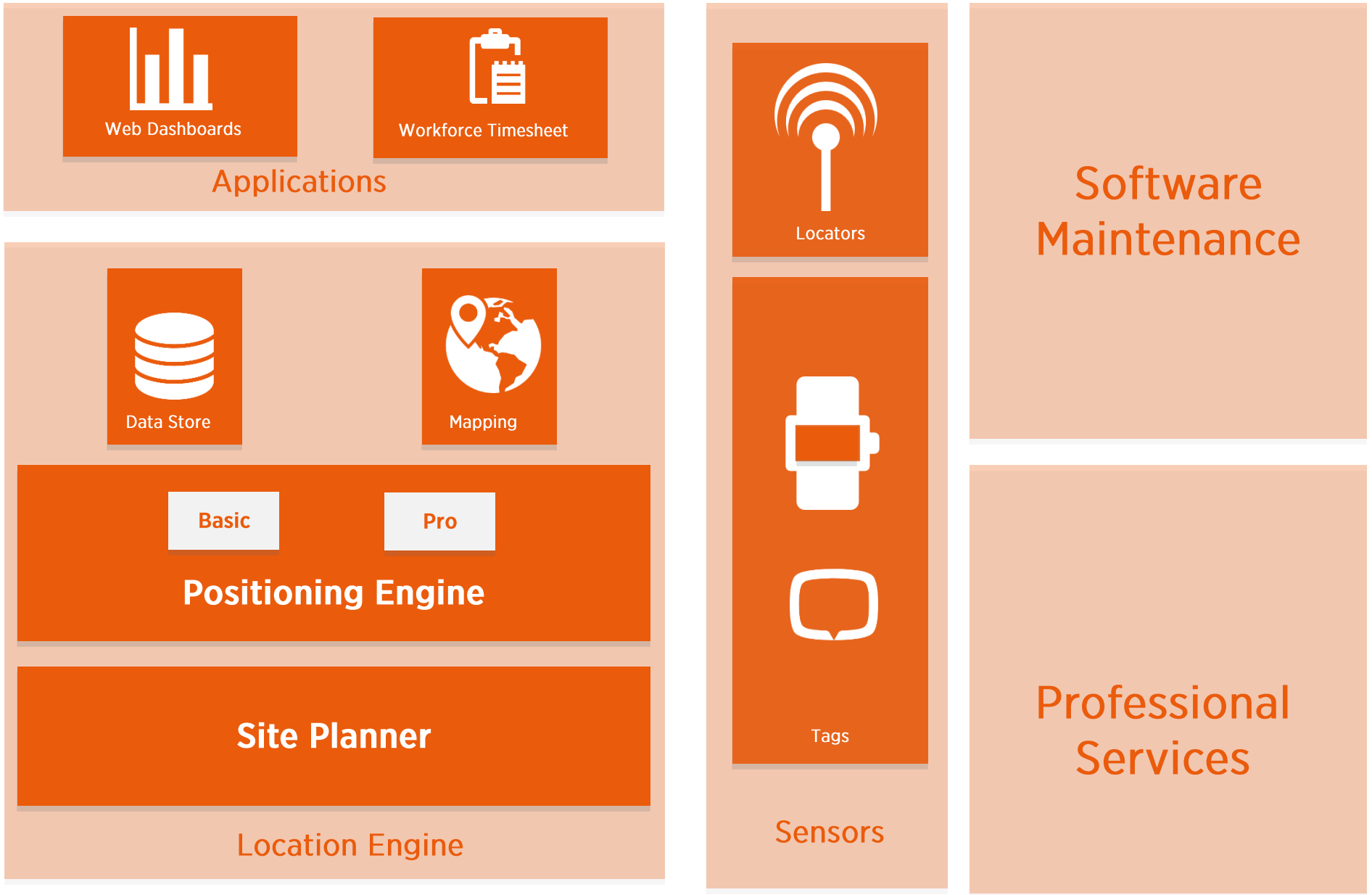
Workforce & Assets Monitoring

Solution Overview

KHATIB & ALAMI

esri Partner Network Platinum

CMMI


Web Dashboards
Workforce Timesheet
Applications
Data Store
Mapping
Basic
Pro
Positioning Engine
Site Planner
Location Engine
Locators
Tags
Sensors
Software Maintenance
Professional Services

Key Features

Superior Accuracy

Accuracy is around 0.5 m (2 ft). If needed, even centimeter/inch-level accuracy can be achieved. Accuracy is relative to the distance between the Tag and the Locator and to the number of Locators.

Real Time Positioning

Location update rate is up to 100 Hz, and latency down to 100 ms. This is sufficient for almost all real-time use cases in any industry.

Open Bluetooth Ecosystem

The system is able to track different types of BLE tags. Not only that, any BLE device that is transmitting a specified radio packet can also be tracked.

Open Tag Design

A large set of lightweight, shockproof, waterproof, and easy to attach tags for different usage. You can pick your design and functionalities of the tags that will be necessarily optimal for all your use-cases.

