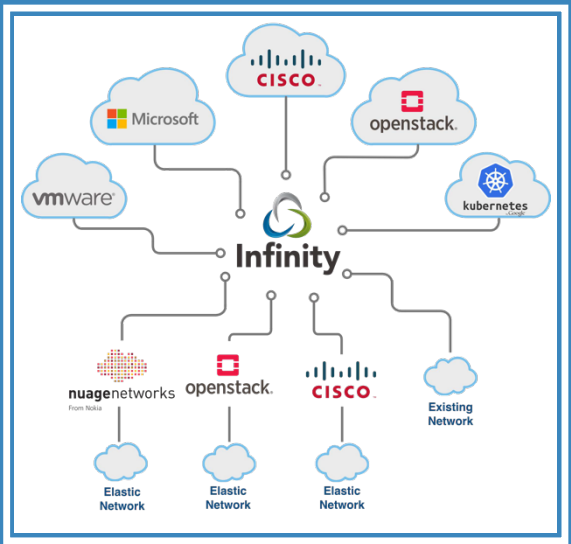
Global Toolset - Dashboard

Key Benefits:

- Maximize the service architecture ROI by automating:
  - Release parameter provisioning (IPs, UIDs, names, VLANs & VRFs)
  - Network and prefix provisioning for SDN and SD-WAN
- Eliminate service disruptions and network issues through:
  - Unified management of existing and SDN networks
  - Centralized provisioning of multiple orchestrators
- Simplify networking through unified IP provisioning for:
  - Converged infrastructure
  - Private, public and hybrid cloud (incl. containers)
  - NFV environments
- Speed up time-to-market for new services
- Real-time visibility into network and IP assignments
- Automated change provisioning into DNS services
- Native support for multitenancy through:
  - Ability to manage and provision overlapping networks
  - Role-based Access Control (RBAC) for delegations
- Add IPAM-as-a-Service into your service catalogue



Network View



COMPATIBLE WITH:

SDN ENvironments:
- Cisco ACI / APIC
- Nuage VSD

Cloud Services:
- Microsoft Azure
- Amazon AWS
- Arista EOS

NFV Environments:
- HPE NFVI-I
- HP Helion Carrier Grade

Orchestrators:
- OpenStack Liberty+
- Cisco UCS Director
- Kubernetes
- Microsoft SCVMM
- VMware VCO & vRealize
- Ansible, Chef, Puppet, etc. possible

DNS Servers:
- FusionLayer DNS
- Microsoft DNS
- F5 Big-IP DNS
- Nominum Vantio Auth

DHCP Servers:
- FusionLayer DHCP
- Microsoft DHCP

Virtualization Platforms:
- Citrix Xen
- KVM
- Microsoft Hyper-V
- VMware ESXi

Hardware:
- Any CentOS 6 /RHEL 6 compliant x86 server

vmware PARTNER TECHNOLOGY ALLIANCE

CITRIX ready

GOLD R6 READY

Main Features at a Glance:

Unified management of all network blocks and subnetworks:
- Native support for IPv4, IPv6 and dual stack networks
- Support for overlapping private address spaces
- Automated synchronization with SDN controllers
- Optional L2/L3 discovery for traditional networks
- Support for binding subnets with DHCP services
- Supports default DNS zones for each subnet

Can be operated as CMBD for all network-related information:
- Data structure fully configurable, no restart required
- All data accessible via REST (read, write, remove)
- REST API supports integration with multiple systems
- Automated data synchronization from multiple sources

Native support for multitenancy and RBAC:
- Supports overlapping private networks in single system
- Role-based Access Control (RBAC) for restricted access
- Centralized authentication via LDAP, RADIUS and PAM

Advanced business logic for provisioning:
- Off-the-shelf connectors for supported orchestrators
- Provisions IP, name and/or UID based network tags
- Provisions networks / prefixes based on Supernet tags
- Supports integration with multiple external systems

IPAM tools for network management and assignments:
- Network management wizards for different network types
- Tools for effecting bulk changes
- Bitmask / network calculators
- IP calculators
- Automated synchronization of DNS data
- Default DNS zones and naming on subnet-level
- Merge and split subnetworks on the fly
- Subnet-use and allocation reports
- Import / export tools

Automate DNS management process:
- Slave zone creation
- Zone serial incrementing
- Reverse entries
- Validation and consistency checks

High Availability (HA) & Scalability:

- Embedded Redis NoSQL database for data caching
- Embedded PostgreSQL database for persisting storage
- Supports HA through clustered deployments
- Scales to tens of millions of objects under management

Supporting Datasheets

https://www.fusionlayer.com/documents/dhcp-server-datasheet.pdf
https://www.fusionlayer.com/documents/dns-server-datasheet.pdf