



## CUSTOMER CASE STUDY

AWS and HyperTrack APIs Automate Workflows for W Energy's Field Technicians



**FOUNDED: 2009**

**LOCATION: Tulsa, OK**

**AREA OF FOCUS:  
Field Service**

### THE CUSTOMER

W Energy provides technology solutions to the oil and gas industry. Their customers are the largest oil and gas servicers in the world. W Energy creates tools to orchestrate efficiency for oil and gas producers, making their operations more transparent and predictable. From land management and production to plant accounting and transportation, W Energy delivers software solutions that give oil and gas companies visibility and control over their businesses.

### THE BUSINESS NEED

In an industry that is as investment intensive as oil and gas, teams need to create systems to optimize resources and streamline operations. W Energy's integrated architecture approach simplifies the technology footprint for servicers by giving them a cloud platform that is customizable, robust, and reliable. Most importantly, W Energy tools deliver data to the teams that need it - operations teams in the field, at plants, and finance. These teams depend on accurate data for forecasting, planning and reporting to stakeholders. In order to capture the most accurate data for field operations, the W Energy team needs solutions that are able to visualize which assets in the field are being serviced and when.

The W Energy team built tools to meet customer needs. However, as customer requirements became more stringent and complex, the team realized that real-time location data for field service technicians was essential to meeting those needs. Accordingly, the team **identified requirements for live route data and more accurate documentation of field equipment visits** - both of which should be **visible in operations dashboards**.

As a team with significant expertise in building cloud technology, these requirements were within the teams' scope. However, they quickly realized that **these requirements called for logistics and mapping experience** that existed outside of the existing team's purview.

Looking for consultants and platforms that could accelerate their development efforts, they were introduced to HyperTrack. HyperTrack solution engineers learned more about their requirements and noticed a fit to partner to help build their roadmap. Specifically HyperTrack could deliver expertise that worked well with W Energy's team of engineers. **HyperTrack's API first approach allowed the W Energy team to benefit from the logistics technology they needed without distracting them** from their core expertise of coordinating software ERP solutions for specific oil and gas industry aspects.

## THE SOLUTION

The W Energy team is rolling out the following solutions to satisfy their requirements:

By having the ability to document travel in real time, operations teams are able to closely measure and plan equipment

**maintenance in the field.** By Giving teams key information about the location of the driver, operations managers can easily find and resolve errors to transform location intelligence into business value.

**Driver SDK to accurately track the location of the driver during shifts**

**Geofences to automate the detection of work being done onsite**

Operations teams needed to automate the documentation of work on the site including **the time when the service professional reached the well and when they left the location.** Using HyperTrack's Geofences API, the engineering teams are able to build solutions to automate this documentation and better predict when equipment can be serviced. Customers can use geofence data to understand details about how time is spent in the field, where time was spent within the geofence and what activities were completed within the geofence.

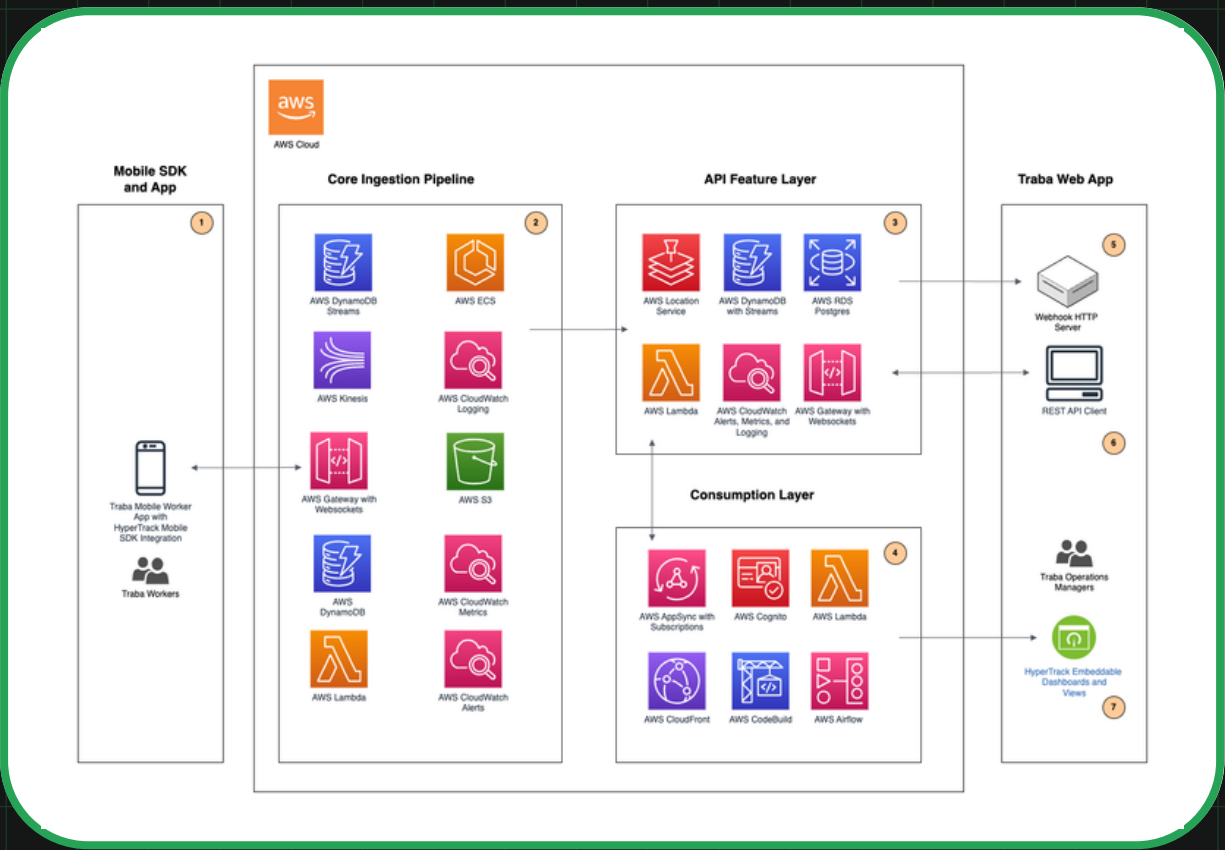
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Since teams have the data from geofence visits and tracking service providers, **HyperTrack allows streams of this data**

