



Three Full-Service
Broadband Providers
Transformed Operations
Using Synchronoss'
spatialSUITE





What You'll Learn

Modernizing your fiber planning tools does more than just increase efficiency, it creates the opportunity for reducing costs through innovative use cases.

This e-book looks at broadband companies in different regions and industry segments that use Synchronoss' spatialSUITE, had significant external or internal planning needs, and decided to improve their business operations by using spatialSUITE's comprehensive functionality to implement new use cases. These spatialSUITE customers found their use cases to be straightforward to deploy, customizable to their needs, and positively impacting for both employees and customers.

These stories suggest ways a range of fiber, broadband and telecommunications organizations can use spatialSUITE – and the resulting benefits from improved operations. Consider what your company may gain from deploying this powerful fiber-first planning and design solution.

Use Cases Covered

- 01** | Actionable, daily network intelligence
- 02** | Mission critical order fulfillment
- 03** | Service assurance automation

01 ACTIONABLE, DAILY NETWORK INTELLIGENCE

**A major US
broadband provider
and fiber company**

CHALLENGE

To efficiently manage their massive fiber network, this company's operations demanded timely network wide PNI insights and status reports.

200K+ / **325K+**
MILES / KILOMETERS
OF FIBER

30M+
CUSTOMERS

BUSINESS NEED

Decades of acquisitions and mergers left a patchwork of disparate systems across this company's fiber footprint. When network leadership asked for PNI status reports, it required multiple teams of engineers in dozens of regions to manually pull CAD records, interpret the records in written reports and then the company's managers would have to compile a national roll-up view. This took up to 30 days! Leadership recognized early on that cohesive and responsive network management capabilities and diagnostics were needed to maintain and deliver quality customer service. What they needed to serve their customers and shareholders was insight – true network intelligence. Real-time status and health checks on their PNI, HFC, OSS. They needed spatialSUITE.

ROLLOUT

Instrumenting their network to glean network intelligence with spatialSUITE was a major undertaking. First, unifying their network data model required sophisticated planning and sustained coordination. Next, in partnership with Synchronoss, they rolled out the spatialSUITE platform in a multi-phased implementation that spanned years and impacted hundreds of stakeholders. They chose spatialSUITE, hardwiring it into their network planning processes because they believe it's the most fiber-centric platform on the market – offering superior fiber and HFC design and management capabilities. The final phase of the rollout covered awareness, training, and stakeholder adoption. Strong executive sponsorship coupled with engagement by operations and engineering has fully automated the design and management of a centralized physical network inventory. This means that these valuable processes can be distributed across regions and business units to improve operational efficiency.



IMPACT

This company's commitment to modernizing their physical network design and operations, in tandem with the roll-out spatialSUITE, created a rock-solid foundation from which to manage one of the largest and fastest-growing networks in the US. Not only does this foundation allow them to know up-to-the-minute status and changes, but it was also indispensable throughout 2020. In the span of 4 months in the wake of pandemic lockdowns, this network experienced almost 2 years' worth of traffic growth. The remarkable performance of the network during this time can be attributed to outstanding work by engineering and care teams, key technology innovations, and billions of dollars in strategic investment for many years before the pandemic began!

This company can now
generate network intelligence
reports daily. Before
spatialSUITE this task took
up to **30 days!**

KEY INSIGHT

The ability to streamline operational efficiency is critical to successful fiber rollouts and network management. spatialSUITE offers actionable, daily network intelligence emerges from automating physical network design and operation.

02 MISSION CRITICAL ORDER FULFILLMENT

Asian Pacific broadband telecommunications provider

CHALLENGE

The ability to build and deploy service for a new nation-wide broadband network with aggressive targets to serve 75% of the population within 5 years and over 95% within 8 years.

160K / **255K**
MILES / KILOMETERS
**INCLUDING 100K KMS
OF FIBER**

7M
**CONNECTED HOMES
& BUSINESSES**

BUSINESS NEED

The bold charter for this new fiber player was to design, construct and then operate a national broadband network taking it from predominantly greenfield to full production in just a few years. Due to government involvement, strategic U-turns, and funding adjustments, their high-level directional plans and requirements changed multiple times. To make matters even more challenging, this new company had to perform under an intense media spotlight, close government monitoring, and strong public scrutiny. To achieve their goals, they knew they had to deploy a robust physical network inventory system with the ability to model and manage their entire spectrum of OSP and ISP components: fiber, coax, and copper broadband. And they knew that implementing best-in-class processes with support from an industry leading provider was essential.

ROLLOUT

In collaboration with Synchronoss, this provider planned their PNI system with an eye toward creating the ability to leverage that data to automate order fulfillment and service activation processes. The initial phases focused on building fulfillment and provisioning services for the field technicians. Web services for “Create Design,” “As-built,” “Order Rollback” and associated fallout cases were quickly developed using spatialSUITE. The data output from these web services was integrated with scheduling systems and field devices – making their field tech’s work highly efficient.

As this provider entered the next phase of rollout, network build out, monitoring became the priority. A basic monitoring dashboard had been created to identify processing bottlenecks. While this basic dashboard could generate daily reports, its

This network reaches over **95%** of the population, adding **50K** subscribers a day at peak.

multi-hour latency caused as many problems as it solved. A dashboard can only be as informative as the underlying data allows. The provider chose to implement a spatialSUITE-powered dashboard as a replacement. After testing, the basic dashboard was jettisoned, and the spatialSUITE version instituted. The provider was able to recalibrate timing from hours to seconds. This dropped queue wait times to less than a second with an average processing time of ~ 6 seconds.

