VMware Global Network Identities

KEY BENEFITS

- Eliminate gaps to implement Zero
 Trust Accelerate Zero Trust to
 secure applications through a
 common resource framework,
 allowing a standardized network
 identity to create and capture intent.
- Reduce management complexities Enable fast, reliable and secure changes. Eliminate the need for arbitration across teams with unified control across disparate silos.
- Streamline automation Integrate with existing business processes and workflows. An API-first architecture provides tight integration with business tooling and the lifecycle of business intent.

Overview

VMware Global Network Identities[™] is a multi-cloud network services platform that provides unified visibility, control and governance of network identities. It offers connectors to orchestrate DNS, DHCP, and IP address management (IPAM) functions across enterprise, public cloud and managed solutions.

Workload/Cloud Automation, VMware vRealize® Automation™, API, Service Automation

VMware Global Network Identities™

DNS as a Service

DNS as a Service

Unified Naming and Addressing

Data Center

Cloud

Remote Office/Branch Office Sites with VMware SD-WAN™ Edges

DATA Control Telephone Data Center

NAMING Control Telephone Data Center

 $\label{thm:continuous} \textbf{FIGURE 1:} \ \textbf{The VMware Global Network Identities platform}.$

Global network identities unlock cloud service provider functionality for the enterprise

Too many disparate naming and addressing tools, manual processes, and spreadsheets become a bottleneck to automation. Organic sprawl of multi-vender or multi-environment DNS, DHCP and IPAM (DDI) solutions have evolved over many years in silos. This is getting worse as lines of business go around core IT teams by using public cloud or modern app—specific tooling.

As a result of lack of consistency and a single source of truth, resource identification and control become impractical. These solutions are also disjointed from governance, change impact, and policy/design processes. Resource allocations by too many systems or implementations without unified visibility create overlapping network identities and, as a result, enforcing policy becomes a challenge.



Traditional systems lack the multitenant foundation needed for cloud service teams to act like service providers. Multitenancy, permissions, business workflows, and a flexible resource system aligned to support multiple businesses, clouds and organizations is either missing from these traditional systems or unattainable due to too many different tools, requiring cloud service teams to build unmaintainable homegrown amalgamated systems. Everyone has a custom-built admin tool, and no one likes it.

Features and functionality

VMWARE GLOBAL NETWORK IDENTITIES PLATFORM	
FEATURE	BENEFIT
Resource manager	 Utilize a customizable resource management system with flexible structures, fields, permissions and workflow integration—all driven by API. Create a global source of truth for network identifiers, from virtual machines to cloud to branches, all in one place. Implement enterprise-wide Zero Trust security via a common resource framework.
Global permissions structure	 Create custom groups and set user accounts with the hierarchical permissions structure. Gain the flexibility to set permissions at any level of the hierarchy, all the way down to each object in the resource system.
Cloud services IPAM	 Handle everything from subnet allocation management to host-level assignments to devices with complete IPv4/IPv6 support; comes with import tools to get up and running quickly. Enable support for advanced field validation and features, such as IPv6 sparse allocation, virtual routing and forwarding (VRF), and multi-domain VLANs.
Global DNS controller	 Integrate out of the box with a variety of DNS providers and platforms, giving you the flexibility to work with your current infrastructure as is and ease DNS migration(s) in the future, as needed. Easily support duplicate zones and even the most complicated DNS environments with DNS groups. Utilize built-in support for role-based permissions and approval workflows at the DNS group, DNS zone, and DNS record levels.
DHCP controller	One-stop configuration management for DHCP scopes All available via API or UI for easy integration and use by provisioning teams
REST API	 An API-first approach means simple integration into current environments without sacrificing support for future environments. No more having to question if a feature in the UI has an API.



Use cases

Multi-cloud automation

By automating the identity creation process across private and public cloud environments, VMware Global Network Identities delivers consistency across heterogeneous sites to streamline multi-cloud operations. Built-in multitenancy allows streamlined handling of overlapping identities.

SD-WAN transformation

Gain visibility into existing usage of address space, DHCP, DNS and circuits. Create a common operational model with remote sites by consolidating disparate DDI solutions. VMware Global Network Identities connects into existing infrastructure, helping create migration plans while setting up future control through automated workflows.

Zero Trust security

VMware Global Network Identifies helps make Zero Trust security attainable through a foundation of a common resource model, allowing a standardized global network identity framework. As metadata starts to overwhelm the actual network identifiers themselves, VMware Global Network Identities delivers a customizable enterprise resource model that puts applications, assets and infrastructure as top-level entities that can be used to automate naming and addressing.

