

# Closeness to Citizens with E-Government

**E-Government 2.0 is the name of the German Federal Programme which aims at the promotion of IT-based communication. Building up a Public Key Infrastructure (PKI) with an integrated identity-, access-, and security management is essential to guarantee a secure exchange of electronic certificates. The Dahme-Spreewald district, with support from Devoteam, has taken a pioneering role here.**

Public administration has reached a new level of quality since the 1990s due to the information and communications technology: Today, administrative processes are mainly handled electronically. This saves time and costs. The waiting queues in administrative offices belong to the past – at least in most cases.



*The rural district office in Lübben (Germany) has taken the opportunity to switch to electronic document exchange.*

## Fast and Efficient with E-Government

Today, public authorities are equipped with modern PC workstations, they can be reached via e-mail and provide both the citizens and companies with an increasing amount of information via the Internet. Ideally the administrative processes can be executed entirely online.

A pioneer for the implementation of a Public Key Infrastructure (PKI) within the scope of the E-Government programme was the Dahme-Spreewald district in the

German federal state of Brandenburg. Two years ago, the responsible people took the opportunity to switch to electronic document exchange in the course of a new budget, cash and accounting project.

## Experience makes the Difference

The Dahme-Spreewald district chose Devoteam as its partner for the implementation. "The excellent expert knowledge of the employees in the conceptual development and implementation of the solutions in the different areas of PKI, identity, access and security management spoke in favour of the company", says Jürgen Häntschel, the district's head of IT. Moreover, Devoteam has long-time expertise as system integrator and has a broad knowledge of operating and managing IT solutions.

The close collaboration with selected product and technology partners in the field of security and service management provides the basis for the outstanding technical skills of Devoteam's consultants.

## Secure Exchange via the Public Key Infrastructure

In order to achieve the exchange of electronic documents, it was necessary to develop a Public Key Infrastructure (PKI) i.e. a cryptologic system to issue, distribute and verify digital certificates. But the PKI was not only conceived to be used for issuing certificates in a secure manner. The system should also be able to support authentication and secure e-mail-correspondence.

For each single secure transmission the sender needs the public key of the addressee. Digital certificates - which are themselves secured with a digital signature - allow

## About the Dahme-Spreewald district

The Dahme-Spreewald district is situated in Brandenburg, south-east of Berlin. The Dahme lake area, the Spreewald (Spree Forest) and the region Niederlausitz (Lower Lusatia) are the dominant natural areas of this region. The northern part, bordering Berlin, is criss-crossed by rivers and channels and dotted by lakes. The region has a fine economic development and is the location of some larger company headquarters.

The area around the major district town of Lübben is tourist-oriented; the rural south is an agricultural area. Besides this, manor-houses like the castle in Königs Wusterhausen or nature preserves like the Niederlausitzer Landbrücke (Lower Lusatia land bridge) attract many visitors.

# Identity Management Solution

for the verification of the authenticity of the sender and the integrity of the transmitted data. The verification is conducted by special software.

## In Touch with the Citizens

"Until now, the exchange of signed certificates is performed only internally between the administrative sites of Lübben and Königs Wusterhausen. But for the coming year we are also planning to implement document exchange with our citizens", Häntschel outlines the expansion of the system. Then even the online transmission of construction plans will be made possible. "Moreover, with this application we meet the requirements of the EU Services Directive which is an EC directive to realise the European single market in the field of services", continues the IT-specialist.



*Spreewald (Spree Forest): The exchange of signed certificates with the citizens is planned for the coming year*

## Solution Architecture

The solution implemented by Devoteam uses the BB-5000 PKI-Appliance of Ecos. With the Novell directory service of the district (Landkreis) it is possible to manage certificates, user authentication and synchronisation irrespective of what operating system is being used. Furthermore, the system provides a smart card lifecycle management. Using a separate web interface, the user is able to roll out certificates fast and easily no matter where the PC is located.

The administration is done via a SSL-connected web interface. Two virtual appliances were used to install a high availability solution with automatic synchronisation of the internal database. The high degree of availability is secured by a VMware server available in the district and combined with the LINUX cluster technology.

Devoteam selected the KAAAN Advanced card reader, security level 2, from Kobil Systems. The smart cards were delivered with the operating system TCOS 3.0. For ensuring e-mail security, Devoteam implemented the Utimaco SafeGuard MailGateway. The creation of pdf signatures is done with the help of the OpenLimit CC Sign software which allows for legally binding, electronic signatures in accordance with the highest international security standard.

## About Devoteam

Devoteam is an award winning EMEA leader in Connecting Business & Technology, specializing in information system infrastructures and telecommunications. Headquartered in France with 5,000 employees in 25 countries across EMEA, it achieved a 2010 turnover of €0.5 billion. Combining consulting and technology solutions enables Devoteam to provide its customers with independent advice and effective solutions that meet their strategic objectives. Our Consulting services range from idea and high level business advice through choice of technology solutions to organisational IT centric transformation implementations and change in large & complex IT projects. Our Solutions teams have the skills, experience and methodologies to deliver large and complex IT implementations across a range of technologies. Our Expertise of IT specialists are available for hire on-demand, accessible through a consulting service, providing our clients with highly specialised subject matter experts both locally and across EMEA.