

## Transforming a mobile service provider with a next-generation network.

### INTRODUCTION

This client is one of the largest companies in the industry, focusing on mobile telephony, broadband, fixed telephony, home security, network security, and business services. They were looking to implement a solution to meet their most advanced network needs, and Beyond Technology stepped up to the challenge with them.

### BUSINESS ACTIVITIES

Mobile Service  
**provider**



### BUSINESS BACKGROUND

This company has several main sites with internet providers connected to them. These sites have grown as independent nodes with data services for mobile users.

These sites have grown as independent nodes with data services for mobile users, integrating data centers of various sizes depending on traffic requirements. They have high capacity requirements, both in terms of switching and routing, as well as interconnection to other service providers. They had tried other technologies without success in their implementation.



### CHALLENGES

To provide a high-performance solution to optimize Internet service delivery and reduce complexity. In addition, scalability, reliability, resilience, and network automation, among others, are design concepts prioritized in this project to improve the current Internet service offering and support new emerging and growing markets.

The solution had to be able to work with equipment from other manufacturers and be able to switch traffic automatically in case of failure.



### SITUATION

The company was originally composed of 2 independent networks, which through several internal projects are in a merging process aiming to operate as a single network.

In the merging process different configurations, vendors, technologies, and processes are integrated in order to find a point where the ecosystems can coexist and scale, keeping the network transparent, resilient to failures, and easy to operate.

## What needed to be resolved?

- There were several limitations in the design of each central site, i.e., in the case of a complete outage of a central location, the traffic restoration had to be done by rerouting it.

Regarding the saturation of the Internet link, if it approached its capacity limit, new capacity had to be contracted because it was more complex to reroute the traffic to another main site.

### WHY?

The lack of an integrated network increases OPEX and CAPEX, requiring synchronized operational processes and investments in infrastructure and internet services.

## What were the main limitations?

- To know the full context of the current network because it is an extensive network and is one of the leading providers of mobile telephony in Mexico, the operation's importance and the implementation's quality should not be less than the proportions of this large company.



## SOLUTION

The implemented solution was designed and based on protocols that provide scalability at the service provider level offering high-level features.

The solution works with Juniper equipment, which provides a carrier-class architecture and operating system that meets the highest reliability standards in the market. This equipment provides access to the Internet through its interconnection and various content providers, offering geographic and local redundancy in case of failures. They are also enabled to integrate with automation, virtualization, and SDN (software-defined networking) systems.

## What was the overall experience of the Beyond Technology team?

- Very challenging due to the client's high demands and the difficulty of implementing the project, but in the end, very satisfactory due to the excellent fulfillment of the objectives.



## How did Beyond Technology help?

- With the implementation of the proposed solution, documentation and execution according to international standards. The project's development contributed to improving the end-user experience, reducing operating and infrastructure costs, and increasing the network's redundancy and reliability.



### CONCLUSION

The solution was integrated to increase the availability and efficiency of the network, combining the current networks and obtaining the benefits of a network prepared to operate with the latest generation protocols.

## What were the results?

- An integrated and efficient network that translates into significant improvements in the user experience and the fulfillment of the objectives of this large mobile services company.

## How was the company transformed?

- ✓ The turnkey project was carried out from site preparation, physical installation, configurations, commissioning, and integration with other equipment.
- ✓ Proposals were reviewed according to best practices and new technologies that will improve the network's overall performance.
- ✓ It was transformed through a new generation network, enhancing the quality of the services delivered and the service to the end customer, with lower operating costs and more efficient traffic control.