CANTATA

QA SYSTEMS
The Software Quality Company

SECTOR Railways
STANDARD EN 50128

Case Study

OSyS

Optimized Systems & Solutions
(Formerly Data Systems & Solutions, formerly Rolls Royce and Associates)

CERTIFICATION

Cantata has been classified a **Class T2 Tool**, as usable in development of safety related software up to the highest safety integrity level (**SW-SIL 4**) as defined by the **EN 50128** standard

For information on tool certification, please visit:
www.qa-systems.com/cantata

"The support staff were very good at providing timely solutions"

About the Company

Optimized Systems and Solutions was formed from Data Systems & Solutions which, in turn, was formed in early 1999 as a joint venture between Rolls-Royce plc and Science Applications International Corporation (SAIC). It brings together complementary businesses which draw on the project management, engineering, information technology and systems integration skills of its two parents.

This combination of experience and resource has produced an exceptional new company, focused on delivering high-quality, world-beating information technology products and services. The SEAS business unit within Optimized Systems and Solutions is at the forefront of high-integrity software systems engineering applications.

Background

Optimized Systems and Solutions (OSyS) has been developing high integrity real-time software systems for many years and has its origins in submarine nuclear safety systems for the Royal Navy. The SEAS group of OSyS is a business unit specialising in high-reliability and high-integrity systems and software, and is actively involved in developing and verifying software both as a prime and subcontractor. SEAS has achieved a steady growth throughout its existence.

The Project

The ability of Cantata to provide coverage and metric analysis was particularly useful in this project. The project aimed at conducting system acceptance tests on a railway signalling configuration tool for Westinghouse Signals. The customer had provided the test specifications, but OSyS were required to provide code metrics, determine the coverage and report any areas of code not exercised. This was previously undertaken using a number of proprietary tools, but Cantata was able to provide all of the necessary features in one integrated package that proved easier and more cost-effective to use.

The system was in C++, running on Windows. The product being tested had a complex GUI, so the testing itself was driven by a GUI Test tool, with Cantata running in the background. Jason Pinn, the engineer involved with the Unit Testing, reported, "*Although some minor problems were encountered with Cantata, the support staff were very good at providing timely solutions*".

All case study text has been approved by the relevant customer.
QA Systems acquired the Cantata business taking over all development, support and sales from IPL in March 2012.
Cantata is the extension of the Cantata++ tool.

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