



Figure: Overhead line inspection similar to the one undertaken by Ferrous Metals SA

Client

Ferrous Metal SA*

Location

France

Industry

Engineering

Solution

Desktop-as-a-Service (DaaS)

Application

CAD, BIM and FEA

As part of Ferrous Metal SA's* new philosophy of using intelligent systems and smart services, it implemented Cloudalize's GPU-powered Desktop-as-a-Service (DaaS) solution to increase collaboration and automate workflows to deliver a railway infrastructure project on time and within budget.

About the Company

Founded in 1948, Ferrous Metal SA*, has been at the cutting edge of manufacturing for over 70 years. It is the French-based subsidiary of Ferrous Group AG†, a global leader in manufacturing standard and special steel-based products and related components.

Listed on SIX Swiss Exchange, it operates in over 30 countries and had consolidated sales of over CHF 1.5 billion (USD 1.5 billion) in 2019.

The Challenge

The firm was approached by Europa Rail‡ to survey, maintain and replace the overhead line system including cable families, breaks, switches and cable trays.

Almost immediately after commencing, the project began to face issues with different profiles - BIM managers as well as electrical, structural, container, rail, civil, software and surveying engineers - each with their own device, operating systems and professional software.

These differences had an impact on the productivity and performance of the teams. There was no real-time collaboration or a standardised setup. All parties were working in silos with separate files, different workflows and design specifications. There was no Single-Source-of-Truth (SSoT) from which everyone could work collaboratively to obtain the correct information at any time and on any device.

Ferrous Metal SA* was under pressure to find a cost-effective and efficient smart solution. The available IT hardware was not flexible and was limited in computational power and performance to run the heavy-duty Computer Aided Design (CAD), Building Information Modelling (BIM) and Finite Element Analysis (FEA) software to provide real-time collaboration between on- and off-site personnel.

The Solution

Cloudalize enabled Ferrous Metal SA* and Europa Rail‡ to standardise the setup for each profile on the project without any expensive hardware upgrades or buying additional software. There was one person who had the task of creating tailor-made roles in the Cloudalize's user-friendly and intuitive Admin Portal for each profile of the project.

One key advantage to the project team of Cloudalize was the rapid data streaming over a standard 4G and Wi-Fi connection.

"By the final stage of the project, Cloudalize GPU-powered DaaS solution enabled real-time collaboration and communication between the different profiles" states John Cockerill§, BIM Coordinator at Ferrous Metal SA*. "Furthermore, the project team went from BIM Level 0 to BIM Level 3 over the duration of the project as more and more people realised the added value of Cloudalize."

The Future

Cloudalize's GPU-powered solution revealed itself to be flexible to adapt to the requirements of the project life cycle thanks to being straightforward, easy-to-use and rapid to set up without any upfront investment.

Cloudalize's GPU-powered solution is aligned with Ferrous Group AG† future vision of digitalisation tailored to its customers' requirements. By proposing Cloudalize's solution in future Requests for Proposals (RFPs) and Requests for Information (RFIs), Ferrous Group AG† understands that it is a flexible solution well-suited for demanding engineering projects with multiple profiles, heavy-duty software, supporting digital transformation and real-time collaborative BIM processes.

"It was technically impossible to complete this project without Cloudalize's solution. It is competitively priced, BIM-optimised and offers the speed and performance that Ferrous Group AG† requires to install and maintain Ferrous' high-quality products to its public and private customers."



John Cockerill§
Senior IT engineer
Ferrous Metal SA*

sales@cloudalize.com www.cloudalize.com

*, †, ‡, §: All company and personal names have been modified in this document pending full approval from the parties concerned.

Title Image: Sludge G, 2013, Overhead wiring inspection, Lea Bridge viewed 30 May 2020, <Image>

V1.0 (A4) © 2020 Cloudalize. All rights reserved.