

Schlumberger PKI /Corporate Badge Deployment

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Overview

- Background
- Overview of the PKI and Corporate Badge components
- Applications
- Deployment Status
- Next Steps
- Lessons Learned





Schlumberger

. . . built on global technical services leadership

Two Divisions:

Oilfield Services

SchlumbergerSema

80,000 employees

140 Countries

SchlumbergerSema





IT security: the business case

IT Security represents a huge opportunity to enhance SLB image as secure information provider and provide new ways of leveraging our services. IT Security poorly executed has the potential to destroy our business reputation. Two main priorities:

- Ensure the privacy and integrity of our client's and our own systems and data.
- IT system availability is critical to our business.

IT security: facts

- Decentralized management needs to be responsible for the performance of a highly centralized IT Security system.
- SLB knowledge is a significant competitive advantage and needs to be protected
- People and process are more critical to IT Security than technology
- World Class as compared to “Silicon Valley” companies not traditional Oilfield competitors

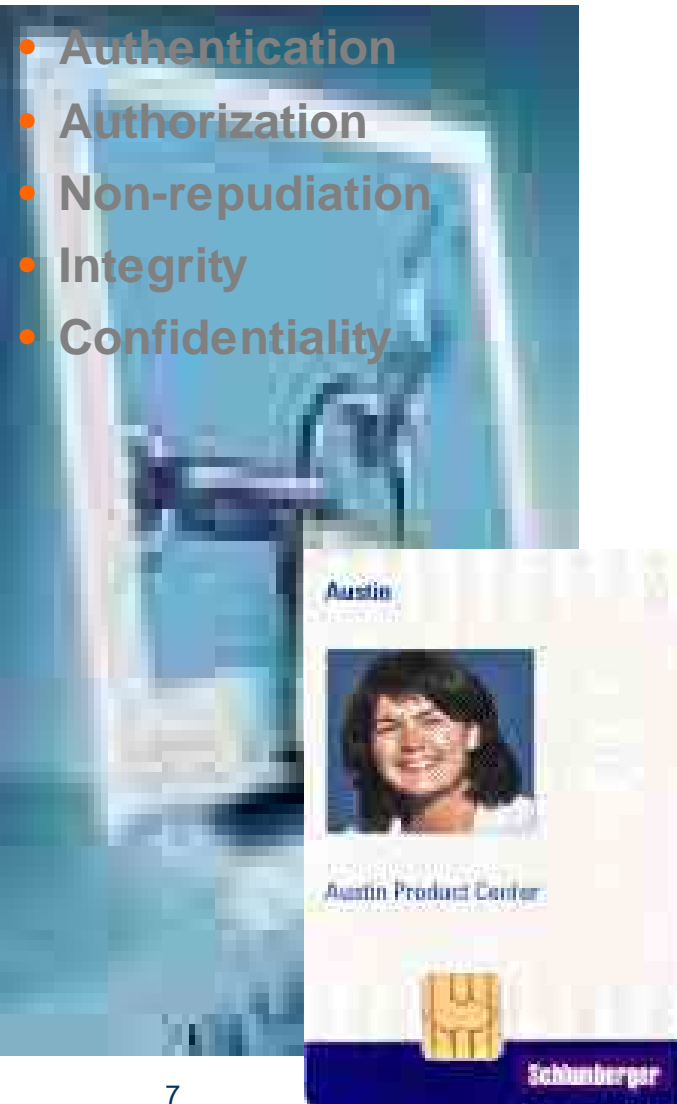
A Corporate Badge?

- Passwords are expensive and provide poor security
- Many different standards increase management complexity and help desk support costs
- Increasing network fraud, poor security around transactions and messaging
- Hard drive based security can be improved

=>One single ID card for both secure **physical and logical** access and providing **portability** and **non-repudiation**.