Key Features

Internet of Things

The IoT BLE radio sensors can be made visible to our system. Many other sensor data can also be visible and received by our system and exposed through its open and configurable API

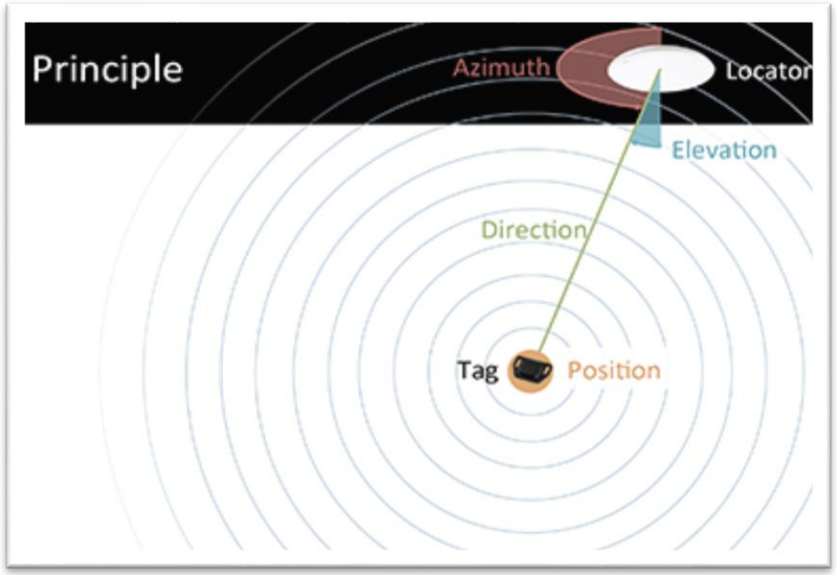
Long Battery Life

Using the onboard sensors and/or geofencing, and activating the Tag only when needed, battery lifetime can be extended up to several years.

Use Cases


Safety and Security
Proper positioning can save workers' lives during and outside working hours
Inventory Management
Connect to your supply chain inventory to better locate and understand assets
Indoor Navgation
Context aware applications for wayfining and navigation
Contractor Management
Ensure that contractors are fulfilling the agreed SLAs and time attendance
Asset Tracking
Locating valuable physical and personal assets for compliancy and cost efficiency
Behavior Analytics
Understanf and gain insights of the behavior of your of resources anywhere

Unique Technology



The Real-time Locating System (RTLS) platform gives Accurate, Real-time, Reliable, Scalable, Versatile, Easy to use and integrate, and Affordable. solution deliver what is promised in every industry

This solution uses a unique technology based on Bluetooth Low Energy, unique Angle-of-Arrival signal processing method, and advanced positioning algorithms.

This positioning principle works using advanced antennas, the Locators, to measure the direction (Angle-of-Arrival) of a radio signal transmitted by a Tag. The result is sent to the Positioning Engine, which uses advanced algorithms to compute the Tag's position and creates outputs in various formats.

The Angle-of-Arrival method enables our system to determine accurate 2D position using only one Locator. With two Locators, the system is able to compute accurate 3D position.

The intelligent locating system is based on Bluetooth Low Energy (also known as BLE, Bluetooth 4.0 or Bluetooth Smart), which has quickly become the industry standard for wireless personal area network technology.

It gives the system several advantages, including long time battery lifetime, compatibility with standard mobile devices, and the ability to carry sensor data alongside the positioning.

FAQ (Frequently Asked Questions)

- Are the APIs to connect to the hardware free of charge?
  - ☑ API is free, it is part of our strategy to help our customers to make the use of different applications.

- How are the pricing of commercial licenses based?
  - ☑ Commercial licenses are based on number of locators only. It does not matter if you have 1 or 10000 tags, the price is the same. Both annual and perpetual models exist

- What is the difference between different licenses ?
  - ☑ The license depends on the delay required: BASIC (location update 1/minute), PRO (location update 1/s), ULTRA (location updates 10/s, mainly for sports).

- Can you elaborate more on the positioning technology used?
  - ☑ BLE is the radio channel used between the tags and locators, however our core technology is based on Angle of Arrival (AoA) that is what makes us different from everyone else.The position (angular data) and sensor data is gathered from moving targets (tags, phones etc.) by locators that are connected to the Positioning Engine, that produces the x,y,z coordinates and stores them to a database that you can decide where it resides.

- Can we have programmable frequency ranges?
  - ☑ The technology supports standard BLE advertisement channels and proprietary channels at the edges of 2.4 GHz band. A tag/device can be designed so that the channel can be programmed dynamically.

FAQ (Frequently Asked Questions)

- Do you support Indoor / outdoor seamless integration (GPS with indoor technology without manually shifting or turning location services on/off)?
  - ☑ Yes, through the applications used.

- Does your system work offline?
  - ☑ Yes, it's possible.

- What areas of operation you mostly operate in?
  - ☑ We are focused on developing and providing the technology. Our partners, who provide the end customer solutions and system integration, are operating on several industries, ranging from sports to security, from healthcare to smart buildings, from manufacturing to logistics etc.

- How the antenna - location application - location service engine are communicating?
  - ☑ Locators (antennas) and Positioning Engine communicate via encrypted UDP messages. All integration to other systems (e.g. apps) are done via our web API.

- Gartner defines the components that are used to create three major on-premises location service solutions in the
market, which one do you support?
  - ☑ We can do real-time positioning of static/mobile assets. Locators (antennas) are installed statically in the premises.