



TELXIUS

Telxius:

Securing a common view of
inventory to accelerate operational
delivery and drive automation

Better decisions, at the right time, for the
benefit of all customers

Telxius: Securing a common view of inventory to accelerate operational delivery and drive automation



Telxius, a fast-growing provider of telecommunications infrastructure and services embarked on a programme of automation, in order to transform service delivery. Key to this was a **single, common view of all assets** – physical, logical and virtual – that enable delivery and assurance of the complete service portfolio.

Telxius decided to obtain and implement a new inventory solution from VC4, so that **data from all the different platforms and silos could be brought together** into the unified view. The solution is agile and supports interfaces to all vendor platforms. It provides automation of operational processes and simplifies investment planning.

Introduction: Better decisions, at the right time, for the benefit of all customers

Telxius is a global telecommunications infrastructure provider operating an extensive network. With more than 94,000km of high-capacity fibre optic submarine cables, Telxius runs 93 Points-of-Presence (PoPs), in 23 countries. The network is used to deliver a range of carrier and colocation services, including such as Carrier Ethernet, leased and private lines, custom DWDM propositions and IP connectivity, as well as value-added options for security and more.

This network has grown rapidly, year on year, so both the asset base as well as the logical and physical resources required to support customers have also grown in parallel.

As a result, it had become increasingly difficult to manage all these resources while ensuring rapid and timely responses for the delivery of new services, the addition of new capacity, and to extend the existing network.

These are complex and common tasks for operators and are fundamental to their ability to succeed. The team at Telxius realised that the existing way of managing these tasks was no longer suitable.

More automation was required to ensure differentiation and to maintain market leadership - with online touch points and interfaces.

Failure to make changes would undermine and erode the competitive position and inhibit future innovation. The company needed to be ready to take on new challenges and it had to be agile. That's because expectations – as well as technologies – have changed.

Put simply, in 2022, service delivery to existing and new customers should be very straight forward. This requires a significant transition – and complete transformation of the OSS layer.

"We understood that we would need a vision to achieve this – part of our digital transformation journey. That's not an easy task, because it's not just a technical solution that was required. We also needed to change the way in which we do things - which means changing people too!"

Edwin Torres
Network Planning Engineer
Telxius

The challenge: Creating a unified view for all stakeholders

A solution was needed that could provide a consolidated view of all assets – physical, logical and virtual – that enable delivery and assurance of the complete service portfolio. It was decided to obtain and implement a new inventory solution so that data from all the different platforms and silos could be brought together into the necessary unified view. This would provide the operational agility sought, while also easing planning for new network investments.

Of course, people are key to supporting such an ambitious programme. So, it was essential to align the right stakeholders, with the right goals. In this case, leadership came from the technical staff, led by Edwin Torres, but also with clear alignment with the business teams.

Fundamentally, the project impacts everyone in the business, but the technical team understands the disparate nature of the elements involved in service delivery. That's because there are numerous elements across different domains, as well as different OSS platforms and management systems, so it was best-placed to assume oversight for the project.

Implementing the solution: IMS from VC4

Inventory Management System (IMS) from VC4 was chosen to unify these systems, so that the common view of all assets could be secured. A key consideration is the fact that Telxius works with multiple vendors, including Ciena and Infinera, which provide optical solutions for different transport and connectivity services. The services span state-of-the-art DWDM and OTN (based on G.709), as well as legacy assets, such as SDH and PDH solutions.

While Ethernet is growing rapidly, such legacy services must still be considered, even as migration to OTN continues. VC4-IMS can extend to all such systems, ensuring that all assets and elements are covered in a complete, consolidated view of the overall network and service inventory. As a result, the network can be modelled accurately. This is a dynamic view, updated every 24 hours, with a unique data discovery and reconciliation process.

Telxius has also achieved MEF 3.0 certification, so adheres strictly to best-practice standards for digital service transformation and automation, VC4-IMS played a key role in ensuring and maintaining compliance.

Telxius has now transformed to a dynamic, agile model for service delivery, with the ability to deliver new capacity in short time periods – essentially, supporting its customers with pay-as-you-go models, for as needed service support. With the new inventory model, VC4-IMS provides the baseline view of the network to support these daily activities, so that teams can obtain the right information, at the right time.

In turn, this information can easily be shared with other platforms – for example, to Fault and Performance Management Systems – or for delivering actionable reports, such as summaries of all network alarms and operational capacity. These reports are automated, and technicians can control the frequency with which they are generated, as well as trigger ad hoc reports, when required.

"During the pandemic, we received many new service requirements – we achieved them all. We didn't miss a thing. IMS from VC4 helped us to achieve that."

Edwin Torres
Network Planning Engineer
Telxius

The outcome: What does this mean for Telxius?

VC4-IMS helps Telxius to carry out daily tasks. It provides a complete picture of the network inventory, across all current and legacy elements. Accurate inventory management gives Telxius the ability to obtain the correct understanding of resources, so new actions can be undertaken, supporting both deliver to existing customers and growth.

VC4-IMS also supports deep integration with the BSS. So, for example, when buying new capacity from operators in countries where Telxius doesn't have a footprint, these can be defined in IMS. Changes to such assets are automatically registered, with updates applied to the CRM BSS components, covering key data (date of activation, duration of service period, and so on), so that billing cycles and invoices can be triggered. This integration is bidirectional, so if actions are taken in the CRM, the data is also fed to VC4-IMS.

The benefits have been widespread. For example, VC4-IMS has allowed new processes to be created for other departments – supporting new agility and efficiency. It enables the right decisions to be made quickly – with high confidence that the correct resources are being used, in the most efficient way.

The results: Securing lasting value with VC4-IMS

VC4-IMS also supports processes for planning. The first step towards providing a new service is to define the network development tasks required. With VC4-IMS, this detail can be captured through active reports. This is also used to quantify project time plans – when additional effort or escalation is required, optimising planning processes and measuring effectiveness so that improvements can be delivered.

Bringing together all network and process data, as well as increasing integration with the BSS has shown that the next step should be to implement big data analysis programmes, so that new performance indicators and reports can be created, allowing new insights to be discovered for service delivery, as well as operations and maintenance.

The adoption of VC4-IMS has delivered the fundamental view of network assets and inventory required to support agile, dynamic operations. It has helped Telxius consolidate data, providing the single view that's necessary to enable the team to take better decisions, at the right time, for the benefit of all customers.

VC4

Keesomstraat 10A
1821 BS Alkmaar
Netherlands

+31 725628114

sales@vc4.com

www.vc4.com



vc4.com

© Copyright 2022 VC4 B.V.
All rights reserved