

RSA[®]Conference2015

San Francisco | April 20-24 | Moscone Center

SESSION ID: SPO1-T09

Trust in Mobile Enterprise – Have We Lost the Game?

CHANGE

Challenge today's security thinking



 #RSAC

MODERATOR:

Prof. Dr. Norbert Pohlmann

Professor Computer Science Department for Information Security, Director of the Institute for Internet Security – if(is) at the Westphalian University of Applied Sciences Gelsenkirchen, Germany *and* Chairman of the board of the IT Security Association TeleTrust

PANELISTS:

Ammar Alkassar

CEO of Sirrix AG security technologies, one of Germany's leading security suppliers

Dr. Hans-Christoph Quelle

Managing Director of Secusmart GmbH, a BlackBerry company

Dr. Kim Nguyen

Chief Scientist Security, Bundesdruckerei GmbH *and* Managing director, D-Trust GmbH

What is the Right Security Solution for Mobile Computing?

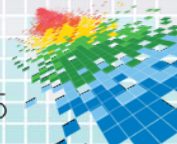


airwatch[®]
by vmware[®]



MobileIron[®]

Samsung **KnOX**



Classification in Protection Classes

Class 0

Consumer

Share (# of devices out of all)

- Threat: privacy of personal data, Cybercrime
- Expected costs: adds 5% to personal IT costs | products and vendors: achieve market trust

100%

Class 1

Companies, authorities

- Threat: Cybercrime (higher degree of risk), compliance, **legal privacy protection**
- Expected costs: adds 10% to IT | products and vendors: certified for effectiveness

70%

Class 2

Companies, authorities, infrastructure

- Threat: Cybercrime, targeted attacks on corporate values, **corporate espionage**
- Breach of security leads only to individual damage
- Expected costs: adds 20% to IT | products and vendors: certified by internationally approved bodies

27%

Class 3

Companies, authorities, infrastructure

- Threat: Economic espionage (intelligence services) and cyber attacks, **cyberwar (sabotage)**
- Breach of security leads to collective damage
- Expected costs: adds 50% to IT | products and vendors: certified by nationally approved bodies

3%

+ cost of infrastructure

Class 4

Classified (beyond Restricted)

- National Security, Protection requirements: according to classification regimes
- Expected costs: adds 400% to IT | products and vendors: approved and certified by national authorities

0,01%

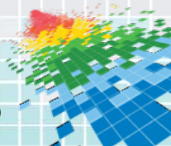
Appropriate Mechanisms

MDM, VPN, Secure Messaging, Voice and Cloud, Container solution

+ Secure Operating System, Mutli-factor authentication, Approved PKI, End2End Encrypted Voice, Messaging and Cloud, E-Mail encryption

+ Hardware-based 2-factor authentication (Smartcard, Token)

Core Classes for Enterprises



Authentication and Identification Worlds

Identification

PKI based signing/
Encryption

Governmental eID Solutions
with officially verified ID



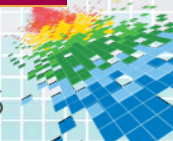
Post issuance of PKI cert

Authentication

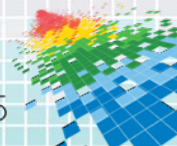
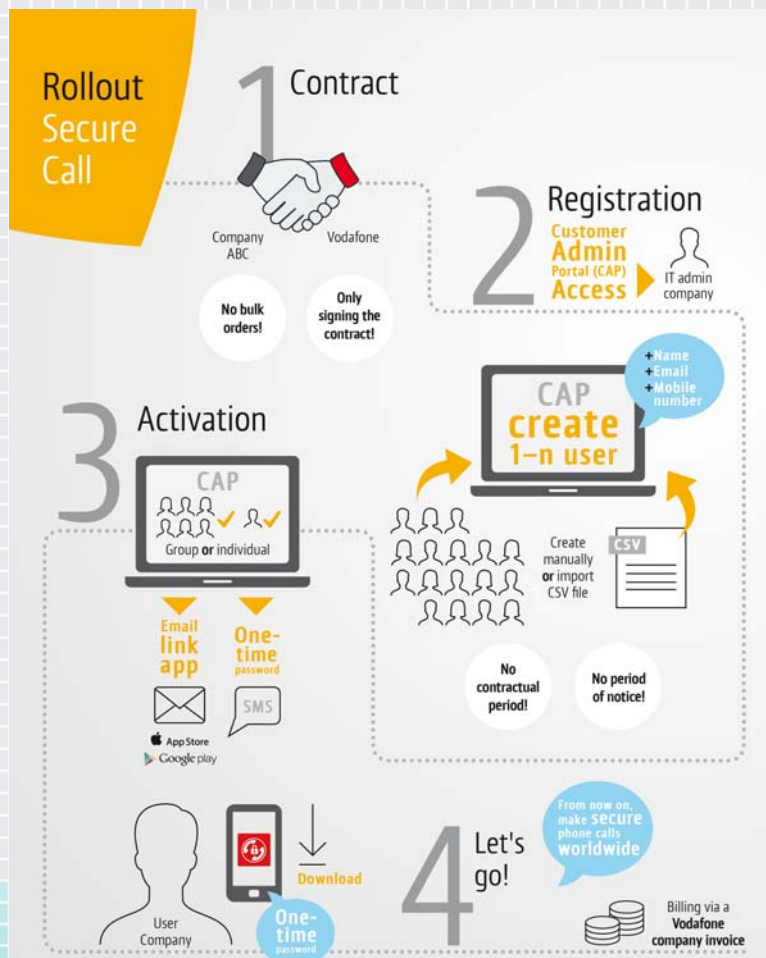
Authentication using FIDO



