

**SOLUTION BRIEF**

# Fortinet and Pole Star NAO® Track Deliver BLE Tag Tracking Solution

## Enabling Location-Based, Value-Added Services with Next-Gen BLE-Based RTLS

### Executive Summary

Pole Star NAO® Track locates equipment and people fast and accurately, while generating insights that can improve process workflows and resource allocations, ultimately leading to significant cost and time savings. Tracking data increases safety for staff, patients, and guests with geo-located duress calls, facilitating fast security responses and incident tracking. Pole Star uses a powerful suite of applications, APIs, and SDKs to enable integrators to tailor their use of location services for specific use cases and needs. The integration with Fortinet leverages the Fortinet Wi-Fi access points and the Fortinet Security Fabric for comprehensive security and secure, high-performance networking.

### The Challenge

Enterprises suffer from operational inefficiencies linked to the difficulty of locating critical equipment. It is estimated that in a hospital setting, nurses spend on average 20% of their shift locating the equipment they need instead of spending time with patients. This, combined with the attrition due to loss and theft of expensive equipment, leads to millions of dollars lost each year. In addition, many jobs require individuals to work alone or in isolated environments. A lone worker is defined as an employee who performs work activities without close or direct supervision from a colleague or manager. They can be found in a variety of industries, such as healthcare, retail, and transportation. Staff-emergency solutions providing exact location of incidents provide more peace of mind to these at-risk workers, fostering more loyalty toward their employers. Further, enterprises are in need of secure, high-performance networking to address the rapidly-growing needs of users, applications, systems, and devices in their deployment.

Addressing all of these challenges with one single location platform, leveraging one unified infrastructure, reduces the overall cost of technology adoption. Pole Star leverages standard BLE technology at unmatched levels of performance, providing down to room-level location accuracy. This is complemented by the Fortinet AP series access points and the Fortinet Security Fabric, which deliver secure, high-performance networking.

### Joint Solution

Pole Star and Fortinet have partnered to deliver an advanced, reliable, and affordable BLE-based RTLS solution to address the challenges encountered in the healthcare, senior living, hospitality, and transportation markets. The integration of NAO® Track and Fortinet BLE features, enabled through the Fabric-Ready Program, delivers location-aware applications to improve operations and safety and drive revenue for customers.

### Solution Components

- Fortinet FortiGate Next-Generation Firewall
- Fortinet AP Series Access Points
- Pole Star NAO® Track location engine (cloud hosted or on-premises)
- BLE wearable and asset tags

### Solution Benefits

- Enables higher capacity outpatient care services and revenues through improved care center workflow
- Reduces healthcare costs by improving usage rates of mobile equipment, such as infusion pumps, wheelchairs, and beds
- Eliminates time wasted looking for things
- Improves worker safety by integrating fast and accurate location and context data with emergency call and response systems
- Provides secure, high-performance networking using the Fortinet AP series access points and the Fortinet Security Fabric



## Solution Components

Pole Star provides a unified RTLS solution able to track BLE tags (fastened on assets), and BLE wearables. These BLE devices are paired with mobile and smart-wearable-centric location capabilities.

**1. BLE asset tags** attached to equipment or used as wearables for staff and guests.

**2. Infrastructure:** The tags communicate with the Fortinet access points via their built-in Bluetooth radios. The APs then forward the BLE data to Pole Star's NAO® Cloud service where location is processed and analytics are generated. The infrastructure can be supplemented with Pole Star's hardware to augment coverage locally.

**3. UI:** Depending on the use case, either Pole Star's own dashboard or a third-party system integrating Pole Star's location data will be used by the end-user to visualize alerts, manage assets, assign tasks or statuses, and locate equipment.

**4. Setup and management:** The NAO® Suite comprises the management and field deployment tools and documented deployment processes to avoid pitfalls and maximize performance.

Fortinet AP series access points provide a high-performance, flexibly-managed Wi-Fi network with a broad range of APs which can be deployed into any environment. FortiAP hardware is an integrated part of the Fortinet Security Fabric, allowing users to extend security to the very edge of their network to combat the ever-evolving threat landscape. Fortinet also offers built in NAC device onboarding services to enable simple but secure client management.

## Solution Integration

Pole Star's BLE wearables and tags transmit information which the Fortinet AP series access points receive, passing the measured signal strength and beacon data to Pole Star's NAO Cloud. There the raw BLE data is processed and interpreted by Pole Star's location engine NAO Track in order to provide location intelligence to third-party systems via cloud APIs. The data transmitted from Pole Star to partner applications includes 3D coordinates, room name, time stamp, location accuracy, along with other valuable information to help third-party systems address the specific business challenges linked to location.

**For integrators,** Pole Star's solutions are designed with two attributes in mind:

1. Ease and flexibility of integration: Any solution provider who wants to integrate BLE location services can integrate with Pole Star using a wide set of APIs, including REST and MQTT.
2. Fail-safe deployment processes and tools, ensuring maximum system reliability and performance: Solution partners will benefit from 20+ years of expertise in location services.

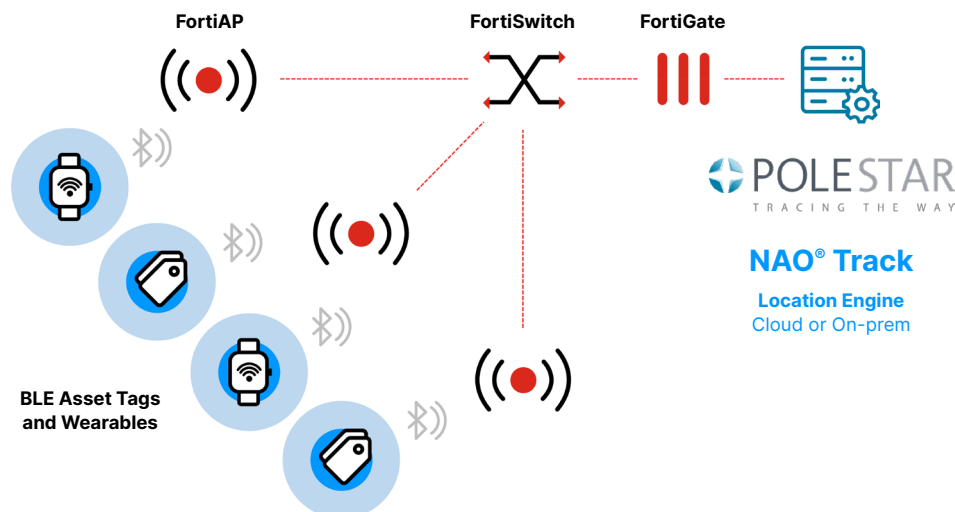


Figure 1: Pole Star and Fortinet integrated solution

## Joint Use Cases

Many location-powered use cases can be delivered, as the Fortinet and Pole Star integrated solution is highly flexible, customizable, and interoperable with many systems. Below are some examples:

- **Asset management:** Find and know in real-time where people and assets are.
- **PAR-level management:** Monitor inventory in real-time and ensure equipment is at the right location at the right time.
- **Staff duress:** Protect employees, nurses, and students with precise and real-time safety information.
- **Wireless nurse call:** Allow residents and patients to call for help from anywhere with smart geo-located alert management.

## About Pole Star

Pole Star is the most experienced (21 years of existence) indoor location technology partner. We enable software integrators and enterprises to build and deploy location-aware solutions in a fast and easy way, to help enterprises augment customer experience, improve processes and improve safety. 700M+ square feet of space are covered worldwide by hundreds of location-aware applications.



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