T-Mobile creates with ecambria cryptotickets® a Web Single-Sign-On solution throughout Europe

CASE STUDY

Summary

T-Mobile operates numerous web portals for customers, staff members and business partners across Europe. The users gain access to important web applications via the portals in order to manage customer data, perform service configuration and execute commercial operations.

T-Mobile has equipped its portals and applications with the cryptotickets Single-Sign-On solution since 2004. Any single user can thus safely and securely access all relevant applications without additional login.

About T-Mobile

T-Mobile (Telekom Deutschland GmbH) started business operations as an economically independent company in 1993. Today the enterprise is among the most successful in Europe in the mobile communications business sector. The one hundred per cent subsidiary of T-Mobile International AG & Co. KG, with its approximately 8,000 staff members (as of March 31, 2005), is actively operating in one of the most dynamic growth markets in Germany. With its approximately 27.5 million customers (as of December 31, 2004) T-Mobile is the market leader in Germany. Worldwide, in excess of 77.4 million customers (as of December 31, 2004) are already availing of the services of the T-Mobile majority stakes in the company.

"With the cryptotickets solution we can make new strategic services and web applications available to our user groups throughout Europe in a fast, safe, secure and uncomplicated manner. T-Mobile has been able to realize huge cost savings as well as retain the value of investments already in operation simply by integrating cryptotickets into existing portals and applications."

Holger Suska, Telekom Deutschland GmbH
Head of the Consumer and Partner
Internet Systems Department.

cryptotickets
your trusted connection into the cloud

CASE STUDY

The Challenge

Thanks to the convergency of telecommunications and information technology, T-Mobile is able to offer its customers effective mobile solutions and services such as web'n' walk mobile internet, mobile multimedia or sound logos. The customers themselves, as well as T-Mobile's partners and Service Centre staff members, configure and administer these services via numerous web applications.

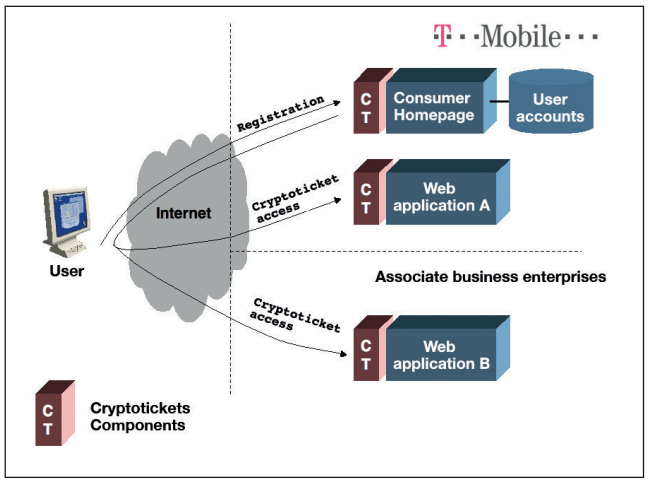
The challenge for T-Mobile in early 2004 lay in providing the various user groups in the European branch offices and business partners (service providers such as debitel or talkline) with the rapidly growing amount of web applications in a swift, safe and secure way. Today, a new web application - e.g. for administering the new T-Mobile sidekick - has to be integrated in the shortest possible time into as many as 18 different target group specific portals in 14 separate companies all over Europe. On top of it all, both the portals and the web applications are implemented in various web technologies like Java, PHP, Perl, ASP or .net, and are operated in various locations across Europe and the United States.

The solution with cryptotickets

The ecambria cryptotickets solution is optimized towards being easily integrated into existing portals and web applications. In this way, existing investments can be protected and new web applications and portals can be quickly and economically interconnected.The cryptotickets solution thus smoothly works in unison with current standards for useful Single-Sign-Ons like for example the Liberty Alliance Protocols.

From mid 2004 T-Mobile began equipping its portals and web applications throughout Europe with the cryptotickets solution. These portals were used by customers, Service Centre staff members, sales business partners and service providers. The integration of the lightweight cryptotickets components was extremely fast and cost-effective. In particular, there was at no time any need for lengthy and costly alterations to the network infrastructure (leased lines, router adjustments, plug-in installatioins on web servers, Firewall connections, IPSec-links etc.). No new systems had to be installed and operated.

CASE STUDY



The illustration shows the basic outline of the cryptotickets solution:

The example demonstrates how a customer logs into the Consumer portal of T-Mobile. By using cryptotickets he can then access T-Mobile's (application A) and business partner's (application B) web applications. The Single-Sign-On solution is achieved merely by integrating the cryptotickets components (CT). The web applications are thus able to eliminate their own account management.

Key features for the successful operation at T-Mobile

1. Swift and economical integration into new and existing systems

The cryptotickets software components are lightweight and very simple to integrate into existing systems in various technologies. In this way, T-Mobile achieves a short time-to market with low expenditure when integrating new applications.

2. Independence of the network infrastructure

By consistently making use of asymmetric cryptography, Single-Sign-On between portal and application is achieved solely via the user's browser without having to create a direct communication route between portal and application. Applications which are operated in different networks can thus be integrated into a portal with minimum effort. As the cryptotickets components can be directly integrated into the application, there is no need for additional plug-ins to be installed on web or application servers.

3. Security and verifiability of user accesses

By deploying asymmetric cryptography which has been tried and trusted over decades, the cryptotickets solution can achieve a high degree of security. As the private key for creating a cryptoticket is known only to the relevant portal, a cryptoticket which is received can also be used as proof of correctly authenticated access to applications in legally separate enterprises.

CASE STUDY

4. Supporting scenarios with multiple portals

At T-Mobile, web applications frequently need to be made available to several target groups in various countries. The cryptotickets solution supports access to an application from multiple portals with varying account databases. T-Mobile has, for example, thus enabled its service providers (debitel, talkline etc.) to gain direct Single-Sign-On access to important configuration applications for mobile communications services.

5. ecambria systems GmbH's online-knowledge-base and Consulting Services

The situation concerning websites and applications in major business enterprises such as T-Mobile is catered for by numerous teams and external suppliers. The comprehensive online-knowledge-base, with whose help application developers in particular were very quickly able to familiarize themselves with the cryptotickets solution and consequently able to at once work productively, played an important part in the success of cryptotickets. The ecambria Consulting Services were able to render invaluable and effective support in the conception of the overall solution for T-Mobile.

ecambria systems GmbH

ecambria systems GmbH is a software company which focuses on conceiving and developing innovative software products. Thanks to its Consulting Division, ecambria also offers its know-how to customers wishing to stand out from competitors through the implementation of its tailor-made software systems. Since late 2003, the company has been developing and marketing the cryptotickets Single-Sign-On solution, with productive installations in most European nations and the United States.

ecambria was established as a spin-off from the University of Bonn by Dr. Oliver Stiemerling in the year 2000 and is today active throughout Europe in the telecommunications, logistics and service industries. The company's head office is in Cologne, Germany.

ecambria systems GmbH
Genter Str. 26 · 50672 Cologne · Germany

Tel.: +49 (0)221-595527-0
Fax: +49 (0)221-595527-5

Mail: info@ecambria-systems.com
Web: www.ecambria-systems.com

cryptotickets
your trusted connection into the cloud