



## CITY OF HAGEN

# SAP® SOFTWARE HELPS BRING GOVERNMENT CLOSER TO CITIZENS

### QUICK FACTS

#### Organization

- Name: City of Hagen
- Location: Hagen, Germany
- Industry: Public sector
- Products and services: Services for local citizens and businesses
- Employees: 3,500
- Web site: [www.hagen.de](http://www.hagen.de) (German only)
- Implementation partners: SAP® Consulting, Hagener Betrieb für Informationstechnologie (City of Hagen's IT provider), and the Institut für Kooperative Systeme GmbH

#### Challenges and Opportunities

- Replace maintenance-intensive legacy e-government platform
- Reduce red tape by delivering high-quality online services for citizens and enterprises
- Streamline internal business processes and cut costs
- Enable compliance with the relevant European directive

#### Objectives

- Implement a future-proof, portal-based e-government solution
- Leverage service-oriented architecture (SOA) to flexibly integrate various point solutions
- Introduce standard software for enterprise resource planning (ERP)

#### SAP Solutions and Services

- SAP ERP application
- SAP NetWeaver® technology platform
- SAP NetWeaver Portal component

#### Implementation Highlights

- Accelerated implementation thanks to reusable services
- Protected investment through integration of existing solutions
- Successfully completed highly challenging project in just 8 months

#### Why SAP

One-stop solution including technology platform for SOA, portal, and proven ERP software

#### Benefits

- Gives citizens and businesses 24x7 access to local government services via a single, secure portal
- Automates time-consuming manual activities, freeing up administrative staff for other tasks
- Enables fast, efficient creation and enhancement of e-government services
- Cuts software development costs
- Helps ensure compliance with European e-government requirements
- Supports straightforward integration of new services via standard interfaces

#### Existing Environment

- Homegrown e-government software
- Heterogeneous point solutions for individual departments and processes

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**Peter Klinger**, E-Government Expert,  
Institut für Kooperative Systeme GmbH



An innovative new solution is helping City of Hagen, Germany, cut through red tape and reduce costs. Built on service-oriented architecture (SOA) and powered by the SAP NetWeaver® technology platform, the Rathaus21 portal gives citizens, businesses, and local government employees rapid, round-the-clock access to a wide range of information and services. What's more, it supports fast, flexible creation of new online offerings – meeting users' changing needs while cutting development effort.

With a population of almost 197,500, Hagen is located in attractive countryside some 10 miles south of Dortmund in the state of North Rhine-Westphalia. The city boasts many historic buildings and monuments. Key local industries include steel, paper, electronics, and logistics. It is also home to the University of Hagen, Germany's only state-funded distance-teaching university, which has some 50,000 students. The local government authority, City of Hagen, is responsible for providing a wide range of services – from vehicle registration to garbage collection.

### **A First Mover in E-Government**

City of Hagen is no stranger to e-government. In fact, the local authority was quick to grasp the potential of online services and launched the first version of Rathaus21 back in 2000. Developed in close collaboration with the city's IT provider Hagener Betrieb für Informationstechnologie (HABIT) and Institut für Kooperative Systeme GmbH (IKS) at the University of Hagen,

the "virtual town hall" solution served its purpose well. But by 2007, it was in need of a major makeover.

"Our legacy application was very maintenance intensive," explains Peter Klinger, e-government expert at IKS and former managing director of HABIT. "What's more, it lacked the portal functionality we needed going forward. We wanted standard software that would enable us to integrate the various point solutions used by our agencies, reduce time-consuming development, and shape up for the future." The new solution also had to streamline internal processes, introduce new accounting practices, and help ensure compliance with the European Union (EU) Service Directive, which requires local authorities to provide a single point of access to their services.

To master these challenges, City of Hagen decided to adopt service-oriented architecture (SOA) – an adaptable, agile, and open IT architecture, where functionality is grouped around

business processes and packaged as interoperable services. "SOA appealed to us because it offered a lot of flexibility – and allowed us to orchestrate our individual online offerings," states Gerd Thureau, e-government strategist at HABIT. The question was: Which software would best support this approach?

### **Service-Oriented Architecture with SAP NetWeaver® and SAP® ERP**

After putting products from a variety of vendors through their paces, City of Hagen and its partners opted for the SAP® ERP application and the SAP NetWeaver® technology platform. "SAP ERP delivered the proven software we needed for our new accounting processes," says Klinger. "What's more, the application runs on the SAP NetWeaver technology platform, which includes portal functionality, plus comprehensive support for SOA."