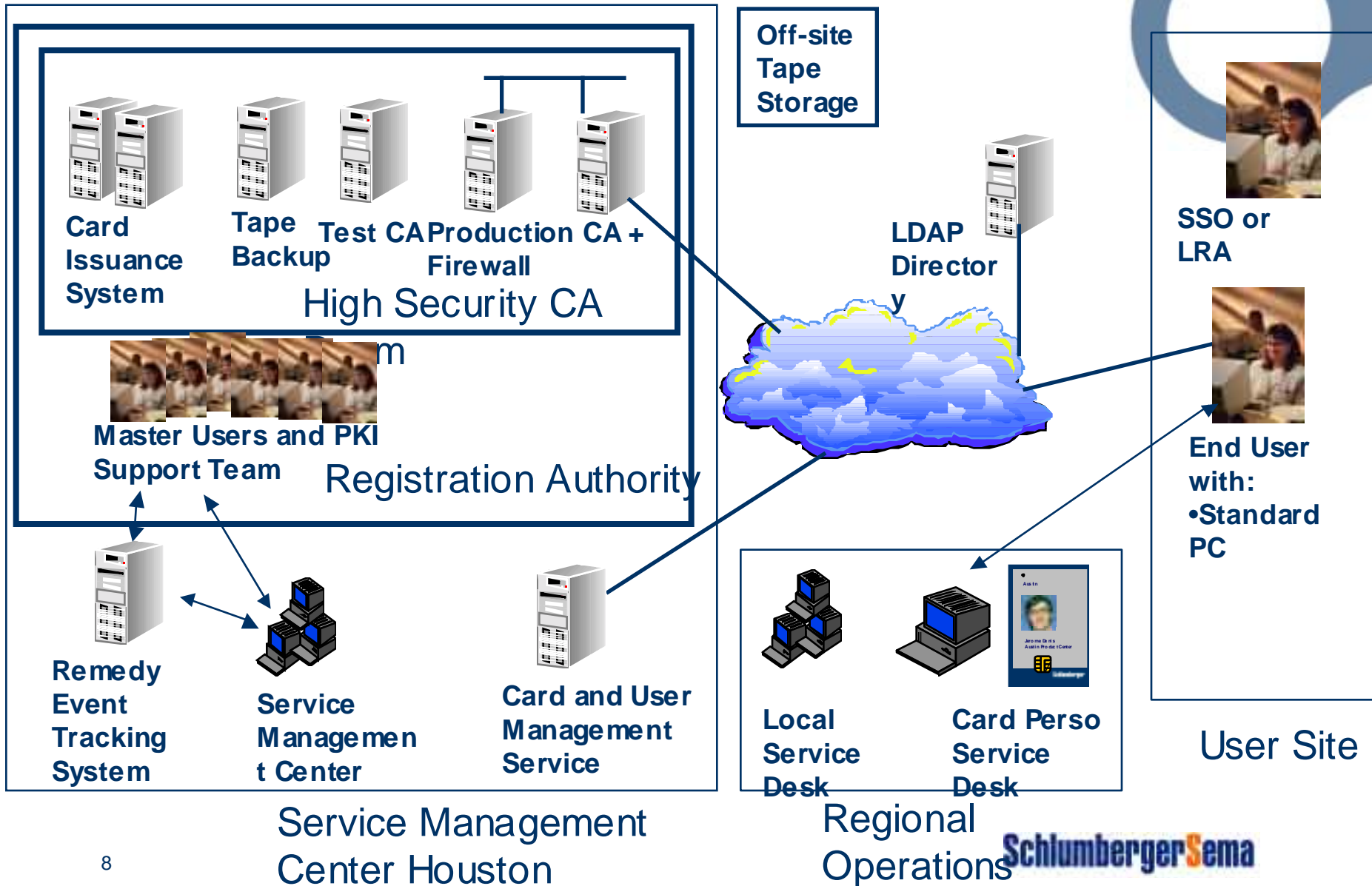


Corporate Badge Solution (Dexa.Badge)



- Global physical access
- Corporate ID
- Global PKI plus Smart Card
- Secure network logon and web access
- Signed/encrypted email and docs
- Smart Login (Secure password store)
- Card-based VPN
- Secure Dial-Up Access
- ***DoD CAC platform***

PKI Corporate Badge Overview



Card Issuance System

- Distributed issuing is essential for a ID Badge roll out
 - Web-based system for card issuance
 - Physical card issuance (card-user binding)
 - Central database for card history
 - Directory Interface
- Printing Stations (25)
 - Admin client
 - Camera
 - Printer

