



1,000,000 Rides Later: SMART's Journey to Cloud-Based Maximo



About SMART

Sonoma-Marín Area Rail Transit (SMART) is the San Francisco Bay Area's newest transportation option for travel, offering passenger rail service in Sonoma and Marin counties. SMART's initial 43 miles of rail corridor includes 10 stations, from the Sonoma County Airport to Downtown San Rafael. Future extensions include: Larkspur, which is scheduled to be completed in 2019; Windsor; Healdsburg; and Cloverdale. The full project will provide 70 miles of passenger rail service, connecting SMART passengers with jobs, education centers, retail hubs and housing along the Sonoma-Marín corridor, and a bicycle-pedestrian pathway.



Overview

Since launching in 2017, SMART has used Projotech's Maximo as a Service (MaaS) alongside implementation and support from Intelligent Technology Solutions to manage its work orders, assets, purchasing & invoicing, inventory, and more.

- + Projotech, a Gold IBM Business Partner, offers IBM Maximo: the global standard in software for Enterprise Asset Management and maintenance. Since 1999, Projotech has been providing Maximo as a Service (MaaS), which allows clients to manage, maintain and scale their solution requirements while benefiting from flexible services and lower operating costs.
- + ITS is a full-service IT business solutions provider with 19 years of specialization in Enterprise Asset Management as well as IT Service and Security Management. As an IBM partner and reseller, ITS leverages a number of IBM Maximo products and add-ons in their solutions. ITS's specialization in limited products and technologies enables them to provide a greater depth of expertise.

Choosing an EAM Solution

Early on, SMART knew they needed an industry-leading Enterprise Asset Management (EAM) to help them provide an excellent service to their customers.

Managing a railroad's busy 24/7/365 schedule means scheduling cleaning and maintenance into a few short hours in the evening. With 14 DMUs (diesel multiple units) for carrying passengers, 43 miles of track, ten boarding stations, and many other assets such as crossings and signals, there's a lot to keep up with.

Failure to manage and maintain these assets doesn't just mean a loss of revenue. If SMART breaks down, it means residents unable to get to work, visit friends, or go to school.

Why Cloud-Based Maximo?

As a global standard for EAM, IBM's Maximo was the obvious choice. SMART then had to decide whether they wanted to host Maximo on a local server or choose a cloud-based Maximo service.

Key to this decision was that by choosing Maximo as a Service (MaaS), SMART could avoid investing heavily in infrastructure and the staff and knowledge required to operate it.

Instead of making large, irregular investments in depreciating assets, a cloud solution enabled them to make regular and predictable monthly payments. With one regular payment, they receive all the infrastructure, software, and support they need. And because they only pay for what they use, SMART have lowered both their costs and their risks.

Other considerations included:

- + **Global Accessibility** – cloud-based Maximo can be accessed anywhere along SMART's 43 miles of track as long as workers have an internet connection.
- + **Superior Reliability** – The guaranteed 99.99% is critical to a busy railroad with a 24/7/365 schedule. The reliability and redundancy provided by the cloud keep everything running smoothly.
- + **Strong Security** – Projotech's ISO certification gave SMART the reassurance that their data was secure in the cloud.
- + **Maintenance-Free** – With data and applications provided as a service, there are no onsite hardware requirements. This meant SMART could concentrate on operating their railroad and let Maximo experts run the system.

Implementing Cloud-Based Maximo

Using a cloud-based system, implementation was simple. With no technical configuration needed, SMART was able to start integrating their business processes into the system immediately.

Unlike many businesses, SMART had the benefit of implementing Maximo from very early on. Because of this, they didn't need to transfer and remap many of their business processes from another system.

After initial successes using Maximo for work orders and assets, SMART switched over the few processes that were using other systems. This included their Operator Log (originally managed using an Access database) and their Purchasing and Invoicing (previously paper-based).

Today, SMART continues to expand its use of Maximo. Each new process added to Maximo has helped SMART to become more efficient.



How Cloud-Based Maximo Empowers SMART To Keep Running In All Circumstances

Within a few months of implementation, SMART experienced the benefits of cloud-based Maximo first-hand when the Santa Rose Wildfires swept through the area. Despite significant damage to local structures (including loss of power) and fires all along the railroad, SMART's Maximo data was never under threat.

Because of this, SMART was able to use their trains to help first responders get where they needed to go. They were also able to continue logging and assigning work during the disaster.

Of course, Maximo is just as powerful during the day-to-day as it is during an emergency. Here are just a few of the ways that cloud-based Maximo helps SMART serve their passengers:

- + **Work Orders** – SMART use Maximo to manage preventative (scheduled) and corrective (unscheduled) work orders and track the cost of maintenance. This enables them to keep their service running reliably.
- + **Assets** – SMART uses Maximo's asset hierarchy to logically group and manage all their assets. For example, each DMU has subcomponents such as the wheels, powertrain, and interior.
- + **Operator Log** – This Maximo operator log enables the dispatch center to record events, run reports on them, and even trigger service requests (SR). For example, when a switch is reported not working, the log entry for that event automatically triggers an SR for the maintenance department. This means SMART can track work from log entry through to completion in one system.
- + **Purchasing & Invoicing** – SMART moved from a paper-based system to the Maximo purchasing and invoicing system. This not only saves time and resources, but has saved them approximately \$10,000 in receipt mismatching, double billing, and incorrect pricing.