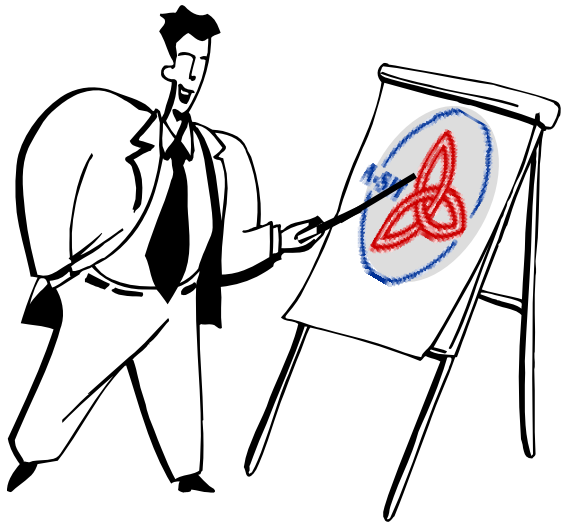
Security in e-Government in Austria

Herbert Leitold

Secure Information Technology Center – Austria A-SIT

Contents



- Introduction
- Citizen Infrastructure
  - the Client-side
- Server-side
  - Open source security modules for e-Government
- In Action
- Supplementary Tools
- Conclusions

Some eGovernment players

BUNDESKANZLERAMT ÖSTERREICH

CIO DES BUNDES

Federal Chancellery

Coordination, Chief Information Officer, operational services, tools, etc.

e-Governement Innovation Center - EGIZ

Research & competence center

A-SIT

Security advise, electronic signatures, etc.

e-Government Challenges

- Trust & Security
  - Identification and authentication
  - Confidentiality
  - Data protection
- Representation, acting as proxy
- Technology neutrality
  - Long-term investments vs. technology life cycle
- Cross-border challenge
  - To be considered from the beginning
- Openness towards the market

e-Signature in e-Government

Bundeskanzleramt der Republik Österreich

Signaturprüfdienst

Nachfolgend finden Sie das Ergebnis der Prüfung der eingereichten elektronischen Signatur.

Unterzeichner

Name	Christian Wregar
Organisationseinheit	Verfassungsdienst
Organisation	Bundeskanzleramt der Republik Österreich
Staat	AT

Aussteller des Zertifikats

Name	a-sign-corporate-light-01
Organisationseinheit	a-sign-corporate-light-01
Organisation	A-Trust Ges. f. Sicherheitssysteme im elektr. Datenverkehr GmbH
Staat	AT

Informationen zum Zertifikat

Seriennummer	21221
Qualität	gewöhnliches Zertifikat

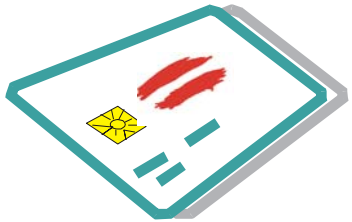
Prüfungen

Signatur	Die Überprüfung der Hash-Werte und des Werts der Signatur konnte erfolgreich durchgeführt werden.
Zertifikat	Eine formal korrekte Zertifikatskette vom Signatorzertifikat zu einem vertrauenswürdigen Wurzelzertifikat konnte konstruiert werden. Jedes Zertifikat dieser Kette ist zum in der

crypto based security for e-government

- **legal acts need electronic signature to get in force**
- **XML-document structure for securing adequate format**
- **online verification offered**
- **same methods as for e-government application**

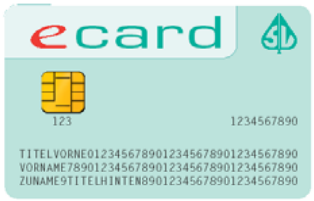
Citizen Infrastructure



- Smart card initiatives
- IDM concept – data protection
- Cross-border IDM

Major rollouts

Bank cards (ATM cards)
Each bank card issued since March 2005 is also an SSCD (as of 1999/93/EC)



