



## EnBW ENERGIE BADEN-WÜRTTEMBERG AG

### MASTERING THE COMPLEXITY OF A MULTISYSTEM LANDSCAPE

#### QUICK FACTS

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**Markus Hautschek**, Professional Analyst,  
EnBW Energie Baden-Württemberg AG

#### Company

- Name: EnBW Energie Baden-Württemberg AG
- Location: Karlsruhe, Germany
- Industry: Utilities
- Products and services: Electricity, gas, nuclear energy, alternative energy
- Revenue: €16 billion
- Employees: 20,000
- Web site: [www.enbw.com](http://www.enbw.com)
- Implementation partner: SAP® Consulting

#### Challenges and Opportunities

- Pave the way for a service-oriented architecture (SOA)
- Enable faster integration between multiple systems across enterprises
- Test-drive state-of-the-art integration technology within the scope of the SAP Ramp-Up program
- Gain greater visibility into information across a highly complex IT environment

#### Objectives

- Upgrade existing process integration software to the latest version to support expanding business needs
- Implement flexible enterprise services to enable developers to create solutions in line with EnBW’s specific needs

#### SAP Solutions and Services

- SAP NetWeaver® Process Integration (SAP NetWeaver PI) offering
- SAP Ramp-Up program
- SAP Consulting services

#### Implementation Highlights

- Completed the SAP Ramp-Up program within slated time frame of just 5 months
- Kept to planned budget
- Benefited from support and advice of a coach from SAP Consulting
- Solved all problems quickly and efficiently

#### Why SAP

- Vast existing SAP software-based landscape
- Best fit in terms of functionality
- Extensive knowledge and prepackaged integration content for the utilities industry

#### Benefits

- Better integration of multiple applications, systems, and organizations
- Greater flexibility to process change thanks to reuse of enterprise services
- Comprehensive registry of services to support the company moving forward
- Wider range of functionality available with the latest release of SAP NetWeaver PI

#### Existing Environment

Complex landscape comprising SAP and 3rd-party middleware and solutions (TIBCO, product configuration system, pricing calculation)

#### Third-Party Integration

- Database: Oracle
- Hardware: Fujitsu Siemens-Sun
- Operating system: Solaris



How do you make sure that thousands of employees have total visibility into data across hundreds of applications and into operations at multiple sites? That was precisely the question facing IT staff at Germany-based power giant EnBW Energie Baden-Württemberg AG. The answer? Development of innovative integration solutions tailored to the company's very specific needs. The means? The SAP NetWeaver® Process Integration (SAP NetWeaver PI) offering – delivering services-based support for even the trickiest of challenges.

Headquartered in Karlsruhe, Germany, the EnBW Group was established in 1997 as the result of a merger between two leading utilities. It is now the third-largest energy supplier in the country. EnBW operates across three divisions – electricity, gas, and energy and environmental services – each comprising a number of independent companies, focusing on a unique aspect of the business (for example, electricity generation, gas storage, and sales and marketing). With a 20,000-strong workforce, EnBW serves a total of 6 million customers. In 2008 it posted revenues of over €16 billion.

### Closing the Gaps

EnBW has a highly complex IT landscape. The group is made up of several enterprises, each running software for specialized tasks. To complicate matters, recent deregulation and stricter legislation means utilities have to exchange information with partners, resellers, competitors, and government agencies on a regular basis. As a result, business processes span multiple applications,

systems, and organizations. And employees need visibility into data across heterogeneous solutions and into operations at diverse sites.

To bridge the divide between disparate systems, EnBW needs state-of-the-art technology to consolidate and integrate processes. "We'd been leveraging a

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**Clemens Kraut**, Team Lead Enterprise Services Integration, EnBW Energie Baden-Württemberg AG

wide range of integration solutions from SAP for some time and were very satisfied," explains Clemens Kraut, team

lead enterprise services integration at EnBW. "So when we heard that the latest release of our existing SAP process integration software includes support for developing enterprise services and using Enterprise Services Repository, we were keen to find out more. One of our goals is to try to implement a service-oriented architecture across the enterprise." Moreover, the company was looking to enable more integration between applications and boost the performance of existing functionality.

The vision of EnBW's SAP strategy is optimized business process performance throughout the entire company with appropriate use of SAP solutions, in order to reach the best possible business value. This means transforming the application and system landscape to an open, integrated business process platform based on SAP technologies and applications. "We face tremendous changes in the energy industry within the next few years. The challenge is therefore to ensure business continuity at highest innovation level," remarks Andreas Giraud, strategist for EnBW's corporate SAP strategy.

