



Discovery Service improves educational experience for online customers





The Challenge

The National Archives developed a number of home-grown systems to improve the accessibility and maintenance of it growing collection. Eventually they decided to move to a Service Oriented Architecture framework to reduce maintenance costs and provide for flexibility to add future services.



The Solution

Neuron ESB is an enterprise service bus designed to simplify messaging, system integration and Web service enablement. Neuron ESB supports The National Archives .NET environment and has a strong API to provide open access to all data for all users.



The Benefits

- · Scalability provides for future growth of organization's architecture
- Business units within The National Archives now have access to the critical data they need
- Simplifies IT infrastructure and deduces maintenance costs
- Improves online experience of customers, including educational and e-commerce services
- 66 We need to ensure our internal customers business units within The National Archives - have access to the critical data they need to meet requirements and explore new opportunities. We are confident that we will be able to do all of this thanks to Neuron ESB. 9 9
 - Aleksandr Drozdov, Enterprise Architect The National Archives of the United Kingdom

Neuron ESB was easy to deploy and use, which was one of our requirements. We were able to deploy quickly and make Neuron the core of The National Archives' new SOA framework. The new Discovery service is built on this framework.

- Aleksandr Drozdov, Enterprise Architect The National Archives of the United Kingdom

The Challenge

The National Archives of the United Kingdom is one of the world's largest records repositories, with more than 11 million record spanning the Magna Carta to modern government papers. The organization keeps its collection secure and available to the public and conducts significant research to ensure government records remain accessible for decades to come.

As The National Archives online catalogue continued to grow, the organization designed and implemented a number of home-grown systems to improve the accessibility and maintenance of the collection.

They finally decided to move to a standardized Service Oriented Architecture framework to reduce maintenance costs and provide the flexibility to add new services in the future. "Because we had built a number of different systems over the years to support online content and services, our architecture didn't have a single platform to build on for future services, including e-commerce and expanding the amount of data we hold in our system," said Aleksandr Drozdov, Enterprise Architect at The National Archives. "We wanted to take a new approach to our information architecture for internal and external customers, and we needed a solution that would enable us to do this quickly and affordably."

The Solution

The team began searching for a solution that would support their unique environment and requirements. They planned for The National Archives' new business architecture model to be based in WCF and wanted a service bus that would support their .NET environment. They also needed a solution that had a strong API to share and open data for all their users. And of course, time and budget were major factors in their choice.

"We looked at a range of commercial products, but found that it would take too long to implement them for this project," said Aleksandr. "We also explored open source solutions, but there were just too many issues around maintenance and support capabilities, including for WCF, and many of them are made for Java users – not what we needed in our organization. Neuron ESB was the right choice for us."

Neuron ESB is an enterprise service bus designed to simplify messaging, system integration and Web service enablement. With Neuron ESB, companies can eliminate the need for additional development and operational costs by putting their existing skills to use through a .NET-friendly API. Additionally, Neuron ESB provides a topic-based publish and subscribe model, complex message processing, and powerful web services and REST support.

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The Benefits

Through performance testing, The National Archives team has assured that Neuron ESB will be able to scale as the organization's architecture continues to grow. "New records are constantly being added to our data stores that need to be accessed from our website. Additionally, we want to continue to improve the online experience of our external customers, including educational and e-commerce services. And lastly, we need to ensure our internal customers – business units within The National Archives – have access to the critical data they need to meet requirements and explore new opportunities. We are confident that we will be able to do all of this thanks to Neuron ESB," said Aleksandr.