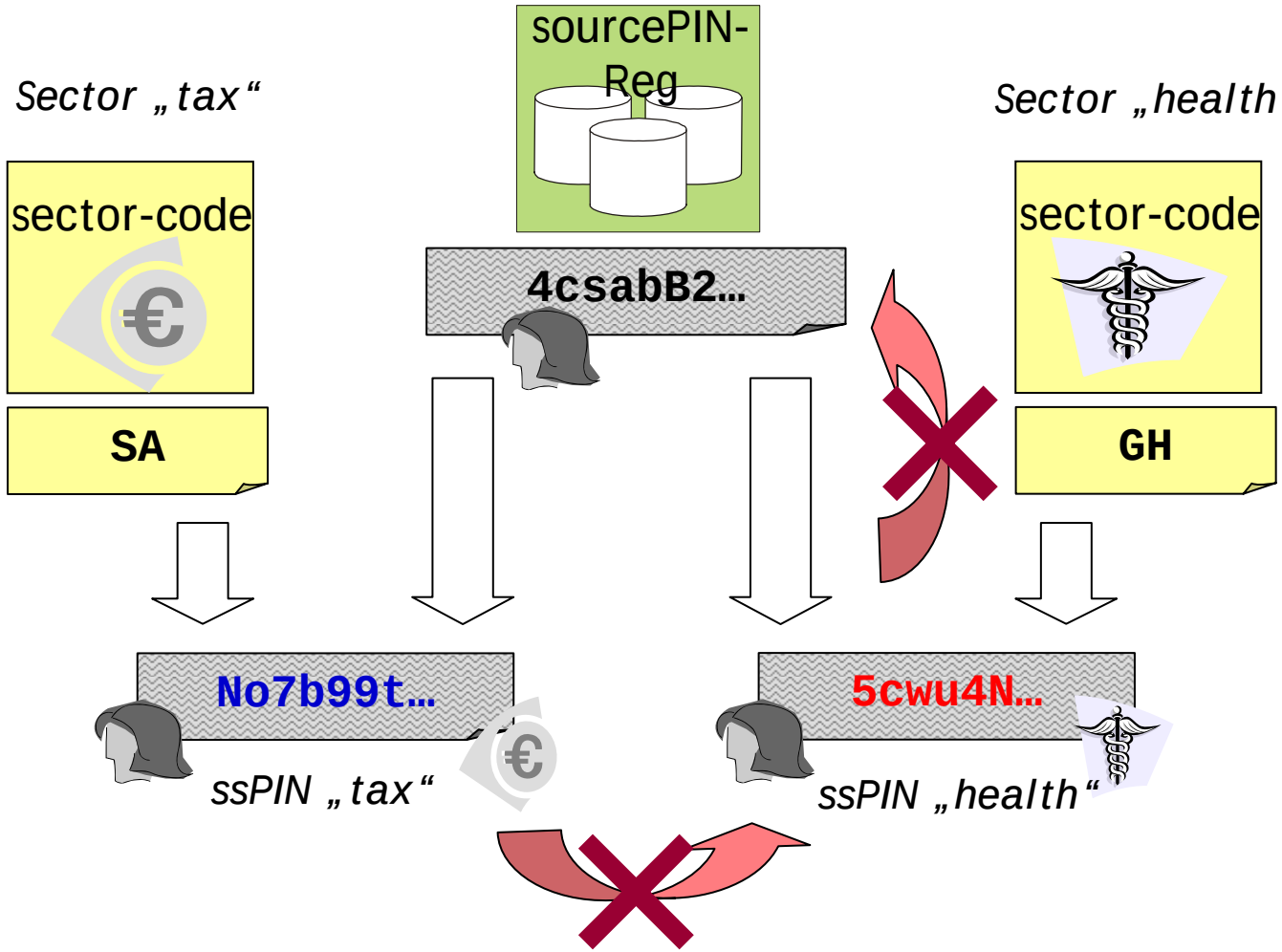
Health insurance cards:
Rollout Mai-Nov. 2005, ~70.000 cards/day
so far ~ 6 Mio. cards, 100 % coverage (8 Mio.) end of Nov.

Mobile phones:
each mobile phone (capable of receiving SMS)
(since March 2004)

Further initiatives:
- CSP signature cards
- Student service cards, etc.

Herbert.Leitold@a-sit.at

Sector-specific IDM concept



Cross-border integration

- Integration of foreign eID
  - Belgian, Estonian, Italian eID currently being integrated
- Uses “Supplementary Register”
  - Recurring identity concept

