Westinghouse Springfields Plant Migrates Nuclear Fuel Application from OpenVMS Platform to Windows

Springfields facility reduces operating costs, and obtains greater reliability for the future, as they replace their VAX hardware and migrate a key application from OpenVMS to a more flexible Windows Server environment.

The Customer

The Westinghouse Springfields site is the UK's main nuclear fuel manufacturing operations. Springfields was the first plant in the world to make nuclear fuel for commercial power stations and has the technology to manufacture fuel for all major designs of nuclear reactors worldwide. Most of the fuel requirements for the UK's nuclear power stations are met by Springfields.

The Challenge

Springfields has provided products and services to over 140 reactors in 12 countries. Its Control Systems application software controls the manufacture of fuel elements for nuclear stations.

All production control data is fed into a shared proprietary OpenVMS-based Rdb database. The applications ran under OpenVMS on HP (DEC) VAX server hardware and were written in Pascal and C using the Rdb database and DCL scripting language.

According to Martin Heaton, Control Systems Development Manager, *"The plant is currently being modernized and the replacement of the VAX hardware is part of this modernization. There are*

no possible package replacements for our unique software applications - so migration offered the quickest, cheapest and lowest-risk option for us to move from this aging DEC VAX platform to an open and more flexible, Windows Server environment."

The Solution

We migrated Springfields' critical Control Systems application to an open and more flexible Windows Server environment using the Advanced toolset for OpenVMS to automate the majority of the migration process.

The toolset converted the application to run in an HP Proliant Windows Server 2003 Enterprise Edition environment.

The Pascal code was converted to C and, together with the applications' C code, was transferred to operate on the target platform with Oracle 10g replacing the proprietary Rdb database.

The Advanced Open Libr8 product was utilized to support the replacement of the OpenVMS systems services, and Advanced Open DCL was employed to replace the DCL scripts.

Client >
Westinghouse Springfields

Sector >
Manufacturing

Project >
OpenVMS Migration

"We chose Advanced for this complex and demanding migration as it had both the technical expertise to convert our OpenVMS applications to Windows, and a well-established migration methodology."

Martin Heaton>
Control Systems Development Manager>
Springfields

CASE STUDY

Springfields Migrates Application from OpenVMS

Major Benefits

With the application now in a single programming language, Springfields Fuels is able to maintain it within the more productive Microsoft Visual Studio development environment.

Springfields will reduce their operating costs and obtain greater reliability for the future.

Heaton concludes, *"The migration and roll-out of the application has been highly successful. Advanced has demonstrated that it has the methodology, software tools and skills to deliver complex projects on-time, to budget and to a high level of quality."*

About Advanced

Advanced is a leading provider of OpenVMS migration and modernization solutions with more than 30 years' experience, and expert staff dedicated to servicing the needs of organizations with legacy systems. Hundreds of organizations worldwide such as Citi, Gap, Chevron, and Westinghouse have enjoyed the business benefits of an Advanced application modernization solution. We work with a large network of OEM business partners, VARs, System Integrators and technical partners across the U.S., Europe, the Middle East and Asia to offer unparalleled solutions.

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Martin Heaton>
Control Systems
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