OpenLegacy
Digital to the Core

Case Study

Leading Indian manufacturer improves performance with real-time error tracking

OpenLegacy provides integrations between the on-prem machines with IoT sensors to the central Oracle database all the way to SAP QC module

Manufacturing | Oracle | SAP | IOT | Digital Transformation

This multi-billion dollar company has played a key role in India's growth in the steel, energy, cement, and infrastructure industries. The company prides itself on its differentiated product mix, state-of-the-art technology, excellence in execution and focus on sustainability.

The Challenge

The company's steel manufacturing is spread over multiple manufacturing plants, each home to dozens of machines of various types. Each machine has numerous sensors tracking multiple data points and supplying event data every 2-3 seconds. Types of data include field maintenance, material consumption, and machine usage. The data is saved in each machine's database, in a proprietary manufacturer format. Then, each machine transfers data to the central Oracle databases.

Although the process works, error reporting and handling are lacking. Because each machine uses its own data protocols, the data transfer processes are "closed" and there's no standard way of reporting errors as they occur or passing error codes to other systems. Therefore some errors go unnoticed for a very long time. An example is the production of metal with incorrect dimensions. When this error goes unnoticed for a while, it results in financial losses.

The Solution

The company used the OpenLegacy's platform to automatically generate microservice based APIs that encapsulated the processes of transferring data between the machines and the central Oracle database.

OpenLegacy generates standard Java code that is easily extended in any development environment. The company's developers have full flexibility to decide how to handle exceptions and errors with any level of granularity. For example, when detecting one type of error they can send an email to a team. For a less critical error type they can simply log an error message.

> *As a major manufacturer, error detection is incredibly important not only for efficiency but also the bottom line. OpenLegacy had an innovative solution that also utilized open standards which also helped alleviate challenges finding the right skills and resources.*
>
> **IT Executive,**
> **Indian Manufacturing Firm**

Furthermore, the company wanted to programmatically surface errors from the shop floor in their SAP ECC Quality Control module. OpenLegacy enabled this integration quickly and easily by supporting seamless data transfer from the sensors to the Oracle databases and to SAP.

The Result

Earlier error detection, leading to improved performance and cost savings

Error detection now happens in real-time, if desired, leading to improved performance, less waste, and substantial savings. OpenLegacy helped to ensure timely availability of authenticated data, while handling an SLA of 300 records per second.

Cost savings and faster implementation by relying on in-house developers and standard, open technologies

OpenLegacy uses standard technologies, thus eliminating the need to hire external development resources or invest in training on multiple proprietary protocols. This led to cost savings, faster implementation, and better usage of existing teams.

About OpenLegacy

OpenLegacy's Digital-Driven Integration enables organizations with legacy systems to release new digital services faster and easier than ever before. Connecting directly to even the most complex core systems, OpenLegacy automatically generates the digital-ready components needed to integrate legacy assets into exciting new innovations. With OpenLegacy, industry-leading companies release new apps, features, and updates while spending a fraction of the time and resources, so they quickly and easily become digital to the core.