By rollout completion, this network’s physical elements were joined to a range of logical services offering a complete picture of the network and services. Based on its verified performance, spatialSUITE became system of record for multiple automations, providing accurate, up-to-date information to business units across the organization. In fact, there are more than 20 different interfaces and automation points including third-party design loading, reporting, cascade status updates, ETL, assurance and operational tools.

IMPACT

The company now reaches over 95% of its country’s population and can provision over 50K subscribers a day. Web services built with spatialSUITE scaled to handle almost 7 million installations. The scale of what was needed to succeed meant that it was simply impossible to perform tasks manually. Their best-in-class performance metrics required high levels of automation and integration of backend systems. The cornerstone of their OSS platform is the physical network records held within spatialSUITE. A large part of their success derives from the automation and application integrations made possible by the Synchronoss platform. This gave the company the ability to scale processes and adapt to changing needs of their business. Their real-time access to data, compliments of spatialSUITE, continues to provide the means to optimize planning and future design.



KEY INSIGHT

spatialSUITE’s impact on this provider’s business has proven profound, allowing them to meet nation-wide demand. This scale was achieved with spatialSUITE’s back-end integration features - key to an automated and modern OSS.

03 SERVICE ASSURANCE AUTOMATION

Telecommunications
service provider for
hospitality venues,
businesses, and homes

CHALLENGE

A reliable and cost-effective way to run network traces and check cable location to avoid service interruption.

MANAGES
3000+
EVENTS PER YEAR

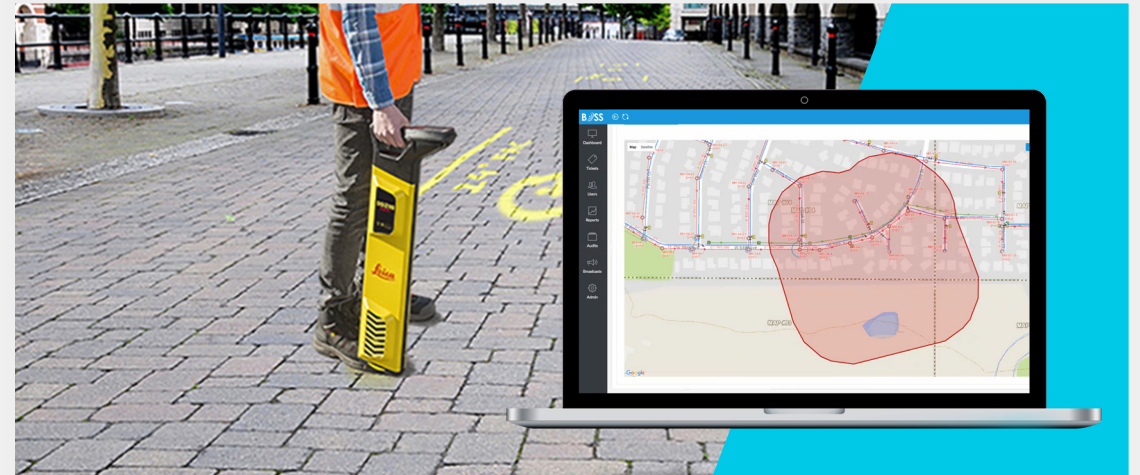
EXCLUSIVE SERVICE PROVIDER TO
45 CONVENTION &
MEETING
FACILITIES

BUSINESS NEED

In addition to providing broadband service to tens of thousands of business and residential customers, this provider specializes in servicing the demanding business convention industry. Having done more than 70,000 events in their history, they know reliability of services is the most important success factor. The dynamic nature of event planning requires them to be nimble, fast, and leaves no time for re-work or mistakes. And nothing can be more threatening to reliability than a cable cut! Shortly after they acquired a new service territory that increased their fiber footprint by 58%, they discovered that their existing “CALL BEFORE YOU DIG” processes weren’t working well enough to meet their customer standards. The fiber location data for the new territory could be out-of-date when it was sent to their “ONE CALL” partner. As a result, the risk of a service-disrupting cable cut was increasing daily.

ROLLOUT

Having deployed a powerfully coordinated combination of spatialSUITE modules, this provider could not only fix their data freshness issues, but also automate their operations with web-based services. The first step was to integrate geographic location and connectivity for the physical network of the newly acquired territory. Then they enabled remote equipment to monitor the location of any new network issues. Once this work was completed, they worked in partnership with their “ONE CALL” vendor to create a spatialSUITE web-based service. The web-based service automates reporting for the collection of cable locations, eliminating previously time-consuming manual collection and delivery to the vendor. The vendor simply connects to a browser-based URL which automatically creates and delivers the most up to date picture of the cable data possible. Best of all, this web-service-based solution was identified, developed, tested, and rolled out in a matter of days.



IMPACT

This full-service broadband provider improved their service assurance program by automating their third-party data exchange processes with spatialSUITE’s accurate and up-to date inventory. spatialSUITE’s web services capability was instrumental, enabling quick adaptations to their business environment. As a result, they improved access to data that has increased their ROI by enabling field techs to receive accurate confirmation before they dig. Up-to-date network information, fewer mistakes, happier customers.

This “CALL BEFORE YOU DIG” use case implemented automation that provides the most accurate network data available to **reduce errors.**

KEY INSIGHT

spatialSUITE has the leading, fiber-focused automation and integration capability. When customers, like this provider, leverage its full functionality, they straightforwardly solve a host of ever-changing operational challenges.



Learn how you can improve fiber network design and planning with spatialSUITE.

Contact [Synchronoss](#) today for a free consultation on best practices for your situation.

¹ Company 2020 Network Report

