

STATISTICA®



Analyze and manage data from millions of IoT devices

Combining edge analytics with a scalable, end-to-end, sensor network enables your organization to harness insights from the Internet of Things (IoT) like never before.

Solution Brief



At a Glance

BUSINESS CHALLENGE

The lack of standardization within the IoT has resulted in a proliferation of hardware types and protocols that require integration and management. Furthermore, the sheer volume of IoT data requires new methods to analyze and derive insights at the edges of networks, close to sensors and devices where the data is generated.

SOLUTION

Statistica has combined its platform of predictive edge analytics, machine learning, and advanced analytics with Friendly Technologies' unified platform that manages devices, networks, and protocols. This end-to-end solution enables carriers and xSPs to gain a competitive edge with more insight from IoT data than ever before.

BENEFITS

- **Manage any device, service, and network** so organizations can ingest and analyze all data generated within the IoT.
- **Predict outcomes before they occur**, applying advanced analytics to identify potential issues and take action before minor concerns become critical.
- **Monetize your IoT** through scale, maturity, service and prediction when you combine advanced analytics with sensor, device, and protocol management.

The combined power of Friendly Technologies' IoT platform and Statistica's edge analytics platform allows organizations to make real-time decisions at the edge.

A LACK OF IOT STANDARDS DELAYS INSIGHT AND ACTION

As businesses strive to make sense of the Internet of Things, they continue to struggle with the integration of various devices, networks, protocols, and data sources. Inherent with these integration efforts is the risk of vendor lock-in, which can happen when an organization is required to buy an offering from a specific device manufacturer—at the mutual exclusion of all others—in order to achieve an end-to-end solution. Alternatively, lock-in could require the purchase and maintenance of multiple, disparate systems.

Notwithstanding the physical infrastructure, organizations may also find that their existing BI and analytics platforms are woefully out of date, inadequate to handle the requisite transmission of ever-growing IoT data volumes to a centralized location for analysis.