SAP NetWeaver allows IT organizations to implement an SOA-based infrastructure and compose, integrate, deploy, and manage SOA-enabled applications. With SAP ERP, enterprises can more efficiently perform tasks in areas such as financials, human capital management, procurement and logistics, and sales and service. In conjunction with SAP NetWeaver, the application provides a tried-and-trusted platform for organizations' business processes.



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**Gerd Tharau**  
E-Government Strategist  
Hagener Betrieb für  
Informationstechnologie

## Advice and Assistance from SAP Consulting

To skill up for the initiative and help ensure it went off smoothly, City of Hagen called in SAP Consulting. “The consultants from SAP supported the technical implementation and provided expert training for our team,” says Tharau. Leveraging their newly acquired knowledge, City of Hagen, HABIT, and IKS worked hand in hand to make sure the SAP software supported the local authority’s highly specialized business processes.

“This was the first time the SAP NetWeaver Portal component had been used for e-government,” explains Tharau. “So we had to tailor it to our very specific needs. But deploying standard SAP software saved us the time and effort of programming from scratch. We simply customized the solution in line with our requirements.”

## Reusable Services Reduce Development Effort

As the project progressed, City of Hagen’s SOA approach saved the partners time-consuming development work. “The same SOA principles underpin all our processes. So once we had implemented one service, we could reuse it in different contexts,” Tharau continues. “This significantly accelerated tasks as the project progressed.”

Thanks to excellent teamwork, the pioneering joint development project was completed in just eight months –

on schedule and within budget. “Close collaboration was key to the success of the Rathaus21 implementation,” says Klinger. “Regular face-to-face meetings ensured efficient communications between all stakeholders.”

## Secure Single Point of Access to Services and Information

Rathaus21 allows users within and beyond Hagen town hall to call up a wide range of facts, figures, and services. “Our intranet and Internet sites used to run on separate platforms,” says Klinger. “Now everything is in one consistently structured solution. What’s more, we’ve been able to integrate our various point applications into SAP NetWeaver Portal – and that’s a real plus.”

Making sure that the portal delivered cast-iron security was a particularly tough challenge, as Klinger explains. “Public-sector authentication requirements are very stringent and call for

readers, for reliable protection against forgery and fraud.

## Lightening the Load on Citizens and Public Servants

Local citizens, enterprises, and City of Hagen itself are now reaping the benefits of the new portal. Individuals no longer have to trek to the town hall during office hours to request information or fill out forms. Rathaus21 is available 24 hours a day, seven days a week, so users can access information and services whenever it suits them – and with minimum bureaucracy. Statistics reveal that many individuals and organizations are completing formalities on Sundays and public holidays, something that was formerly impossible.

At present, over 50 different legacy solutions have been integrated into Rathaus21, which provides citizens with access to over 150 online forms. Offerings currently available via the

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correspondingly robust mechanisms. We cleared this hurdle by incorporating qualified digital signatures into Rathaus21 – a first in the SAP world.” This state-of-the-art authentication procedure leverages chip cards and

portal include geographical data, information on local election results, and basic information on residents of the city. Convenient integrated payment functionality allows users to settle bills for these services online. And many

formerly paper-based manual processes are now fully automated, increasing data quality, lightening the load on administrative staff, and reducing costs for City of Hagen.

One particular highlight is the service that provides access to the citizen registration database (in Germany, all individuals are required to register at the town hall in their place of residence). A prominent application is the online verification process for mail-order companies, which was a time-consuming chore in the past. "We increased the efficiency of our internal process by 16% because customers can now use the new self-service interface and complete the process in just one minute. It used to take days." According to Prof. Dr. Gunter Schlageter at IKS, SAP's approach to SOA allows City of Hagen to drive flexibility and efficiency into their processes. "We are now able to provide improved public services and achieve higher efficiency at the same time," adds Schlageter.

### Well Equipped for the Challenges of Tomorrow

As a central point of access to all local government services, Rathaus21 enables City of Hagen to meet the requirements of the EU Services Directive, due to come into force

in 2009. "Thanks to our SOA-based solution, we're already compliant with a number of EU requirements," says Thurau. "Because all our processes now run on SAP NetWeaver, we can integrate additional applications and functionality via standard interfaces, as and when required."

Going forward, City of Hagen intends to use Rathaus21 to support economic development. "We want to extend our portal to provide services that will attract businesses to the area," says Klinger. In addition, the city will enhance its intranet, giving managers rapid access to actionable information. There are also plans to bring the local authority's human capital management processes onto the new solution.

Citizens and City of Hagen will not be the only ones to benefit from Rathaus21. Implementation partner IKS is currently marketing the solution to other local government organizations. "Rathaus21 is an ideal framework for e-government," says Klinger. "And SAP software delivers the tools needed to create new e-government processes – faster, more efficiently, and at a far lower cost than in the past."



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