



NETWORK
PLATFORMS

CASE STUDY

Unleashing the Power of Automated BGP Management

Helping a leading South African ICT Service Provider achieve outstanding network performance and engineering time savings with Noction IRP.

CUSTOMER OVERVIEW

Network Platforms - a South African ICT solutions provider started its operation in 2003 with the vision to provide clients with premium services and solutions.

Currently the company has four data centers across South Africa. Located in: Johannesburg, Centurion, Cape Town and Durban, as well as two international data centers in London. Network Platforms' wholesale connectivity services include International Layer 2, Local Layer 2, National Layer 2, IP Transit, Remote NAP Africa, Remote LINX Ports, Remote DE-CIX Ports, and Remote AMS-IX Ports. IP Transit service includes NTT, Cogent, Telia, and Level3, which is picked up in London via two diverse points-of-presence – Telecity Harbour Exchange and Telehouse East. This positions the company to provide an excellent local IPT services in terms of quality and redundancy.



Customer Name:

Network Platforms

Industry:

Wholesale Connectivity, Cloud Services, Hosting

Location:

Johannesburg, South Africa

Business Challenges:

- Proactive approach in detecting and bypassing BGP related network problems such as congestions and slow routes;
- Detailed Real-Time network performance views and analytics;
- Minimization of Engineering Time spent on manual BGP manipulation processes;
- Network Latency and Packet Loss decreases.

BACKGROUND

The South African ICT sector has been witnessing an intense rivalry among its participants due to the consolidation of operations with key market players, which has quickly changed customer preferences. Rapid advances in technology, along with fierce pricing tactics and ever increasing quality demands, has led to fierce competition. This has compelled Network Platforms to constantly evolve its services as well as improve its network performance to guarantee the utmost end user experience.

BUSINESS CHALLENGES

Being an ICT service provider, uptime and reliability have always been of a paramount importance for Network Platforms.

Previously, the company's network administrators were frequently spending lots of time during peak network hours manually modifying BGP. This was time consuming and required strict monitoring to eliminate possible human errors, as manual BGP intervention could lead to complete or partial disasters in Network Platform's network infrastructure. The process was becoming cumbersome as the company's network evolved and applying changes ad hoc was getting even more burdensome to the team.

As a result of this complexity, Network Platforms identified the need for an efficient automated system that would eliminate the need for manual BGP manipulation and provide the best path selection capability to its network, ensuring reliable and qualitative services to the end users at all times.

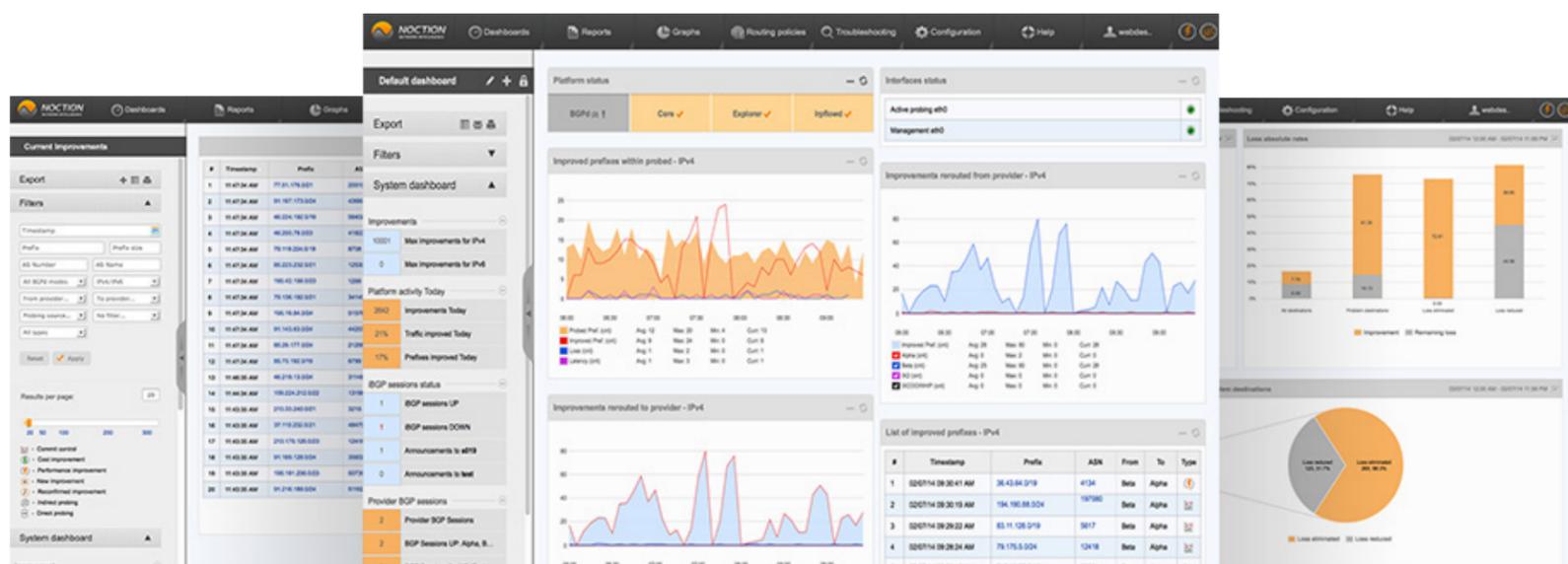
SOLUTION

After a thorough analysis, Noction IRP (the Intelligent Routing Platform) was selected as an ideal solution for Network Platforms routing optimization needs. The deployment of the platform was thoroughly planned and discussed with Noction engineers, taking into account company's network specifics. The platform adoption included the following stages:

Non-intrusive mode Stage:

Once all the prerequisites for the IRP deployment were completed, the platform was installed and started to operate in a non-intrusive mode. While operating in this mode, IRP started to run active probes, gathering data and reporting on potential routing improvements, without ever applying them. The potential benefits of running IRP were reflected in the platform’s frontend, where Network Platforms administrators were able to observe and analyse IRP’s performance in the company’s WAN.

“IRP dashboards gave us a very good overview of the system and its performance. The reports are fantastic, clear and concise.” mentioned Bradley Love, CEO at Network Platforms.



Intrusive Mode Stage:

After switching IRP into the Intrusive mode, the system started to inject all the improvements into the company’s edge routers routing tables via an iBGP session. At this stage IRP began to automatically reroute Network Platform’s outbound traffic through the best performing path.

OBTAINED RESULTS

Following the implementation, Noction Intelligent Routing Platform demonstrated superior performance and achieved some excellent results for the Network Platforms WAN:

Within the first month of being live with Noction IRP, Network Platforms saw **53732** unique prefixes being improved, with **42%** of them being improved by Loss reason and **52%** by Latency reason.

Network Platforms average loss rate dropped from **45%**, to **7%**, reducing the average loss rate by **84.44%**. The average latency dropped by **23.20%** to the historically lowest value.

Noction Intelligent Routing Platform strongly met the high standards and requirements set by Network Platforms, ensuring the company’s continuous and consistent network performance at all times.

“At Network Platforms, we’re always looking for innovative technologies that can improve our network and provide immediate, measurable results that our end users notice and appreciate. Noction IRP does just that.” stated Network Platforms CTO, Warwick Ward-Cox.