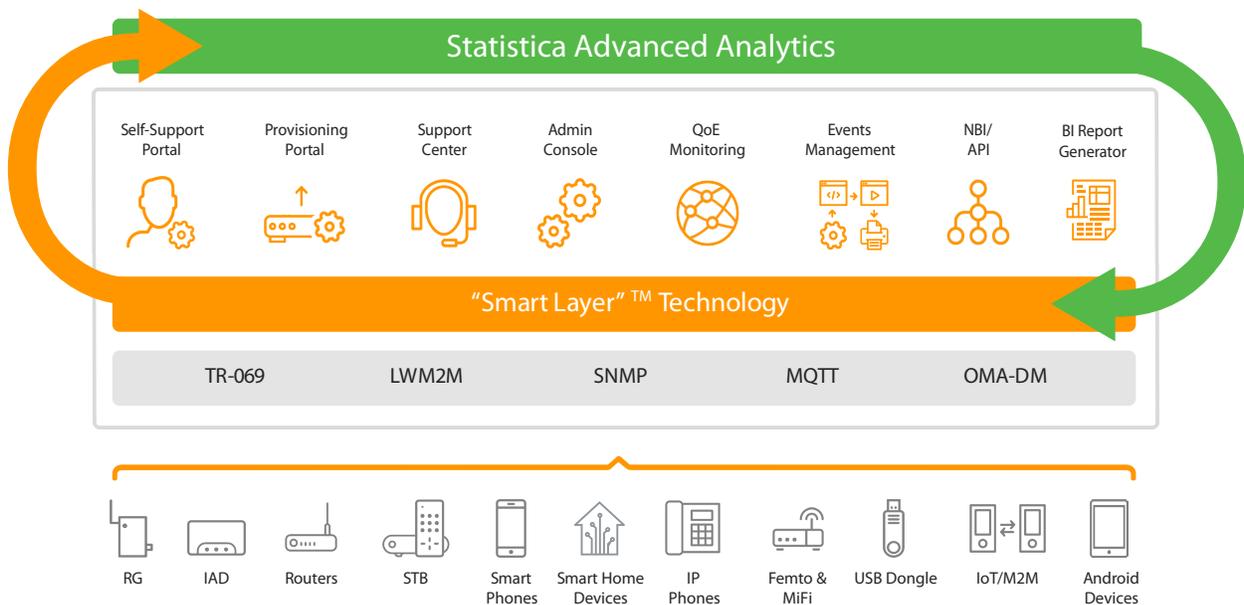


Figure 1: Integrating Statistica's platform with Friendly Technologies enables organizations to monetize their IoT.

MONETIZE YOUR IOT THROUGH SCALE, SERVICE & PREDICTION

Ingesting data generated by IoT devices is only half of a durable IoT solution. Organizations need to manage those same sensors, gateways and devices, thus creating value by offering IoT as a service. This value stems from predictive insights, enhanced security, tier-1 hardware support along with robust and unified APIs for a variety of protocols and standards. Integrating predictive insights along with a scalable end-to-end device

Telecommunications, smart cities, health, agriculture, industrial manufacturing... Our combined, open solution scales to meet ever-growing IoT demands in any vertical.

management platform will allow organizations to differentiate their services and products.

THE COMBINED PLATFORMS

Friendly Technologies IoT platform is built upon its mature device management platform, which focuses on offering IoT as a managed service, taking into account not only the IoT data itself but also the gateways and devices that generate and manipulate that data. Statistica's advanced analytics platform deploys and monitors sophisticated analytics and data prep workflows to any edge device or gateway, thus reducing the need for data transmissions to a centralized server for analysis.

The combination of these two platforms allows organizations to make real-time decisions at the edge of their IoT networks.

Our combined solution encapsulates analytic and data prep workflows into languages appropriate to the target platforms. These workflows not only include advanced algorithms and data preparation functions, but they can also include conditional "if-then" logic to notify or call other workflows. The architecture also enables remote management of any type of IoT device,

including constrained devices (with limited RAM, power and connectivity capacity) and complex gateways with thousands of parameters. Both Friendly Technologies and Statistica are open platforms with extensive APIs for customization of vertical applications.

SOLUTION FEATURES

- IoT device management via standard protocols (such as TR-069, OMA-DM, LWM2M, or MQTT) and proprietary protocols
- Ability to make real-time predictive insights and detect anomalies at the edges of networks where data is generated
- Automated provisioning and remote control of the devices
- Ability to combine business rules and advanced algorithms in deployable workflows
- Management of gateways and sensors
- QoS monitoring and threshold alerts
- Connectivity monitoring
- Event-triggered response
- Remote group updates
- Inventory management
- Problem diagnostics and repair, with remote firmware upgrades



Figure 2: Statistica's proprietary Native Distributed Analytics Architecture (NDAA) is an agnostic, in-database methodology that executes platform-specific analytics on aggregates computed in any database, edge gateway or device/sensor.

ABOUT FRIENDLY TECHNOLOGIES

Friendly Technologies is a leading provider of carrier-class device management software for the IoT, Smart Home and Triple Play broadband services. Established in 1997, Friendly's solutions are deployed by over 200 carriers, xSPs and mobile operators around the world. Friendly Technologies allows service providers and their customers to automatically connect, provision, control, monitor and manage any type of device. For more info on Friendly Technologies, visit <http://www.friendly-tech.com/> or email us at busdev@friendly-tech.com.

ABOUT STATISTICA

Statistica's advanced analytics, big data and IoT offerings provide you endless possibilities to innovate your enterprise. Whether it's uncovering the genetic basis of a disease, reducing hospital readmissions, mitigating financial risk, or ensuring procedural validation, Statistica enables organizations to transform in new and exciting ways. By embedding analytics everywhere and empowering a wider community of citizen data scientists, you'll accelerate innovation, improve customer experiences, and streamline your enterprise for the future. <http://statistica.io>

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