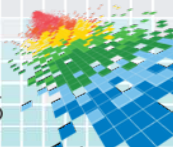
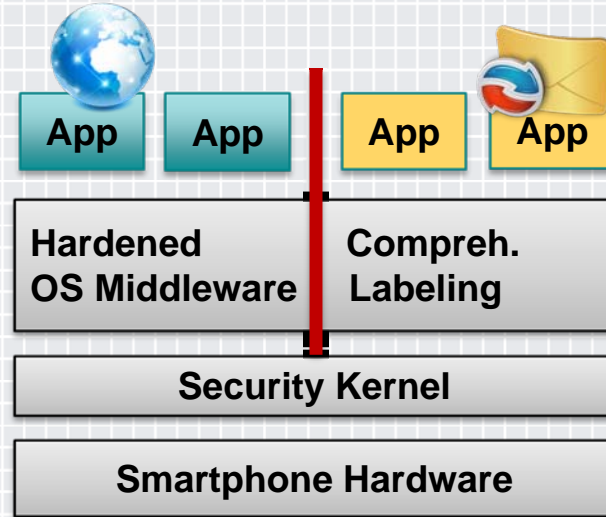
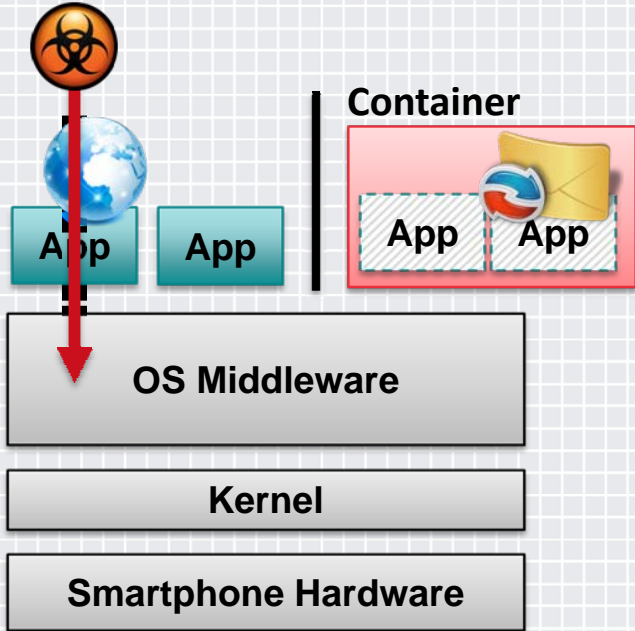
„Proprietary“ authentication systems
e.g. usernames/passwords, AppleID, token...



Which Security Level can the IT Security App achieve?



Why are Containers not Sufficient for Enterprise Level Protection?

