

# SyntheSys Supports Network Rail IT in DOORS® Upgrade Project

## SyntheSys completes an upgrade of IBM® DOORS® and Rational Publishing Engine (RPE) at Network Rail

SyntheSys was invited by IBM® to take on the contract. Network Rail has a long history of using DOORS® in major engineering projects and in its Information Management division.

In 2016, the company found that its DOORS® 9.2 environment was approaching end-of-life for IBM® support purposes, so the software required updating to version 9.6.1. During the lifetime of the DOORS® 9.2 deployment, there were also significant enhancements to RPE – Network Rail opted to upgrade IBM®'s powerful document generation tool to version 2.2.1, which was current when software versions were selected for deployment.

The scale of the project was significant, with some hundreds of user accounts and approximately 100 gigabytes of data, historic and current. Network Rail also took the opportunity to merge two DOORS® databases to simplify support and operations – this required a careful review of the databases' shape and size, and careful DOORS® Extension Language (DXL) scripting to robustly combine the users and data, whilst preserving access rights.

SyntheSys worked with senior Network Rail DOORS® users, Network Rail Information Technology (IT), IBM® and a third-party which supplies several add-ons to DOORS®. A programme of works was designed, which included a full-scale rehearsal of the database merge and upgrade of the software in two test environments. Server infrastructure was specified by SyntheSys for each of two test environments, to which all new or updated software must be deployed and assessed before it is permitted to be deployed to the production environment. System testing was executed by SyntheSys, and user acceptance testing by Network Rail users and their representatives.

The project identified several changes required in third-party add-ins to DOORS®, and SyntheSys worked with the supplier to specify and test these. During the project, SyntheSys was also asked to review the management of access rights on the database, and to suggest enhancements.

Principal Consultant Richard Hesketh, coordinating and executing the work by SyntheSys, said:

"Upgrades, even of commercial off-the-shelf systems, are rarely straightforward at this scale. Several things were key to the success of this project: the experience of our people in previous DOORS® projects at Network Rail; deep knowledge of the IBM® software, and our ability to peel back the layers of a large-scale, complex deployment and understand how best to update it to match current and anticipated needs. Close cooperation and good communication with the users and their representatives helped to smooth the path to implementation."

### About SyntheSys

SyntheSys provides defence systems, training, systems and software engineering and technical management services over a spectrum of different industry sectors. Along with distinct support and consultancy services, our innovative product range makes us first choice provider for both large and small organisations. Established in 1988, the company focus is on fusing technical expertise with intuitive software applications to solve common industry challenges.

