VyOS
The universal networking platform

*ip*NX

ipNX Achieves Cost-Effective Scaling and Enhanced Control with VyOS

A Success Story in Broadband Service Termination and Aggregation

Introduction

ipNX Nigeria Limited, a leading Information and Communications Technology company in Nigeria, faced a significant challenge in scaling their broadband service aggregation in a cost-effective manner. Their journey from evaluating various solutions to successfully deploying VyOS, an open-source virtual router and firewall system, showcases a strategic shift towards greater control, flexibility, and cost efficiency in broadband service delivery.

The Challenge: Expanding Broadband Aggregation Affordably

ipNX was in search of a scalable solution to efficiently terminate customer broadband connections without incurring the high costs associated with mainstream networking equipment. They aimed for a solution that offered not just affordability but also enhanced control and flexibility over their network infrastructure.

Exploring Options: The Search for an Ideal Solution

The quest for an affordable yet robust solution led ipNX to consider various vendors, including some of the most established OEMs in the telecoms industry. However, the prohibitive costs and limitations of these options prompted them to look into VyOS, which promised the flexibility and affordability they were seeking.

Why VyOS? A Cost-Effective Solution with Unmatched Support

VyOS stood out for several compelling reasons:

- **Control and Flexibility:** VyOS's disaggregated approach allowed ipNX to tailor their network elements precisely, avoiding vendor lock-in.

- **Cost-Effectiveness:** The attractive pricing of VyOS made it a financially viable alternative to more expensive solutions.

- **Exceptional Support:** Throughout the evaluation phase, the VyOS team provided prompt and effective solutions to PPPoE-related issues, ensuring a smooth testing and deployment process.

- **Risk-Free Evaluation:** The availability of a free version of VyOS enabled thorough testing without upfront costs, with payment required only for live environment deployment.

Solution and Benefits: High Performance and Significant Savings

Upon deciding to implement VyOS, ipNX leveraged their in-depth testing experience to deploy the solution on bare metal servers, focusing on redundancy and failover capabilities to ensure uninterrupted service for their customers. This setup included a disaster recovery solution for additional resilience. The deployment underscored VyOS's suitability for broadband aggregation, marking a first in its application in this area.

Key Achievements with VyOS:

- **High Throughput:** VyOS demonstrated exceptional performance, achieving up to 20Gbps during tests, with plans to scale up to 100Gbps.

- **Cost Savings:** ipNX estimated over 50% in cost savings compared to traditional networking solutions, highlighting VyOS's cost efficiency.

- **Ease of Configuration and Management:** Despite the learning curve associated with VyOS syntax, ipNX found the system easier to manage, thanks to comprehensive documentation and sample configurations.

- **Enhanced Resiliency:** VyOS offered superior AAA failure resilience by maintaining existing connections during AAA outages, a critical advantage over previous solutions.

Conclusion: A Partnership for Future Growth

ipNX Nigeria Limited's successful deployment of VyOS not only met their immediate needs for affordable and scalable broadband service aggregation but also set the stage for future network expansions. The significant cost savings, coupled with VyOS's high performance and reliability, solidify this partnership as a model for leveraging open-source solutions in the telecommunications industry. ipNX's journey with VyOS exemplifies how innovative approaches can lead to substantial improvements in service delivery and operational efficiency.