

Stadler Rail Group

Multi-site development with CATIA V5 and ENOVIA SmarTeam



Overview

■ Challenge

As a rapidly expanding manufacturer of customer-specific trains and tracks, the Stadler Rail Group required a stable IT infrastructure so that several sites could collaborate on the same projects

■ Solution

In order to implement a collaborative environment and create synergy between the CAD environment and the PDM system, Stadler Rail chose CATIA V5 and SmarTeam Multi-site

■ Benefits

With SmarTeam Multi-site, Stadler Rail can exchange virtual product assemblies five times faster than before and simultaneously increase availability and accessibility of product data



“The greatest advantage in using ENOVIA SmarTeam is the flexibility it provides. Considering our rapid growth, this is decisive.”

Nino Stuber, CAD Administrator,
Stadler Rail Group

STADLER
Cleverer Lösungen auf der Schiene

Stable and accessible development environment

The Stadler Rail Group is driving at full throttle down the road to success. The Swiss company, with its headquarters in Bussnang, delivers regional railways, tramways and rack railways precisely tailored to customer needs. Annual turnover has increased from 4.5 million Swiss francs in 1990 to an estimated 750 million in 2006. At the same time, Stadler acquired additional companies in Switzerland and Germany and opened a new site in Budapest. Currently Stadler is building a new plant in Poland, which will bring the total number of employees worldwide to 2,000.

This growth led to new organizational demands. The engineering sites in Switzerland and Germany were not able to work on projects independently of one another, as originally planned. They often needed to exchange parts, data,

and other project-related information. In parallel, the number of product assemblies grew, thereby requiring a robust product data management system (PDM) able to manage all versions of the 3D CAD models.

SmarTeam – Multi-site connects production sites

One of Stadler Rail's main reasons for choosing CATIA V5 in 2001 was because it enabled them to create very large virtual product assemblies. Since Dassault Systèmes offers, with ENOVIA SmarTeam, a solution for data management in PLM, Stadler Rail decided to adopt this PDM system so as to be able to work with an integrated system: “No other application provides integration with CATIA V5 as well as ENOVIA SmarTeam,” said Nino Stuber, CAD Administrator at Stadler.

Stadler Rail's development sites were faced with the challenge of exchanging large assemblies often requiring long



data transfer times. SmarTeam Multi-site compresses CATIA files, which in turn reduces transfer time. In addition, it duplicates the models at Stadler's sites in Bussnang, Altenrhein and Pankow. Moreover, the cost of integrating CATIA V5 and ENOVIA SmarTeam was very low since there was almost no investment made to the network infrastructure.

Up to date design data available everywhere

Thanks to SmarTeam Multi-site, developers now have access to all the latest data at every site. All systems are synchronized in parallel. The stable environment offers employees assured and rapid access to data. "Our analyses show that in Bussnang, thanks to SmarTeam Multi-site, the time required to check out and open two five megabyte assemblies has been cut significantly to 11 seconds," said Stuber.

ENOVIA SmarTeam enables Stadler Rail to reuse existing part designs in new developments. ENOVIA SmarTeam is used as the company central data management system, and also to define the new assembly group structure for new projects. Due to the allocation rules and number conventions within ENOVIA SmarTeam,

potential collisions of parts can be identified early on. The allocation and acquisition process has been streamlined and access to design information for production departments and suppliers has been improved.

"The greatest advantage of ENOVIA SmarTeam is its considerable flexibility which, with our rapid growth, is decisive. We invested time in the beginning to administer and customize the solution. This investment was balanced by the fact that we are able, at any time, to adapt the system to our needs," said Stuber. In the future ENOVIA SmarTeam will operate more and more as an information system for production and purchasing. Pilot projects carried out at Stadler Rail have already shown positive results.

"In the past, there was an attitude among our designers of "everyone for himself". However, by implementing ENOVIA SmarTeam, they had to rethink and reevaluate their design practices. The increased collaboration means that teams design parts with the overall assembly in mind, and that part collisions are identified much earlier," concludes Stuber.

"In the past, there was an attitude among our designers of 'everyone for himself'. However, with the increased collaboration due to ENOVIA SmarTeam, teams now design parts with the overall assembly in mind."

Nino Stuber, CAD Administrator,
Stadler Rail Group



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Ref: RF_F_M1WED_EN_200612

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