Herbert.Leitold@a-sit.at

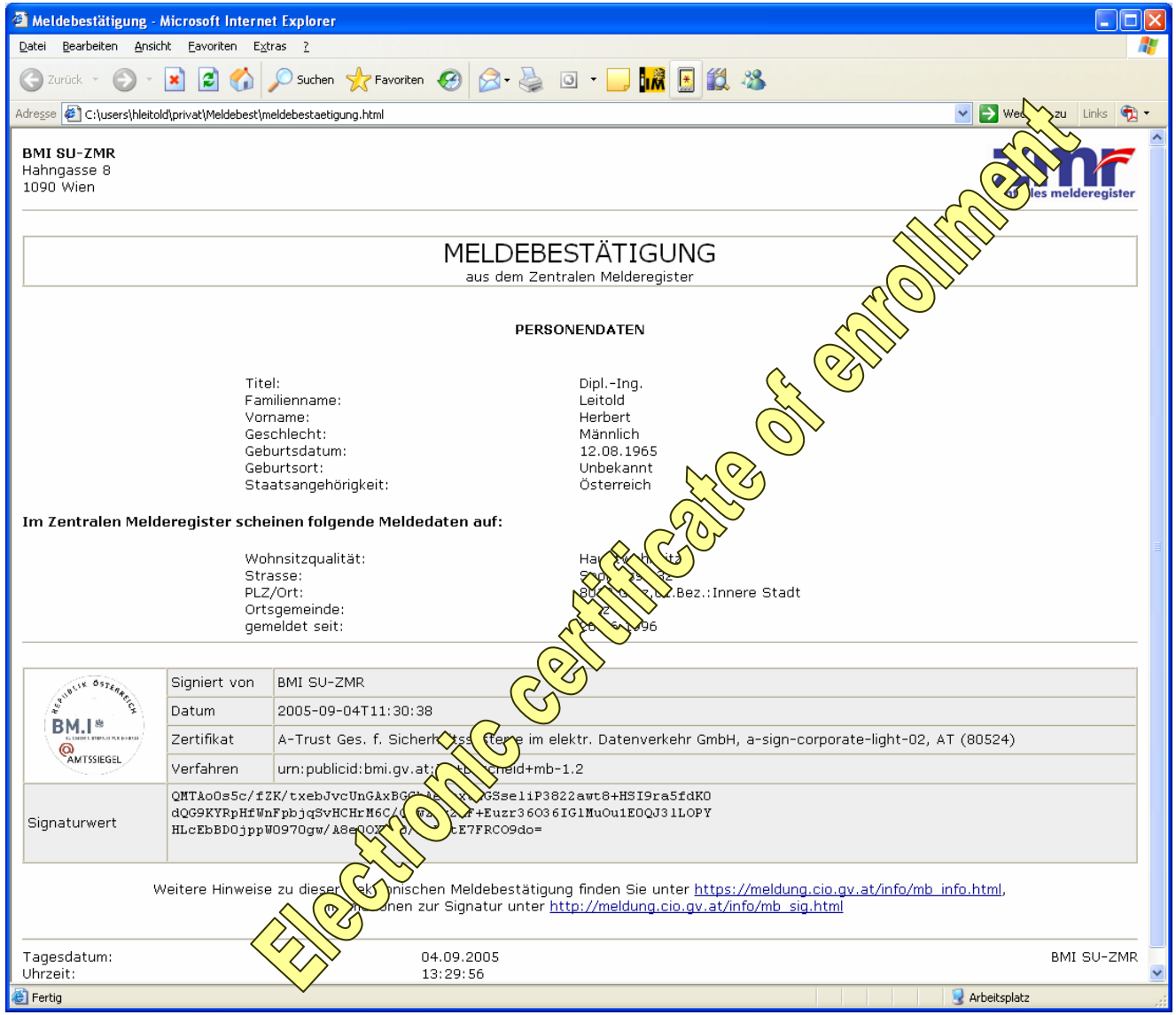
Server Side

- MOA – Module for On-line Applications
  - Basic modules
  - Open source
- Example “Official Signature”

The MOA species

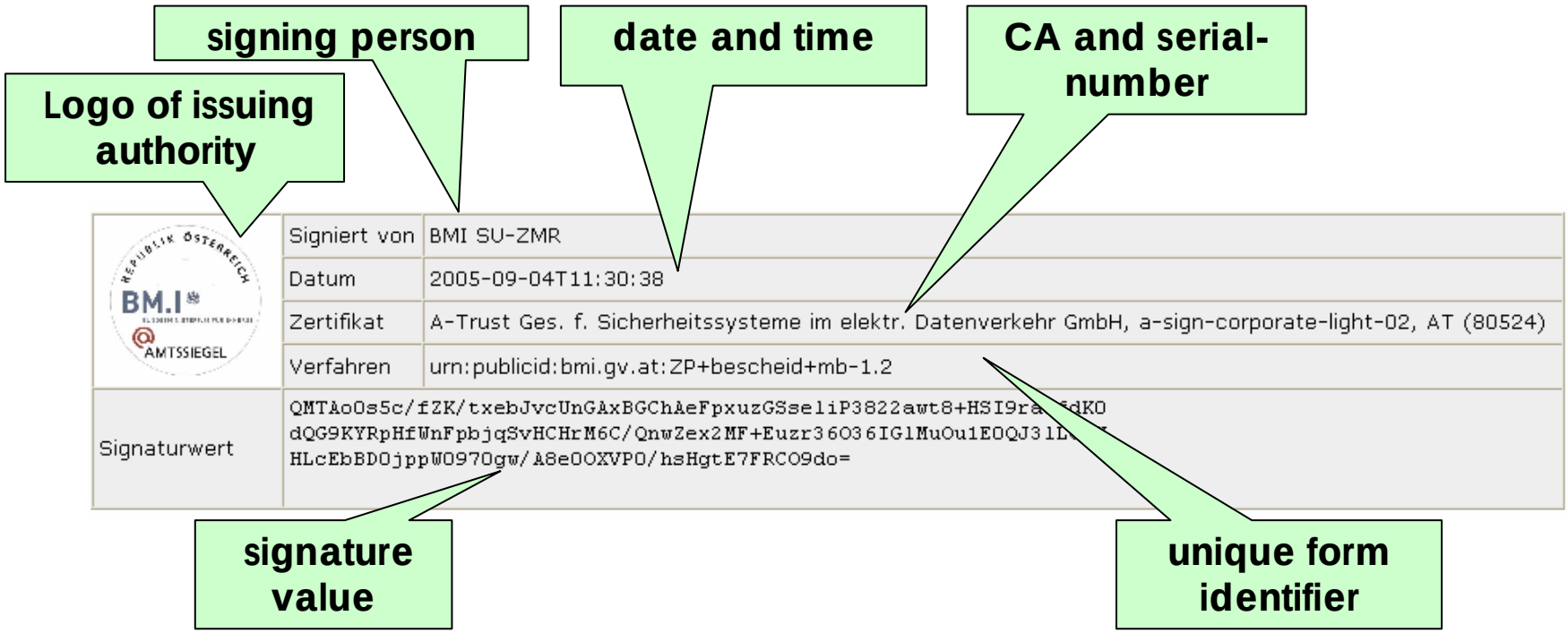
- MOA–ID/ID+, MOA-wID: Identification
- MOA–SS: Server Signature
  - Official Signature
- MOA–SP: Signature Verification
- MOA–ZS: Electronic Delivery
  - substitute registered letter
- MOA–VV: Representation
- further to come …

