



Globe Telecom Uses Infinera's Orchestrated Migration Services for the Modernization of Its Enterprise Data Network

A Networking Case Study

Operators are driven to migrate to new technologies in their networks for a variety of reasons:

1. Reducing risks imposed by equipment at end of life with no vendor support
2. Reducing OpEx by consolidating sites and freeing up rack space
3. Leveraging the better scalability, lower power consumption, and higher automation enabled by new technology
4. Introducing new services and providing higher capacity to their end customers

In 2019, Globe Telecom started a program to migrate business customers from legacy Ethernet equipment to modern IP equipment.



Customer

Globe Telecom, a leading mobile, fixed network, and ICT provider in the Philippines

Challenge

Migration vendor's low throughput on the migration of data services from the legacy network to the modernized network

Solution

Infinera Orchestrated Migration Services

Results

Infinera improved quality and throughput of migration services

"Modernizing thousands of circuits of our multi-vendor legacy network to a state-of-the-art technology is a business imperative. The execution of the migration, however, has been considered as risky considering: the complexity of the end-to-end migration process, and the challenges of ensuring high data quality end to end.

Infinera's Orchestrated Migration Services has proven to be the ideal solution to our challenge. It provides a unique platform to collect and store the multi-vendor migration data and an optimized software-enhanced workflow for the migration execution. As a result, we move our customers to the new technologies at a continuous pace."

Constantine Serafica, VP – Division Head, Transport & Fixed Networks at Globe Telecom

In a multi-vendor environment for both the legacy network and the target networks, the scope of the migration includes:

- The assessment of the existing resources used per circuit
- The definition of the target circuit and the documentation of the existing and to-be status in a low-level design plan
- The initiation of necessary dependency resolutions (e.g., implementation of a new last mile)
- The pre-tests of the new circuits
- The implementation of new customer premises equipment
- The actual circuit migration
- The communication and agreement of the migration plan with all involved stakeholders including the end customer

Experiencing the above challenges, Globe Telecom welcomed the value proposition introduced by Infinera with its Orchestrated Migration methodology to ensure efficient and predictable network transformation.

SOLUTION: INFINERA ORCHESTRATED MIGRATION SERVICES

Infinera Orchestrated Migration is Infinera’s solution to increase the efficiency and quality of large-scale migration programs with software-supported workflow automation. Orchestrated Migration combines the benefits of:

- Infinera’s vast experience in executing network transformation projects
- Tailored software and a seasoned consulting team that merges and stitches together multi-vendor network and business data from a multitude of sources
- A software automation platform combined with process know-how to increase the efficiency of customer workflows

Consequently, in preparation for the migration program ramp up, Globe Telecom and Infinera cooperated to define the source OSS, NMS, and custom-made systems of the required network information (legacy and future network) and ingested them into the ODMS database. In addition, both parties agreed on a detailed process including all inputs and outputs, involved teams, interfaces, and potential dependencies. In close alignment with the involved teams from Globe Telecom’s migration program, local services, and IT, Infinera then automated step by step those software-supportable work packages where automation is possible. To illustrate the automation and efficiency increase, Figure 1 shows the collected data that is used to allow migration planners to easily select a suitable access site.

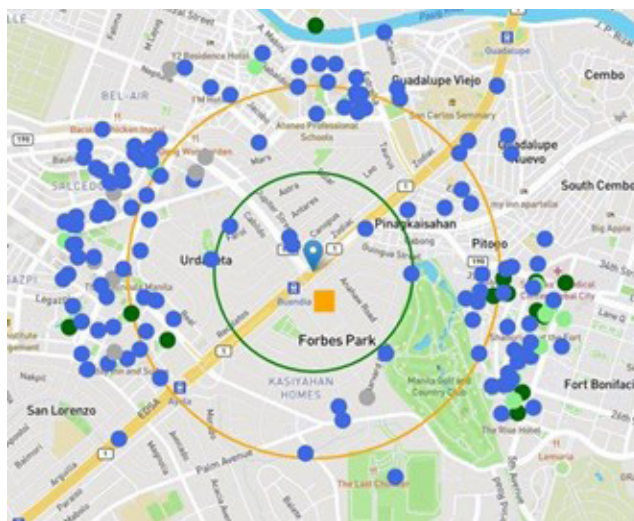


Figure 1: Automatically created map to allow for easy selection of suitable access sites for a given circuit (icon in middle of circle).

As part of the process, data quality is a continuous challenge due to data discrepancies in various systems as well as ongoing activities in the live network. Thus, special care is taken to cater to any changes of the migration parameters, technical or timewise. In addition, dependencies like network or last-mile readiness are closely monitored and included in the project plan.

RESULTS: INFINERA IMPROVED QUALITY AND THROUGHPUT OF MIGRATION SERVICES

For each circuit, the migration process includes four steps that differ in their feasibility to be automated due to the variation of manual vs. software-supported process packages. The first two of these steps are used below to illustrate the improvements obtained by using Orchestrated Migration:

Step 1: Circuit Detailing and Reservation of Capacity for Migration

- The content of this step is to collect all information, both about the legacy circuit and the future circuit, and reserve the latter for migration. With Orchestrated Migration, the full process is software driven, guiding the Infinera migration team logically through the process, including interaction with Globe Telecom stakeholders (e.g., local services) and providing support applications (see Figure 1) for each step.
- The efficiency of Step 1 increased by an average of 50% end to end, including interactive work packages combined with superior quality of input for next steps.

Step 2: Creation of Low-level Design Document

- The low-level design for a circuit migration documents the setup of the circuit before and after migration. Using the results of Step 1, this document is created automatically, complemented with necessary evidence, and sent for approval.
- The efficiency of Step 2 is increased by 50% end to end, mirroring the ratio of automated vs. manual steps (e.g., approval process).

For Step 3 (ensure readiness) and 4 (migration execution), Globe Telecom and Infinera are collaborating to achieve similar efficiency increases. Of course, no software will truly replace manual work on site, but it does ensure that the experts on site always have correct and up-to-date information.