**to be presented to dashboards within their operations control tower via webhooks.** This data gives teams real-time insights and the ability to easily address issues with service providers and report on the state of equipment in the field. By receiving this data through webhook streams, customers can be flexible as to how this data is consumed and presented, giving tech teams more control over how they use location data within their environment.

**Dashboard visualizations to display work happening in real time**



## SCALE LOGISTICS OPERATIONS WITH AWS

As described in the diagram above, W Energy uses HyperTrack Mobile SDK, HyperTrack APIs, and HyperTrack Embeddable Dashboards and Views to incorporate oil technicians' live location based oil well visits tracking for W Energy customer's workflow operations.

HyperTrack Mobile SDK is integrated in the W Energy JOYN app and enables live location tracking as described in the diagram in **Step 1** above. Mobile SDK performs tracking for the W Energy worker only during work shift hours.

In **Step 2** above, HyperTrack platform leverages a number of AWS services, such as AWS Lambda, API Gateway, Kinesis, DynamoDB with streams, and many others to ingest and process location streaming data, performing real time location accuracy processing, summarizing a wide array of activities data, user and system driven outages, and creating a wealth of history and analytics data.

To help manage W Energy oil technician workflows, HyperTrack provides Geofences API as shown in **Step 3** in the diagram. W Energy oil technician's activity tracked since the start of the shift, with multiple destination geofence visits being captured in the technician's history timeline each day. Once tracking is stopped for the day, HyperTrack generates visits history summary.

In order to provide compelling real-time worker fleet visibility experiences, HyperTrack utilizes AWS AppSync with AWS Lambda to implement real-time embeddable views and dashboards as shown in **Step 4**.

To monitor and execute on technician's oil well visits service visits activity, HyperTrack provides webhook payloads to convey status of the technician's activity and visits while it is being tracked as shown in **Step 5** above.

As shown in **Step 6**, W Energy uses HyperTrack Geofences API to execute live destination visits tracking during the working hours, track visits and time spent at oil wells by the technicians on the move. In **Step 7**, W Energy web app embeds HyperTrack embeddable views and dashboards to provide real-time geofence visits tracking experiences to its customers.

## THE RESULTS



We allow customers to define operational rules for productivity, once they apply those rules the last mile delivery on the mobile app gives them a list of prioritized tasks for that day.”

**- HARI DUTT**

Product Leader, W Energy

Logistics + Tech Summit, 2022 | Field Service Executive Roundtable

By building custom workflows that are dependent on logistics and location data, W Energy is able to fully support its customers. The team was able to build a workflow management tool, JOYN, to connect the enterprise to the field; so management can receive required reporting and operations teams can coordinate tasks for field service technicians in real time. By using HyperTrack APIs, the JOYN mobile app allows field service technicians to prioritize their daily tasks and automate the verification of work completed.

Teams are now able to answer questions in real-time about the condition of producing wells and provide data that distills their operations into critical Key Performance Indicators(KPIs) that can be monitored and adjusted over time. This transparency gives W Energy the reliability that their customers depend on as they forecast, plan and determine operations for equipment in the field. These efficiencies culminate in greater productivity for field teams as their activities are guided by validated ground truth data. As a cloud service provider, the W Energy team was able to easily integrate the power of logistics technology into their tech stack. This allows them to use logistics as a strategic lever to drive the overall goals of the business.

## About HyperTrack

HyperTrack provides the building blocks to automate on-demand jobs and workforce for hourly and shift labor, field service, field sales, and delivery. Our order APIs for planning, assignment, tracking, and verification learn from ground truth data to improve operations KPIs. Customers across all inhabited continents use HyperTrack’s comprehensive suite of APIs, SDKs, and webhooks to build solutions integrating mobile, maps, and cloud. **Start building with the free trial at [www.hypertrack.com](http://www.hypertrack.com).**