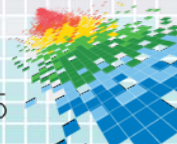
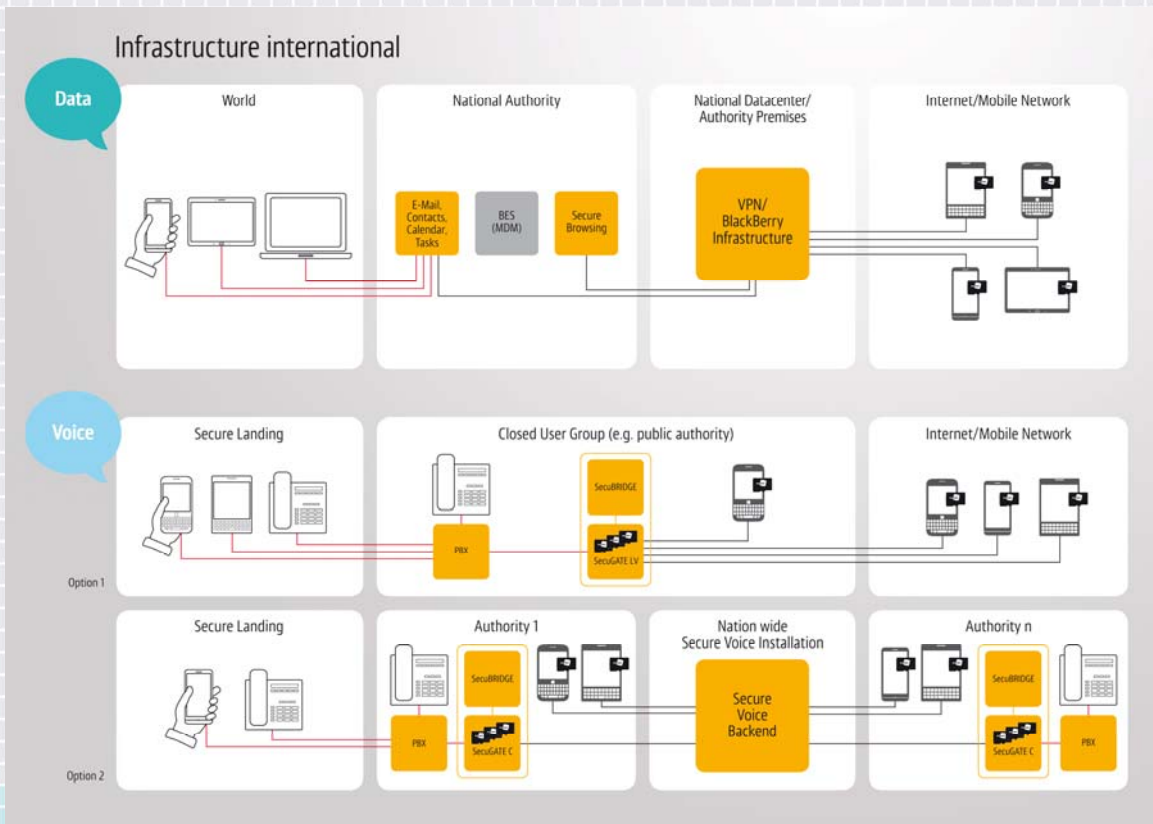


ONE TOKEN

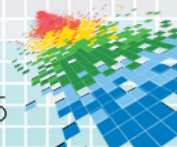
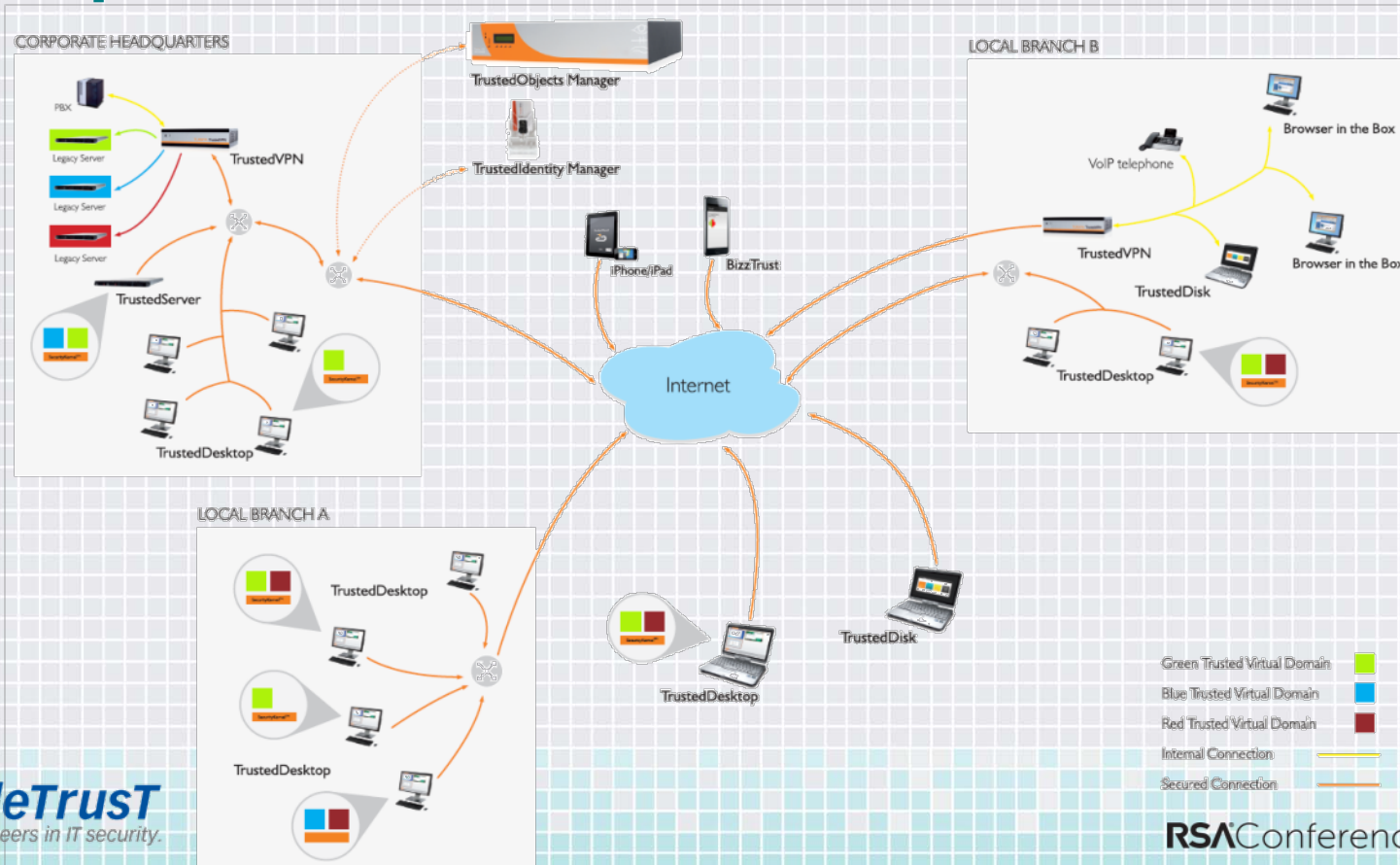