Official signature

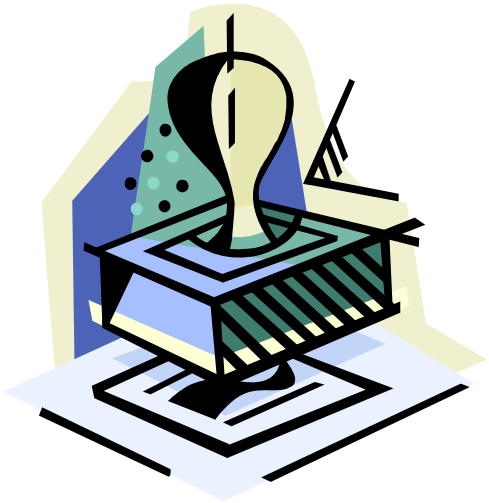


Media independence

- Probative value maintained on print outs
  - reconstruction of XML document possible from the paper copy

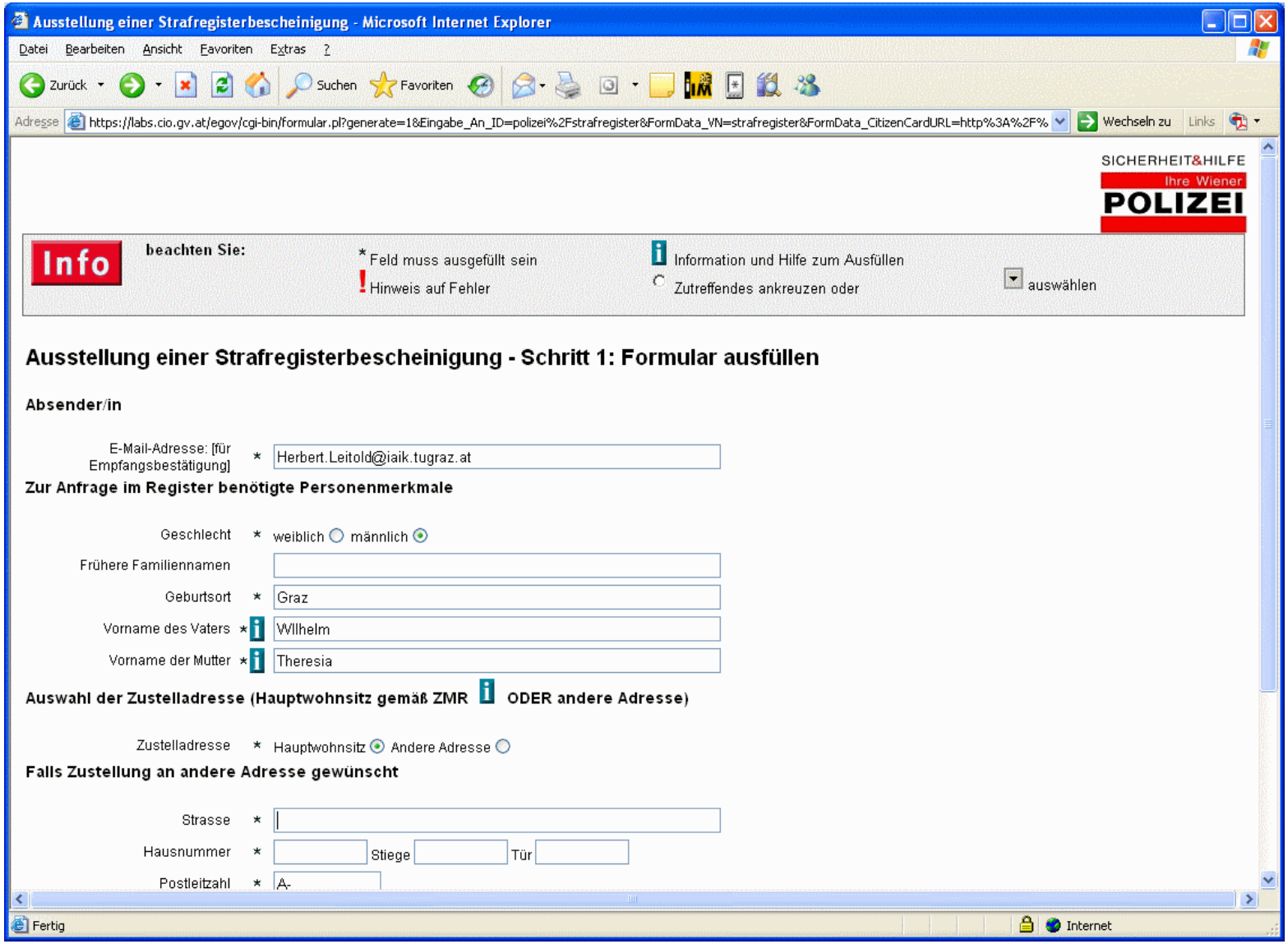


In Action

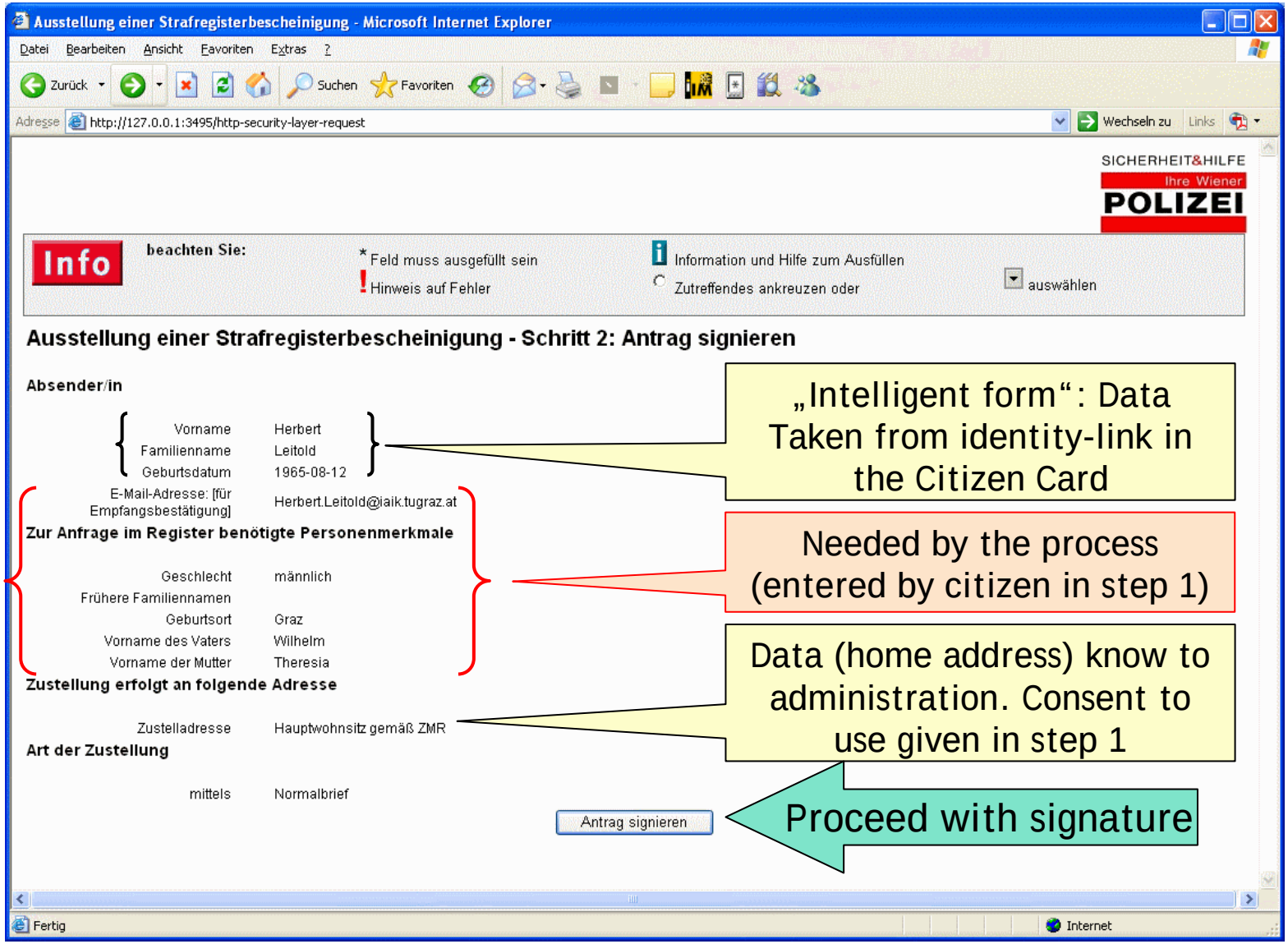


- My “register of convictions certificate” (clearance cert.) step by step
  - ➢ as e.g. frequently needed in public procurement

