

PROJECT

WabtecONE Transit

CLIENT

Various - Transit Sector

Overview

Wabtec Corporation applies a powerful combination of engineering knowledge, data engineering, and data science to present actionable information via tooling tailored to each client's needs.

Wabtec data intelligence systems provide situational awareness and support engineering investigations through a common reference point for equipment performance and context; enabling efficient, appropriate, timely interventions to enhance customer service at reduced cost.

Wabtec Corporation complements your capabilities with enterprise tooling, working in harmony with the unique values and cultural qualities of your business.

Core Wabtec values include safety first, championing the customer's interests, pursuit of excellence, leading through innovation, and team success.

Deliverables

- Consolidated one-stop-shop for rail data and analytics
- Coherent and intuitive human interface: learn once, use for any rail system
- Strong cyber security and data privacy by design
- Streamlined data ingestion, retrieval, monitoring, and notification mechanisms
- Flexibility through support for all equipment types, variants, and configurations

With economical entry-level pricing, secure yet unfettered access to your data, advanced engineering, and a flexible business approach; Wabtec is here to support you.



- Scalability for any fleet size, data rate, or analytics requirement
- Openness: we support clients or partners with flexible options for data access
- Seamless automation of data management, indexing, & processing tasks
- Asset-tracking functions to facilitate data analyses across movements/installations

Challenges

Fragmentation: To collect actionable information, engineers and fleet managers navigate and monitor a wide variety of tools and data sources: this process is prone to blind spots.

Confusion: Diverse user-interface design standards confuse end-users, making it more difficult and expensive to train and maintain the required levels of competency.

Attack: Cyber security and data privacy compliance is expensive. Relevant expertise is in short supply. Even accidental non-compliance carries significant reputational and financial risks!

Duplication: Many core requirements are common across the portfolio. Expense & effort are duplicated by application or engineering teams solving the same problems.

Diversity: Diverse equipment types and configurations are supported with a range of mutually incompatible data formats and recording media or transmission protocols.

Solutions

A one-stop-shop multi-system portal for asset management, performance data, and contextual information from a wide variety of data sources.

Coherent & intuitive interface design consolidates training requirements and enables skill transfer between fleets, equipment types, and data sources.

Supports security, privacy, and legal compliance with strong security engineering.

Harmonised central services for user notification, account administration, format conversion, data transfer, software integration APIs, and other core functionality.

Powerful tooling for storing, processing, comparing, and retrieving data for a wide variety of current and future equipment types and configurations, formats and protocols.

Growing pain: Fleets are growing, and data rates increasing. Solutions that work well at small scale don't always support larger fleets, higher data rates, or diverse inventories.

Compromise: Each software tool has its own peculiar strengths and weaknesses; requiring compromise or duplication. Some vendors lock customer data into their platforms.

Distraction: Data collection and processing takes significant amounts of working time by engineers tasked with identifying, investigating, and correcting equipment faults.

Movement: Faults & conditions correlated across ever-changing installations or relationships between connected equipment confound analysis of long-term, chronic, or systematic issues.

Supports almost unlimited fleet sizes and data rates. Wabtec monitors data and creates actionable intelligence in near real time from thousands of vehicles.

Support a wide variety of essential missions and purposes with best-in-class solutions. WabtecONE provides secure yet flexible access to data.

Streamlines data collection, indexing, and processing through standardisation, consolidation, and automation. WabtecONE provides clear visibility into the contents of each fleet data repository.

WabtecONE asset management automatically correlates faults & conditions across relationships, enabling analysis of long-term, chronic, or systematic issues; irrespective of root-cause.

Benefits

Consolidation: Streamlined workflows complemented by a simple, yet powerful interface enable self-service with mutually contextual information from a variety of data sources.

Competency: Logical and consultative design, WabtecONE increases capability and reduces training costs. Utilisation of WabtecONE functions is monitored to focus training and development work.

Compliance: Due diligence is simplified through single-platform standards-based compliance. WabtecONE applications build on the strong compliance foundation provided by WabtecONE platform.

Efficiency: Higher quality and more features for lower entry-level investment. Intelligent targeting, filtering, and scheduling of notifications to reduce stress from overloaded in-boxes.

Flexibility: Through the flexibility of our robust data management & analytics platform, WabtecONE can be rapidly adapted to support new applications, purposes, equipment configurations & sensor types.

Scalability: Customer solutions built on WabtecONE will benefit from our core data engineering work, with back-office scalability to handle almost unlimited fleet sizes, data rates, and analytics requirements.

Openness: Build on WabtecONE functionality. Enjoy unfettered access to your own data. Integrate the tooling of your choice to augment the core capabilities of the WabtecONE toolkit.

Seamless automation: Spend less time searching for data, converting formats, and preparing reports. Spend more time managing your assets or engineering for performance, reliability, and availability.

Diversity: Asset tracking supports a wide range of use-cases, including complex long-term statistical analyses, enhanced warranty management, and verification of compliance with agreed service levels.

