Challenges

Tracking assets through the entire supply chain

Manufacturers, quick serve restaurants, and transportation companies can benefit from tracking the location of supply chain assets in transit between various plants as well as supplier and customer locations. Parts, products, partially finished goods, food, and other high value assets are required to travel through complex supply chains that often require transfers to different transportation systems and temporary storage during the journey. A holistic IoT-based track and trace solution can prevent the loss of these high value assets when in transit, avoid supply chain disruption, and optimize the dock loading/unloading schedule. The time it takes to build the infrastructure for device connectivity, management, and security is too long to build using in-house services. The building of both a web-based and mobile application experience is a complex process. Ayla addresses these challenges, using a set of pre-built services, dashboards, and mobile applications that enterprises can buy as a solution and deliver their track and trace solution to market faster.

The Ayla Supply Chain Asset Tracking solution delivers rapid connectivity and intelligence for supply chain asset tracking

IoT based track and trace solutions need to connect to the cloud, so the solution can be managed remotely (such as lifecycle management of the tracker devices), and data from the tracking devices can be harnessed to optimize the supply chain (for example real-time tracking of assets as they are move through the supply chain). Ayla Track and Trace is a cloud-based IoT solution, delivered as a platform-as-a-service that enables manufacturers, quick service restaurants, and transportation companies to deploy supply chain based track and trace solutions. This includes a web-based and mobile applications, an administrator dashboard with all features needed to secure and control a fleet of tracker devices, and the foundational services needed to connect, secure, and manage a holistic supply chain tracking solution.

Benefits

Enterprises can deliver a comprehensive and holistic supply chain asset tracking solution to market faster, with a lower total cost of ownership with a platform they can buy and extend.

Rapid Time to market
Pre-built, turnkey platform services allows for 5X-10X faster concept-to-launch.

Low Total Cost of Ownership (TCO)
Modular architecture, configuration-based approach enables low cost of management and servicing.

Flexible and future-proofed
Built on AWS IoT Platform, with a flexible framework for extending to any device and data services.
Ayla Networks on AWS

Ayla Networks offers the complete IoT solution powered by Amazon Web Services (AWS). This powerful pairing is a best-in-class (Ayla, ranked number 1 IoT Platform in Deloitte Fastest 500 growing technology companies list in 2019) IoT infrastructure providing the security, reliability, and flexibility to ensure less downtime and faster times to market. AWS IoT provides the foundational IoT services for data ingest at scale, device management, and analytics of data. Ayla builds upon AWS IoT with value added services for customer facing mobile application for application command and control, a comprehensive dashboard and services for management of things, a machine learning model, Dashboard and services needed for connected and smart appliances.

Features

- **Track and trace solutions for supply chain asset management**
  Leverage a wide range of track and trace solution approaches such as cellular-based trackers and RFIP readers to deploy a comprehensive solution for all elements of a supply chain from manufacturing to final delivery.

- **Manage and monitor track and trace solutions via an IoT platform**
  - Monitor and manage the device state and performance using digital twin modeling, rules and schedules, and over the air (OTA) firmware updates.
  - Gain actionable insights from the device data, using analytics and machine learning, that is easily accessible through mobile and web dashboards.
  - Deploy with assurance through enterprise grade reliability, security and privacy protections.

- **Ready to use enterprise applications**
  Web based and mobile application for track real-time the movement and location of assets.

Case Study: Global Quick Service Restaurant

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<thead>
<tr>
<th>Challenge</th>
<th>Solution</th>
<th>Results</th>
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<tr>
<td>A leading US-based quick service restaurant requires a solution to track packages of meat through its journey from manufacturing/distribution to entering the store and preparation to ensure maximum freshness, reduction in spoilage, and optimization of</td>
<td>By deploying cellular based trackers and an RFIP based reader solution tied to a block chain based application the customers was able to accurately track the movement, delivery and use of meat through the supply chain.</td>
<td>The customer was able to reduce waste and spoilage by 10% and optimize inventory usage by using the Ayla IoT platform.</td>
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Get started with Ayla Networks solutions on AWS