

## **Driving Reliability Bringing Data lakes to the Depot – 19<sup>th</sup> November 2025**

**Presented by: Gareth Davies – CPC Project Services Ltd**

### **Summary of Presentation**

Gareth focused on how railway depots can use data lakes and structured data processes to improve reliability, speed up fault-to-fix workflows, and support better engineering decisions. He explained that while significant effort is often spent on gathering data from trains and wayside systems, the “last mile” — getting usable information to technicians, engineers, and fleet managers — is where organisations most often struggle.

He described how data lakes typically lack mechanisms for user feedback, meaning maintainers and engineers rarely influence how data is structured or presented. Gareth highlighted multiple railway contexts (Jubilee Line, DLR, and 4LM) and explained how teams working on different subsystems often operate in silos; shared data helps create a single source of truth and speeds up cross-discipline understanding.

A major theme was accessibility: providing the right data to the right person at the right time. Examples included automated daily summaries, converting raw logs into structured tables, and creating visual trends that highlight anomalies without requiring manual log-scraping. Gareth emphasised that shaping data into readable, unified formats allows maintainers to diagnose faults faster and engineers to spot patterns more easily.

The session concluded that improving accessibility, usability, and data maturity leads to quicker investigations, stronger feedback loops, fewer missed faults, and more proactive reliability management.

To watch the recording of the webinar please [click here](#).