

CIM Database as a central integration platform

Efficient infrastructure management thanks to better collaboration across different divisions



Stuttgarter Straßenbahnen AG (SSB) has been using CIM Database as its overall IT system for infrastructure and engineering data management since 1995. As an integration platform for the entire company, the system reduces the number of time-consuming tasks and the lack of information by implementing company-wide access to data and information and the end-to-end, non-redundant flow of information across different divisions and systems. The impressive results include improved collaboration between all the parties involved, fewer errors and the ability to avoid costly risks.



Transparent change management

CIM Database offers particular advantages in the Rail Vehicles division, where regular inspections of the vehicles and maintenance and retrofitting measures are carried out. A service life of approximately 40 years poses special challenges for all those involved as changes are made almost daily. In day-to-day operations, the system is tasked with managing series vehicles and their variants based on BOMs. Thanks to its highly developed integrations, CIM Database serves here as the link between the authoring systems used. In addition to AutoCAD Mechanical, RUPLAN from Aucotec is used in particular for developing electrical components, such as the wiring for the internal accessories. The task performed by another integration is the synchronization of parts master data with merchandise management in SAP ERP, which has been integrated in the approval process and is used, for example, to initiate ordering processes and manage spare parts inventories.

Efficient management of the technical infrastructure

CIM Database also makes a significant contribution to business success in the Technical Infrastructure division, which is responsible for the planning, construction and maintenance of the transportation network, including tunnels, roads and stops. The CAD system MicroStation from Bentley Systems is used for planning the infrastructure and RUPLAN from Aucotec for cabling buildings and stops.

In this context, CIM Database enables the versioning of CAD data including reference management, various approval processes and the stamping of digital documents, among other things. In combination with the ECAD data, this provides a verifiable basis for reliable documentation. As a data hub with a differentiated rights concept for the rule and role-based definition of access authorizations, CIM Database ensures, among other things, that

“The flexibility that CIM Database offers is crucial when it comes to implementing the planned integration of all the divisions in the company. We therefore regard CIM Database as a strategically important integration platform.”

Dietmar Fillinger, Executive Manager, Stuttgarter Straßenbahnen AG

those involved only see the information that is actually intended for them. Critical information is kept hidden from unauthorized persons.

Automated PDF documentation, workflows and data consistency

At SSB, documents are required throughout the company and across all divisions. CIM Database provides a mechanism that allows structured, up-to-date and above all non-redundant PDF documents – including engineering drawings and BOMs, manufacturer’s specifications, maintenance instructions, correspondence and images – to be generated automatically at the click of a button.

Less is more: minimized administrative overhead and risk of errors

The advantages that CIM Database offers at SSB are manifold. When focusing on drawing and document management, the solution quickly pays for itself for the simple reason that automation reduces administrative overhead. Furthermore, the solution minimizes the risk of errors – an advantage that is difficult to measure in monetary terms. Incorrect information, for example when building a stop, can result in considerable additional outlay – something that SSB is now able to avoid.



The Company

Stuttgarter Straßenbahnen AG (SSB) is one of the largest and most modern local transport operators in Germany and has in recent years received a number of awards for its achievements. More than 500 buses and trains and around 3,000 employees are on the job daily. Every weekday, almost 600,000 people use one or more of SSB’s 72 lines. SSB provides mobility in Stuttgart and thus ensures that the city is able to function properly and protects the quality of life of the city’s inhabitants.

The solution

- Central integration platform and digital archive
- CAx data management (MicroStation, AutoCAD Mechanical, RUPLAN)
- Document management
- SAP synchronization
- BOM management
- Project management
 - Management of project documents
 - Overarching property management
 - Contract management
- Workflow management
 - Processing of claims
 - Automated transfer of payment orders to SAP

Benefits

- Reduction of search, transfer and idle times
- Traceability of processes, also in accordance with legal requirements; standardization of data, products and processes
- Cost reductions (no redundant data entries, increased reuse of parts, accelerated lead times)
- Improved data and process quality thanks to consistent, non-redundant and up-to-date data stock
- Accelerated circulation of technical changes
- Faster ROI thanks to a reduction in management-intensive tasks and minimization of incorrect information and the associated risks

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