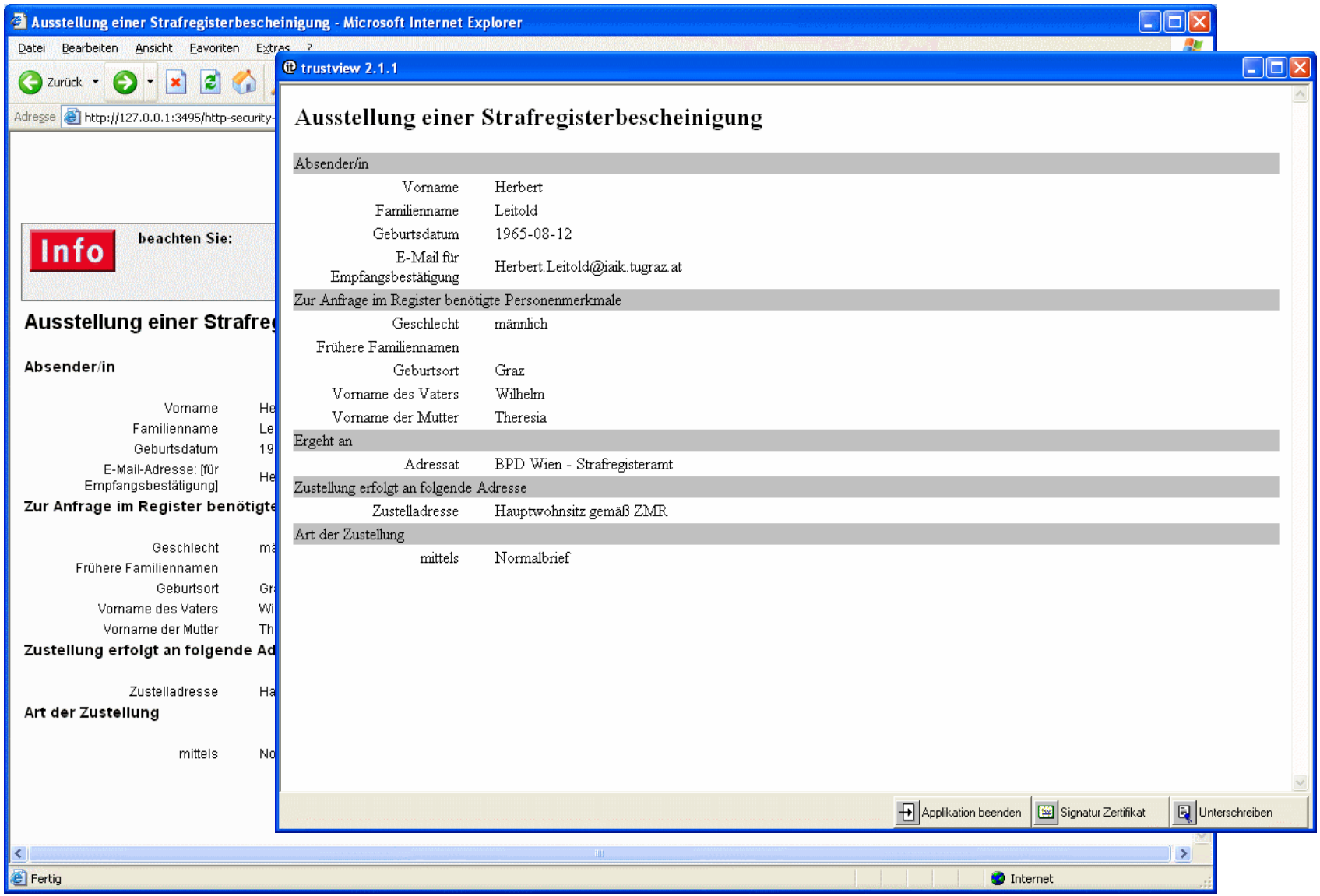
Step 1: Fill in a form, …



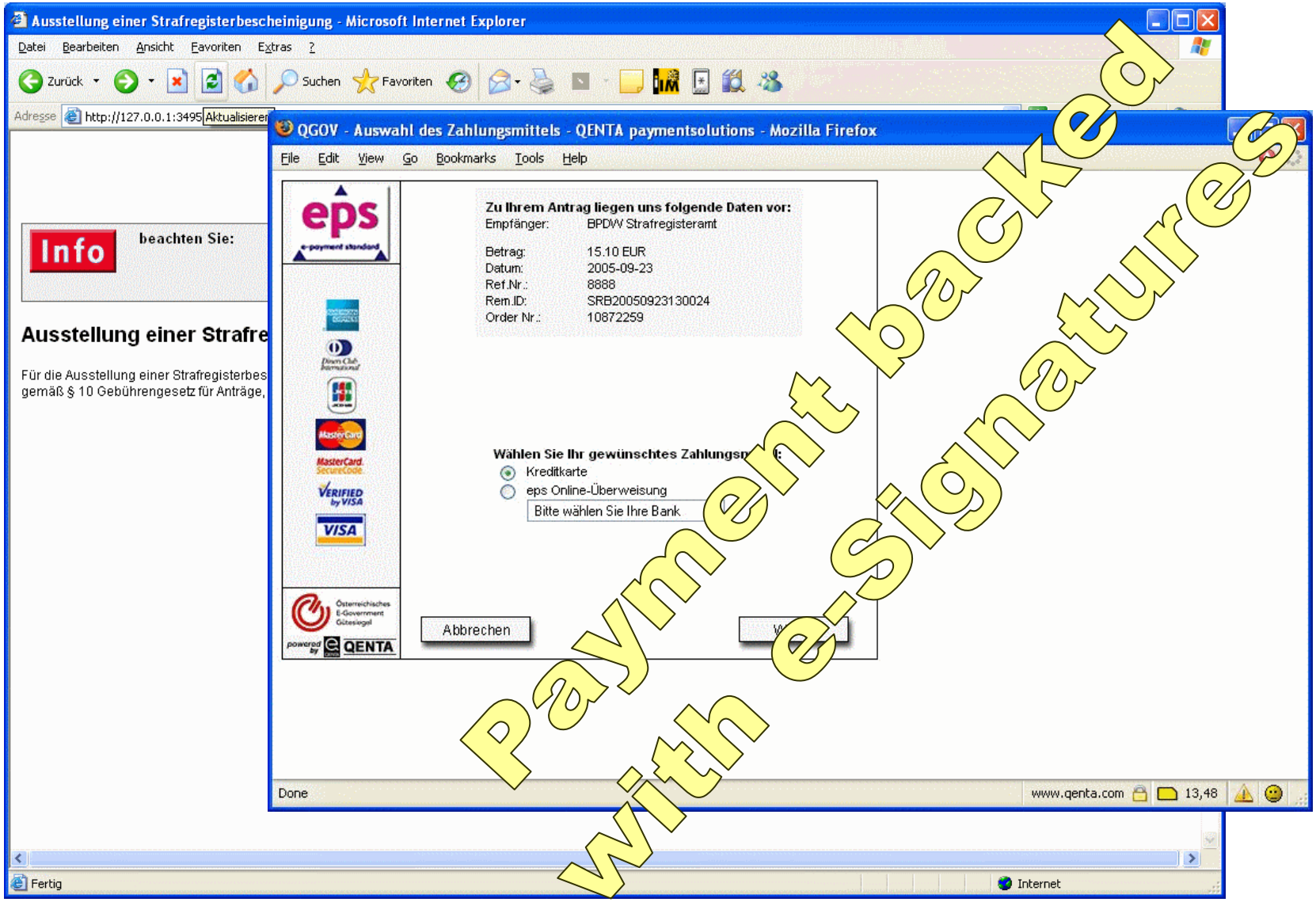
Step 2: control it, …



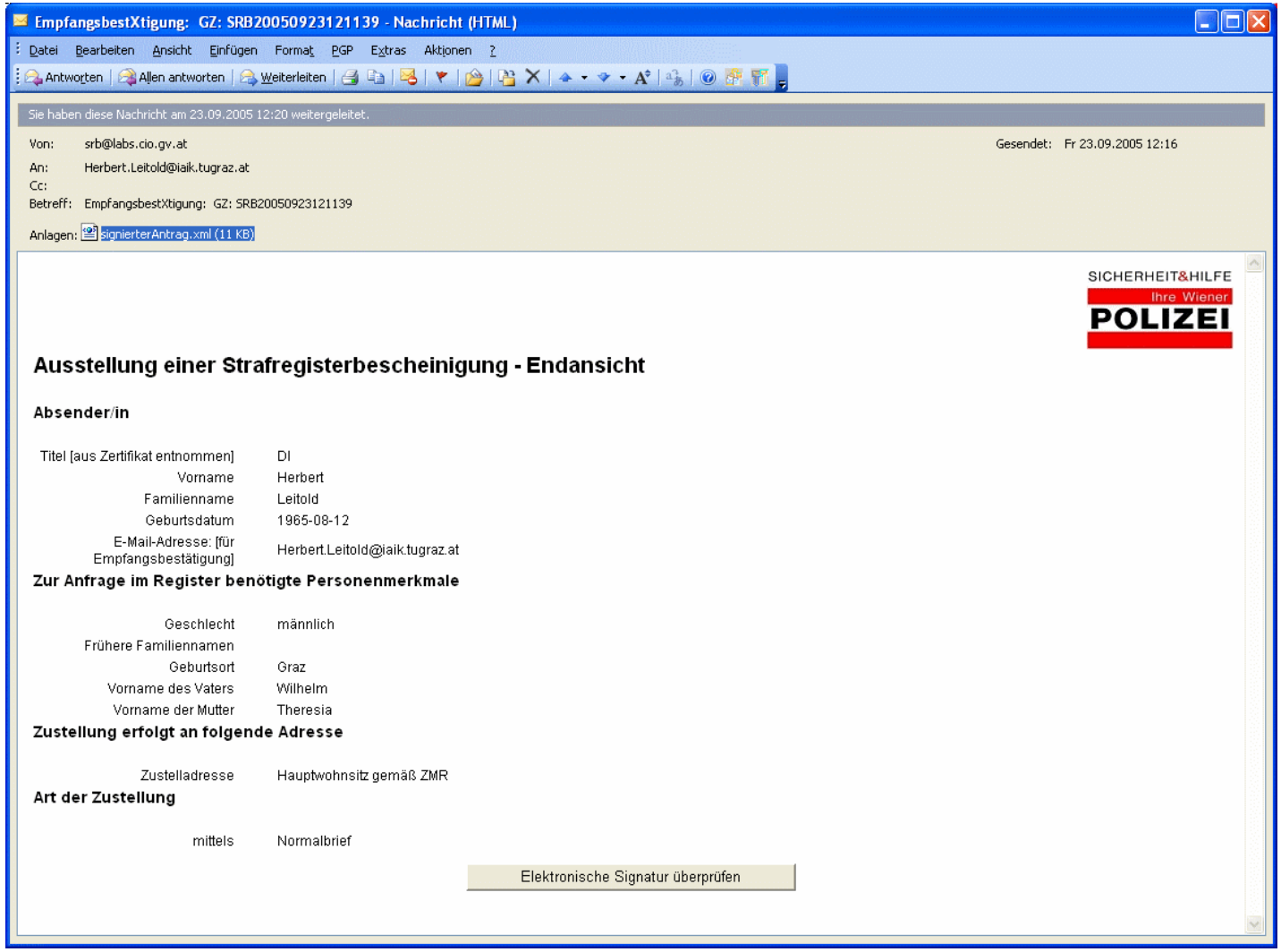
Step 3: sign it, …



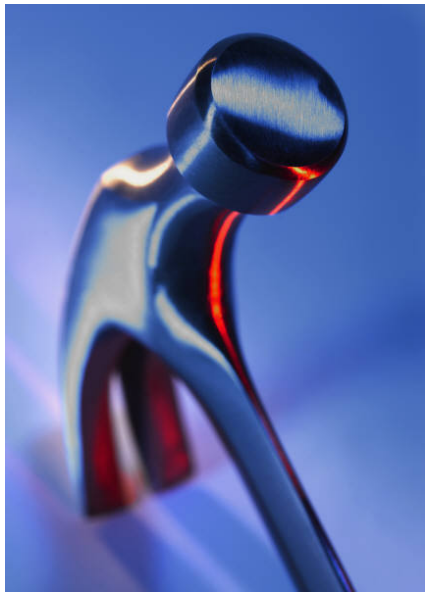
Step 4: pay it, …


Ausstellung einer Strafregisterbescheinigung - Microsoft Internet Explorer
Datei Bearbeiten Ansicht Favoriten Extras ?
Zurück Suchen Favoriten
Adresse http://127.0.0.1:3495 Aktualisieren
Info
beachten Sie:
Ausstellung einer Strafre
Für die Ausstellung einer Strafregisterbes
gemäß § 10 Gebührengesetz für Anträge,