TWO WORLDS

Which Security Level can a full IT Security Smartphone achieve?



Why Mobile Enterprise Security needs Enterprise-Wide Information Flow Control?



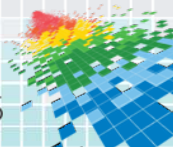
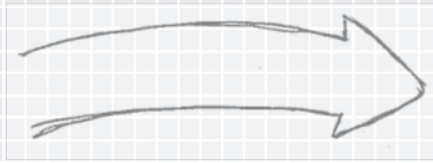
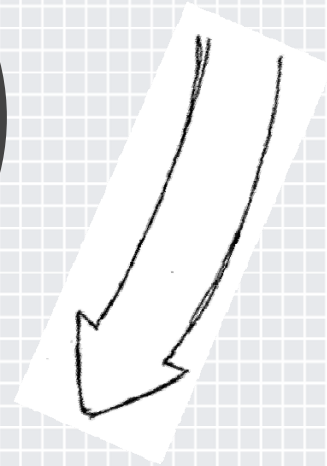
Usability: Building an Eco System

INTERNET
SERVICES

COMPONENT
& DEVICE VENDORS



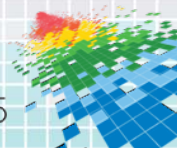
SOFTWARE
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SecurITy

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in
Germany

TeleTrust Quality Seal
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Lessons learned today?

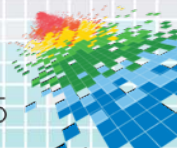
- ◆ Classification in Protection Classes eases the selection of appropriate security solutions for the Mobile Enterprise
- ◆ Within the same organization, domains and devices of different Protection Classes can co-exist.
- ◆ Consumer-level devices can be enhanced by intelligent integration of smart components for use in the Mobile Enterprise
- ◆ Germany deployed public eco-systems provide a good set of best-practice examples

Trust in Mobile Enterprise – have we lost the Game?

We still have an opportunity to win!

Visit the German Pavilion at North Exhibit Hall, Booth 4020

The Partners of the German Pavilion:



“Apply” Slide

- ◆ CISO (Chief Information Security Officer)
 - ◆ Immediate: classification of applications and determine the rules for devices and infrastructure, identification of gaps and risks.
Medium Term: optimization of the security architecture
- ◆ Administrator
 - ◆ Immediate: analysis of the state; classification requirements selection of security functions like authentication, identification (2-factor method), virtualization, trusted certificates, ...
Medium Term: adaptation of processes, use of tool's for the control of security requirements in the field.
- ◆ User in the field
 - ◆ Immediate: recognizing the need for security-related applications and following appropriate rules.
Medium Term: acceptance of restrictions on the freedom of choice of mobile devices
Control of security processes for critical applications.