In this light, the use of SAP NetWeaver PI also aligns with EnBW's strategy for service-oriented architecture (SOA). The energy supplier targets harmonized and flexible business processes. Use of business and software services enable standardized access to applications and improved stability of the applications' functions. Applications can be decoupled from underlying infrastructures and transformed to support homogenous end-to-end processes.



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**Clemens Kraut**, Kraut, Team Lead Enterprise Services Integration,  
EnBW Energie Baden-Württemberg AG

“SAP shows promise to us with its state-of-the-art technologies. The latest release of SAP NetWeaver PI is for us an important building block for our SOA approach and for our SAP strategy,” Giraud says.

### A State-of-the-Art Solution to Integration Challenges

SAP NetWeaver PI, a component of the SAP NetWeaver technology platform, delivers integration technologies based

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on an enterprise service bus that enables process-centric integration of SAP and non-SAP solutions – both within and beyond enterprise boundaries. And it provides users with a transparent view of data across the organization, consolidating and displaying information as if it were stored within a single application. SAP NetWeaver PI focuses on two key challenges – application-to-application integration and business-to-business integration. The latest release is a services-based offering. It gives IT professionals the tools they need to develop flexible solutions to tricky integration challenges. What’s more, it provides access to Enterprise Services Repository (ES Repository) – a central facility for modeling new enterprise services and storing their metadata.

When Markus Hautschek, professional analyst at EnBW, and his team got wind that the new release of SAP NetWeaver PI was soon to be brought to market, they wanted to be sure an upgrade would make long-term business sense for EnBW. So they applied to participate in the SAP Ramp-Up program. SAP Ramp-Up is a standardized process for introducing products to the market. It allows selected customers to test new software in real-world conditions – under the watchful eye of experts from SAP. As

an early adopter of cutting-edge technology, EnBW was an ideal candidate for the program.

### Test-Driving New Technology

The first step was to form an in-house project team – and assign roles and responsibilities. Next, Hautschek and his colleagues carefully defined their hardware requirements and began procuring the necessary equipment. Finally, they created a test environment for SAP NetWeaver PI. To help ensure a smooth transition, EnBW collaborated closely with a dedicated on-site coach from SAP Consulting. “He was the central point of contact between us and SAP,” explains Hautschek. “We worked closely together. And if he didn’t know the answer to a question himself, he could always put us in touch with someone who did.”

The lion’s share of the work was done by EnBW’s own people – and SAP consultants were on hand to offer help and advice throughout. “Of course, there was the odd hiccup along the way,” recalls Hautschek, “but that’s only to be expected with a brand-new product. Our team worked closely with the SAP consultants and behind-the-scenes developers at SAP to iron out any issues as quickly as possible. In some cases, the standard functionality didn’t quite meet our requirements.” “But that wasn’t a problem,” says Kraut, “because ES Repository gave us a wealth of enterprise services that we could leverage to create our own solution. What’s more, SAP NetWeaver PI gave us the necessary toolkit and knowledge to model new services and establish a comprehensive services registry of our own.”

For Hautschek, sticking to the tight timeline was critical. “We wanted to see results fast – so we could decide whether we were going to move SAP NetWeaver PI to a production environment,” he says. “Thanks to the hard work of our team and the experts at SAP, the project was completed in just five months.”

### Paving the Way for Service-Oriented Architecture

The benefits of the improved offering were felt at EnBW. SAP NetWeaver PI, with embedded ES Repository and pre-packaged integration content, enables developers to work more efficiently than in the past. And they can find innovative answers to integration challenges faster.

As Kraut explains: "We used to improvise and create work-arounds for some of the thornier issues. But thanks to the wide range of functionality SAP NetWeaver PI offers and the flexible enterprise services it delivers, we can now reuse the enterprise services to develop solutions tailored exactly to our needs."

"We've already successfully integrated over 20 back-end systems," says a satisfied Kraut. "And this number is set to rise." Some 120 process integration projects are currently underway – with 90% of the initiatives for SAP applications and the remaining 10% involving third-party solutions. "Our developers have even commented how impressed they are with the faster installation of SAP NetWeaver PI 7.1 and are looking forward to working with the new release," remarks Hautschek.

In addition to improvements in performance and speed, the latest release of SAP NetWeaver PI has helped lay the foundations for SOA. "ES Repository provides a firm basis for creating enterprise-scale solutions to business challenges in other areas," explains Kraut. "This project has given us important experience with enterprise services and brought us closer to our goal of implementing SOA."

### More to Come

For Hautschek and his project team, the initiative has been a great success. And they are now looking for ways the new technology can benefit them going forward. "The number of interfaces and systems is rapidly increasing, and we constantly face new hurdles," he explains. "SAP NetWeaver PI has given us a central platform that helps us fulfill today's integration requirements effectively. What's more, we now have a skilled team that is well equipped to master the challenges of tomorrow."

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