

# Towards a smarter future

## The Internet Smart Card



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# Internet Smart Card - Overview

## Some Benefits of the Internet Smart Card

- Very easy to use Reduces administration costs
- No need to install user software, drivers or middleware (plug and play)
- Increases security through secure storage of login details and SSL/TLS encryption
- No need to purchase special expensive card readers
- Uses standard software (available on any PC)



# Internet Smart Card - Overview

## What is the Internet Smart Card?

- The Internet Smart Card is portable, easy-to-use web server, that allows individuals Internet access anytime, anywhere.
- Card and PC (browser) communicate directly via PC's USB port with no middleware
- It displays web content in standard website format
- WebServer can generate dynamic HTML pages (CGI, servlets)
- Data security is ensured through SSL/TLS
- The card is a full member of the LAN
- The Internet Smart Card guarantees secure Internet access
- The Internet Smart Card is the ordinary person's online passport!



# Internet Smart Card - Overview

## Benefits for the card issuer

- Reduced administration costs
- Less roll-out expenditure
- Uses standard Internet technology
- No installation of card readers, drivers or middleware required
- No user training required



## Benefits for users

- No need to install new user software  
(the browser comes with the PC operating system)
- Top security when accessing web-based services  
(accessing portal operators)
- No need to purchase special expensive card readers
- The individual data and stored applications are transportable  
(USB token) and can therefore be used on any standard PC



# Internet Smart Card Applications

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## Application options

- Secure web access
- Peer-to-peer identification
- Loyalty and bonus software
- Access control
- Health cards
- Single Sign-On
- VPN replacement
- e-learning
- Internet banking
- Corporate ID
- e-voting
- Authentication Gateway



# Example Deployment – The Hamburg Lottery

Under German Law Gambling on line requires age verification.



The Internet Smart Card was selected as the mechanism for this. The main drivers for this decision were based on the following criteria:

- Cost of solution – 25% of standard Smart Card Deployment Cost
- No requirement for additional hardware or software to be installed on end users PC's
- Utilized standard web server security practices – and required no special web server configurations or additional hardware.

The project has been running for just over 12 months and to date over 40,000 Lottery Internet Smart Cards have been issued.





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