

HealthHub™

Increases Rail Systems Performance

HealthHub™ is Alstom approach to allow predictive maintenance, it uses advanced algorithms and continuously monitor the state of the assets.

HealthHub™ is a key enabler towards zero in-service breakdowns, maximizing availability and optimizing lifecycle costs. It is your personal and on-demand technical advisor providing you with customized maintenance orders.

GENERAL DESCRIPTION

HealthHub is an integrated decision support tool providing deeper insight to trains as well as infrastructure railway networks. Operators or infrastructure managers are made instantly aware of any major malfunction, while maintenance crews can be ready and anticipate any spare parts orders. Natively compatible with Alstom's innovative monitoring services as TrainTracer or TrainScanner, it can be also integrated with third party environment data.

CUSTOMER BENEFITS

Move from unplanned to planned maintenance

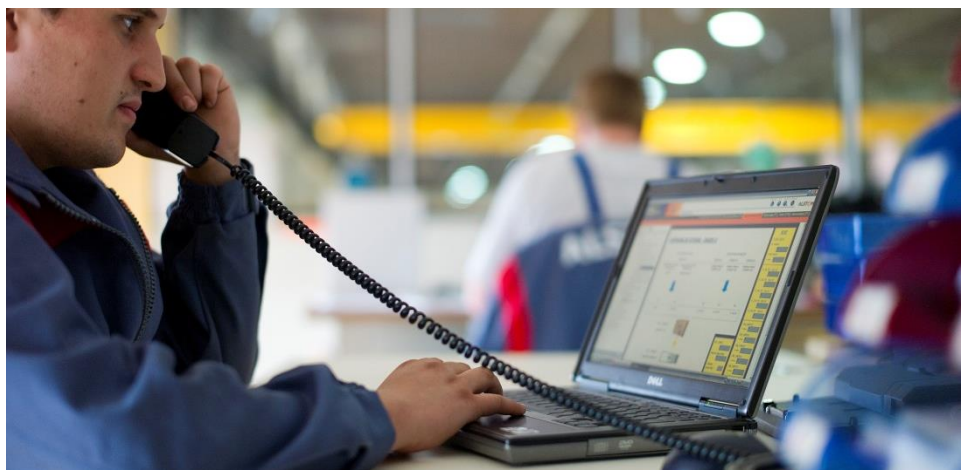
Diagnosing the problem, ordering replacement parts, troubleshooting: all of these time consuming activities are the greatest impediments keeping operators from peak efficiency. Changes in information and communication technologies have revolutionized support techniques for rail equipment maintenance. Alstom has harnessed these technologies with the expertise of its engineers to offer operators and maintainers high value added services and real-time troubleshooting of faults, failures and incidents, and help customers achieve optimum fleet and infrastructure management.

Asset health monitoring at-a-glance

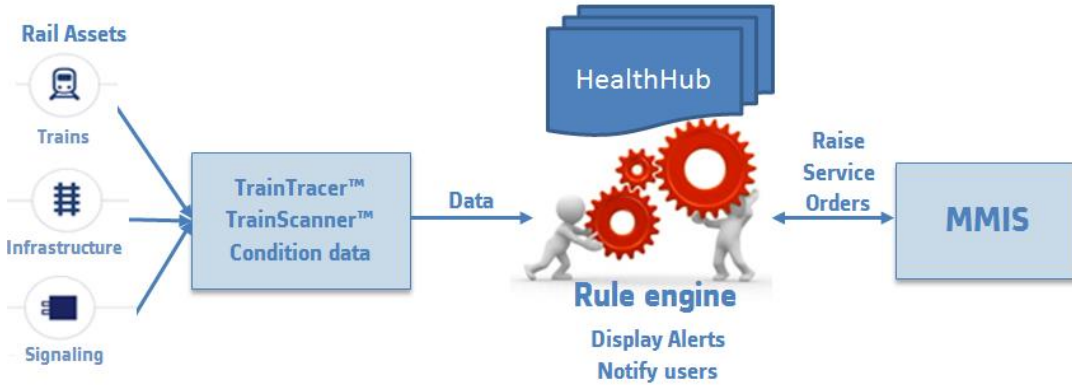
HealthHub showcases the relevant data to various parties through ergonomic user interfaces. Real-time asset health data coming from various sources and their status is displayed at-a-glance thanks to advanced analytics. Its interactions with the MMIS (Maintenance Management Information System) are enhanced through a rule engine which assists the trigger of service orders. This new access to predictive maintenance greatly raises the whole rail system availability.

HIGHLIGHTS

- Immediate access to information via a website
- Decision-making assistance for operators and infrastructure managers
- Reduced downtimes through anticipated interventions
- Integration of business process management workflows
- Natively interfaced with TrainTracer™: Real-time train data transmission solution
- Service Order generation



Streamline operation process



Main features

- Receive data from the asset
- Process these data on a ground IT configuration thanks to Rules based on expert knowledge
- Raise alerts when rules are triggering
- Notify users thanks to various means such as e-mails and reports
- Trigger work orders in a Maintenance Management Information System

Powered by analytics: Augment intelligence

- Live Processing of events and status variable data.
- Temporal sequence analysis (Identify when patterns of event groups occur)
- Geographic filters (Preventing triggers in depot environments)
- Calculation of aggregated values, fleet state (equipment duty counts, condition trending)

Proven solution:

Alstom has implemented its first train monitoring system, TrainTracer, on the UK West Coast Main Line fleet of 53 Pendolino since 2006. New versions have been released since then providing always more business value to the operation. It is a key support element in Virgin's successful very high frequency market changing strategy and increase traffic on the line. More than 700 trains are today monitored.

Point machine health status



Fleet overview



Gain deeper insight at sub-system level



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