

Nile DHCP Service Solution Brief

Industry's first DHCP service in the cloud, crafted for an exceptionally simple experience.

Introduction

Here at Nile, we are all about making endless software upgrades and hardware refresh cycles, box-by-box manual infrastructure configuration, the complexity of setting up network access policies, reactive troubleshooting of performance issues, and other traditional headaches of enterprise networks... invisible.

Integrating another essential capability, Dynamic Host Configuration Protocol (DHCP), was an obvious next step in our goal to radically simplify the lifecycle management of enterprise networks and reduce the burden on enterprise IT teams.

While a foundationally important protocol commonly found in almost every organization, the management of DHCP servers adds to the already significant challenges for organizations. 76% of organizations agree that the boundaries existing in an enterprise network have increased, making managing time and productivity increasingly difficult and increasing overall complexity for IT teams¹.

Additionally, the ever-increasing cybersecurity threats require organizations to not only prioritize the network but also secure everything within the network, including servers running DHCP. Failure to continuously maintain these servers runs a higher risk of opening vulnerabilities for malicious attackers to use to launch malware like ransomware. In fact, 68% of organizations have experienced one or more endpoint attacks that resulted in the data or IT infrastructure being compromised².

To overcome these challenges, organizations need a DHCP solution that offers cloud-like scalability and simplicity without compromising security – enabling IT teams to reduce their IT burdens and focus on strategic initiatives.

Solution

Enterprise IT teams are challenged by tackling new business requirements to improve productivity, enable data-driven decisions, and protect digital assets against security threats. They are actively seeking ways to streamline their operations as a result. Within this context, as a backdrop, increasing adoption of cloud and -aaS models makes a cloud-delivered DHCP service a viable option to simplify this piece of the puzzle, especially across distributed environments.

Nile DHCP Service

Nile DHCP is the first cloud-delivered solution that's designed to address security and operational complexity challenges IT teams face when managing DHCP.

Nile DHCP eliminates the need for on-premises DHCP server infrastructure and natively integrates into the Nile Access Service, which is powered by a single data architecture and end-to-end automation designed to eliminate manual workflows. With Nile DHCP, businesses can scale the deployment of the DHCP service across wired and Wi-Fi access networks.

Nile DHCP delivers on

- Zero on-premises infrastructure
- Operational simplicity
- Native security
- Quick deployments

- Built-in redundancy
- Automated scalability
- Hitless upgrades
- Cloud observability

Where Nile DHCP fits

Simplifying Networking for High-Growth Enterprises

High-growth enterprise organizations encounter numerous challenges in managing their network infrastructure. This includes operational complexities, resource limitations, and security of DHCP servers.

Nile DHCP eliminates the need for any on-premises infrastructure, aligning with the as-a-Service model these organizations embrace when they are consuming other edge IT solutions, such as physical security systems for their physical spaces and video conferencing solutions for their meeting rooms.

Nile DHCP follows similar principles to such IT solutions that are designed to be cloud-native by offering high availability and native security for a seamless connectivity experience. The native integration into the Nile Access Service provides IT teams the option to enable Nile DHCP with a single click.

BENEFITS

Ease of consumption without CapEx constraints

Simplifies operations with automation and observability

Lowers TCO by natively integrating with Nile Access Service

Ensures stronger security posture

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- DHCP fingerprinting
- DHCP reservation
- Integrated IPAM
- Duplicate address detection

BENEFITS

Scalable dynamic addressing

Enhanced visibility for audits and IP tracking

Reduced risk of disruption from server failures

dynamic

- Geo-based address allocation to enable high performance
- Resilient and redundant architecture to protect against server failures
- Automated provisioning workflows to quickly deploy DHCP

Nile DHCP is specifically designed to cater to the complex requirements of distributed enterprises, offering a seamless solution to address the unique needs for business expansion and new digital initiatives.

BENEFITS

Increased availability and consistency across multiple sites

High performance and low latency service to all sites

Quick deployments to enable other technology initiatives

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- Always-on encryption for all DHCP traffic
- DHCP proxy to protect against rogue DHCP servers
- Intelligent alerting to help detect DHCP anomalies

By adding Nile DHCP to their Nile Access Service, universities can ensure a safe online experience for students, guests, and faculty members.

BENEFITS

Mitigate MitM DHCP attacks

Protect against DHCP DoS attacks

Hardened network security posture

Improved visibility

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While essential in every network, managing a DHCP infrastructure yields low business ROI for the already constrained IT team. Lack of simplicity at scale increases risks as the complexity of DHCP management and security continues to evolve. Nile DHCP makes designing, deploying, securing,

and maintaining DHCP easy by delivering it as a cloud-native service.

For additional details regarding Nile DHCP Service and how it can benefit your organization, visit [Nile DHCP](#).

Nile is the leader in next-generation enterprise networks, with a vision to transform the way businesses interact with their IT infrastructure. Nile is dedicated to helping customers redirect a significant portion of the \$75B in infrastructure operating expenses that they currently bear to critical IT initiatives. Nile's Network as a Service (NaaS) solution is designed to keep pace with the rapid innovation seen across private and public clouds, and its commitment to agile solutions is setting a new standard for enterprise networks. For more information, visit nilesecure.com.

¹ Oracle

² Ponemon Institute