QGOV - Auswahl des Zahlungsmittels - QENTA paymentsolutions - Mozilla Firefox
File Edit View Go Bookmarks Tools Help
eps
e-payment standard
Zu Ihrem Antrag liegen uns folgende Daten vor:
Empfänger: BPDW Strafregisteramt
Betrag: 15.10 EUR
Datum: 2005-09-23
Ref.Nr.: 8888
Rem.ID: SRB20050923130024
Order Nr.: 10872259
Wählen Sie Ihr gewünschtes Zahlungsm
Kreditkarte
eps Online-Überweisung
Bitte wählen Sie Ihre Bank
MasterCard SecureCode
VERIFIED by VISA
VISA
Österreichisches E-Government Gütesiegel
powered by QENTA
Abbrechen
Done
www.qenta.com 13,48
Fertig
Internet
Payment backed with e-Signatures

Step 5: receive confirmation, …



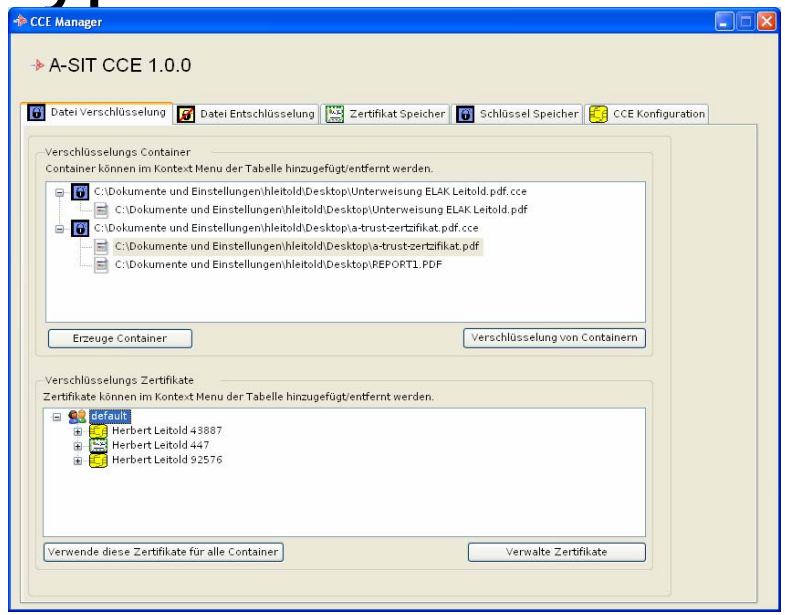
Supplementary Tools



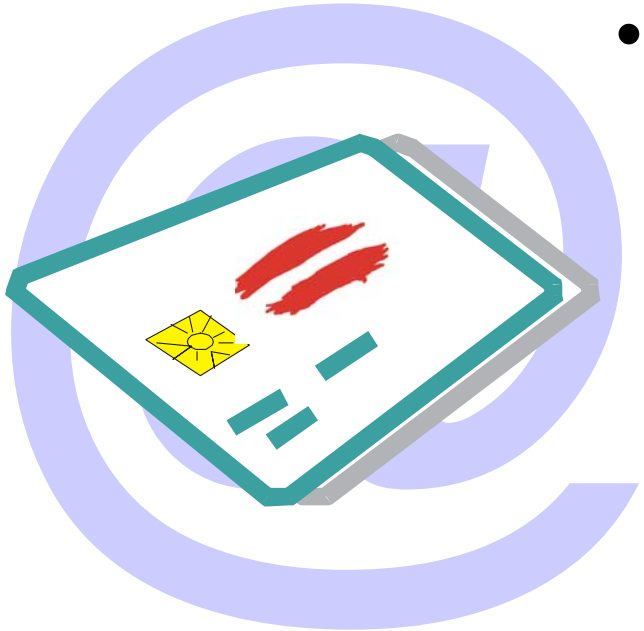
- e-Security for the citizen's PC
  - using the citizen card
  - freely available

Tools

- Secure EFS
  - Use the citizen card to secure the Encrypting File System Key
- CCE – Citizen Card Encrypted
  - File encryption
  - e.g. used for classified data



Conclusions



- Core concepts are
  - Citizen Card
  - Open-Source MOAs
  - Technology neutrality
  - Openness for private sector

Thank you for your attention

Secure Information Technology Center – Austria

Herbert.Leitold@a-sit. at

http://www.a-sit.at