



Tierra and Gemalto: Right Sizing IoT Connectivity Service Plans in real time

The booming Internet of Things (IoT) is on course to double in just five years, reaching nearly 31 billion connections by 2020, up from 15 billion in 2015¹. Exciting as this is for industry stakeholders, this type of fast and furious expansion is often accompanied by challenging growing pains. For Tierra, a fast growing provider of global telematics, fleet management and IoT solutions, the windfall of new customers made it complex to keep track of hundreds of thousands of devices and their connectivity consumption using traditional methods. To solve this problem, Tierra trusted its long time IoT connectivity partner Gemalto for an innovative solution that automatically and easily monitors real time connectivity, helping to right-size mobile service plans to meet customer needs. This case study takes a closer look at the technology solution that's helping Tierra keep close tabs on deployed devices while economizing service plan expenses.

Tierra Telematics, improving business with IoT ingenuity

A joint venture of Topcon Positioning Systems and Divitech, Tierra leverages expertise in geopositioning and optical devices for tailored telematics solutions that monitor and manage industrial processes, agricultural operations, construction projects and more. Tierra's turnkey IoT platform includes hardware and application services, as well as cellular connectivity, to provide 24/7 oversight of everything from crops to equipment fleets, ultimately streamlining processes, boosting productivity and improving the bottom line. Tierra solutions are so well received, the company has enjoyed a significant Year-Over-Year (YOY) growth rate and has expanded to serve OEMs and aftermarket implementers in more than 190 countries worldwide.

Keeping pace with growth and expanding IoT connections

Tierra's rapid growth and globalization has made it exceedingly difficult to reconcile mobile service contracts with the actual number of active connected objects deployed in the field. Historically, this has been accomplished by comparing Tierra's SIM card deployment logs with network activity reports generated by Mobile Network Operators (MNOs). However, with 200,000+ devices deployed in a dynamic and expanding worldwide environment, the lag time between "report" and "action" has made the process obsolete for "right sizing" service tariffs and actual customer needs. Optimal connectivity service is a key element of success for OEMs, especially when working with MNOs who determine monthly tariffs based on a pre-set data limit.

¹IHS: <https://www.forbes.com/sites/louiscolombus/2016/11/27/roundup-of-internet-of-things-forecasts-and-market-estimates-2016/#67864769292d>

Using traditional manual and laborious tracking methods, Tierra was missing a way to immediately identify if the intended service plan was oversized or undersized to meet the needs of specific IoT deployments. Further, they lacked a tool for identifying dormant and not yet activated devices. This is essential in seasonal industries like agriculture where smart farming equipment can sit dormant for more months at a time. Identifying devices not transmitting data is key to containing connectivity expenses that can be avoided.

Tierra teams up with Gemalto to right size connectivity tariffs

Gemalto *IoT Connectivity Smart Saver* platform was the ideal answer to Tierra's lack of visibility on connectivity usage and provided promising results rapidly. The solution's web interface quickly and seamlessly integrates with supporting Connected Device Platforms (CDP) from industry leaders including Jasper-Cisco and Ericsson. It provides instant access to comprehensive data on connectivity and SIM card information.

How the solution works

The solution allows Tierra to securely log on to the Gemalto *IoT Connectivity Smart Saver* SaaS (Software as a Service) and quickly synchronize SIM data coming from the CDP's global data insights platform. Advanced algorithms analyze the data and extract information providing automated intelligence for better-informed decision making. In a split second, it provides a detailed map of active and dormant cards around the world as well as key insights such as the average cost or data traffic per device. The solution gives Tierra 24/7 visibility of its fleet of connected devices and provides recommendations for the most cost effective course of action. Tierra can immediately reassign specific subscriptions to different data plans as needed based on observed activity; or, they can allow the platform to make usage optimization changes leveraging advanced machine learning.

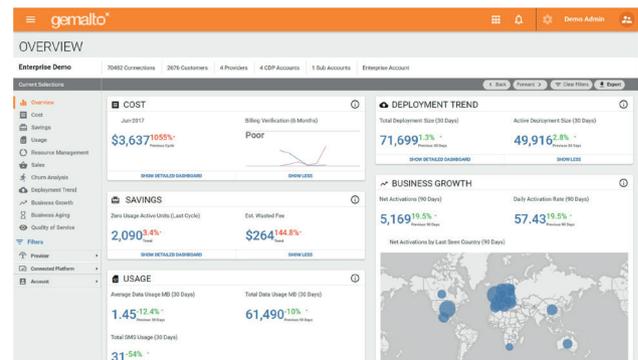
"With super quick access to advanced connectivity usage information, we are able to see which devices are active, inactive or over their data threshold. The Gemalto platform helps users optimize data plan usage before MNO invoices are generated which can ultimately reduce connectivity costs."

Emanuele Petri
Support and Logistics Manager at Tierra Telematics

Within the first month of use, Tierra identified and deactivated subscriptions for the devices that were inactive on its mobile network service plan. The rate plan optimization has helped to save a relevant quota of connectivity costs. Being able to right-size service plans is essential in the months ahead as Tierra prepares to launch a suite of new IoT solutions for different vertical markets and world regions, expanding from two regional service tariffs to eight regional and global tariffs.

"The Gemalto IoT Connectivity Smart Saver platform is very easy to use, and provides access to key metrics in just seconds. It's one of the easiest and most comprehensive solution of its kind and the recommendations based on machine learning were spot on",

says Mr Petri



Gemalto IoT Connectivity Smart Saver platform provides a fast and easy way for OEMs and IoT developers to quickly boost profitability and tightly manage service contracts to improve efficiency. In the fast paced IoT landscape, it's an essential asset to maintain competitive advantage.

For more information, visit our [dedicated webpage](#).

Active device: A SIM card embedded in an object, communicating data over a mobile cellular network

Dormant device: A SIM card deployed in an object, which is not actively communicating over cellular networks