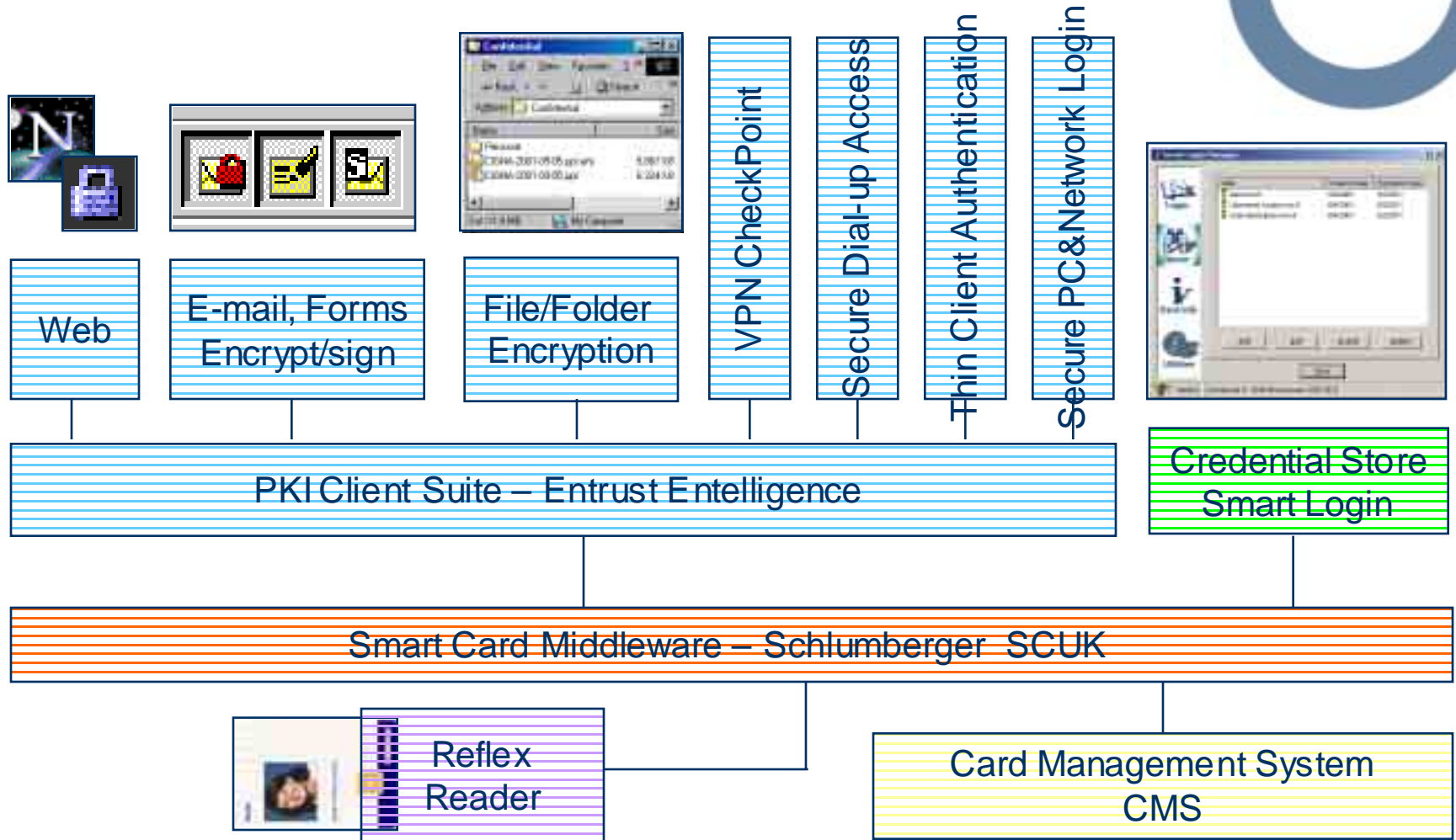


Card Management System

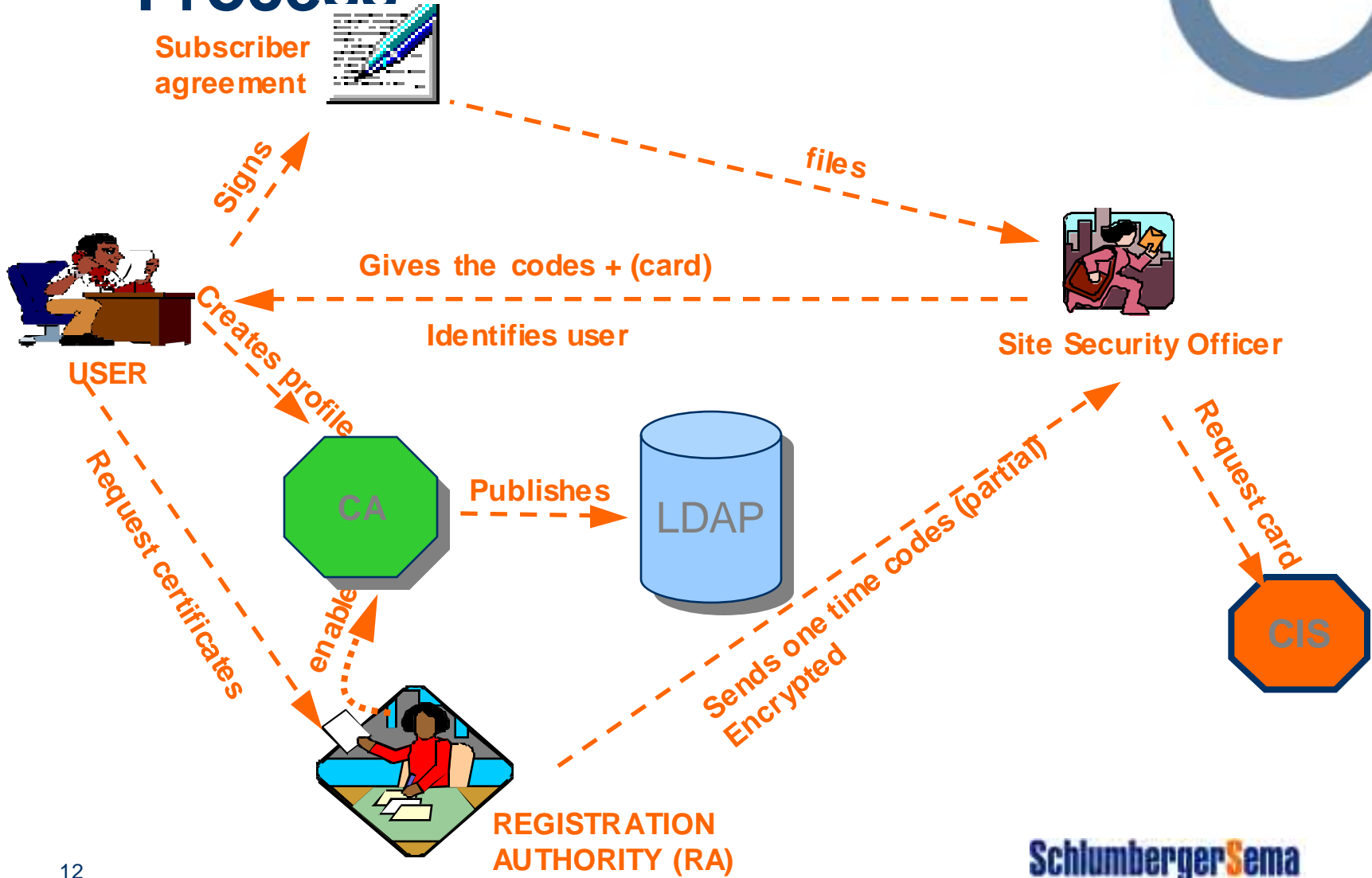


- Essential for a smart card roll out
 - Web-based system to address card related issues
 - Logical card issuance (initial PIN set up)
 - Issues applications such as PKI, SLB GINA, Smart Login
 - Automatic certificate request and load
- Runtime (Smart Card related)
 - PIN management with policy support
 - Unblocking
- Lifecycle
 - Lost card, Temporary card
 - Not tied to the Certificate Authority

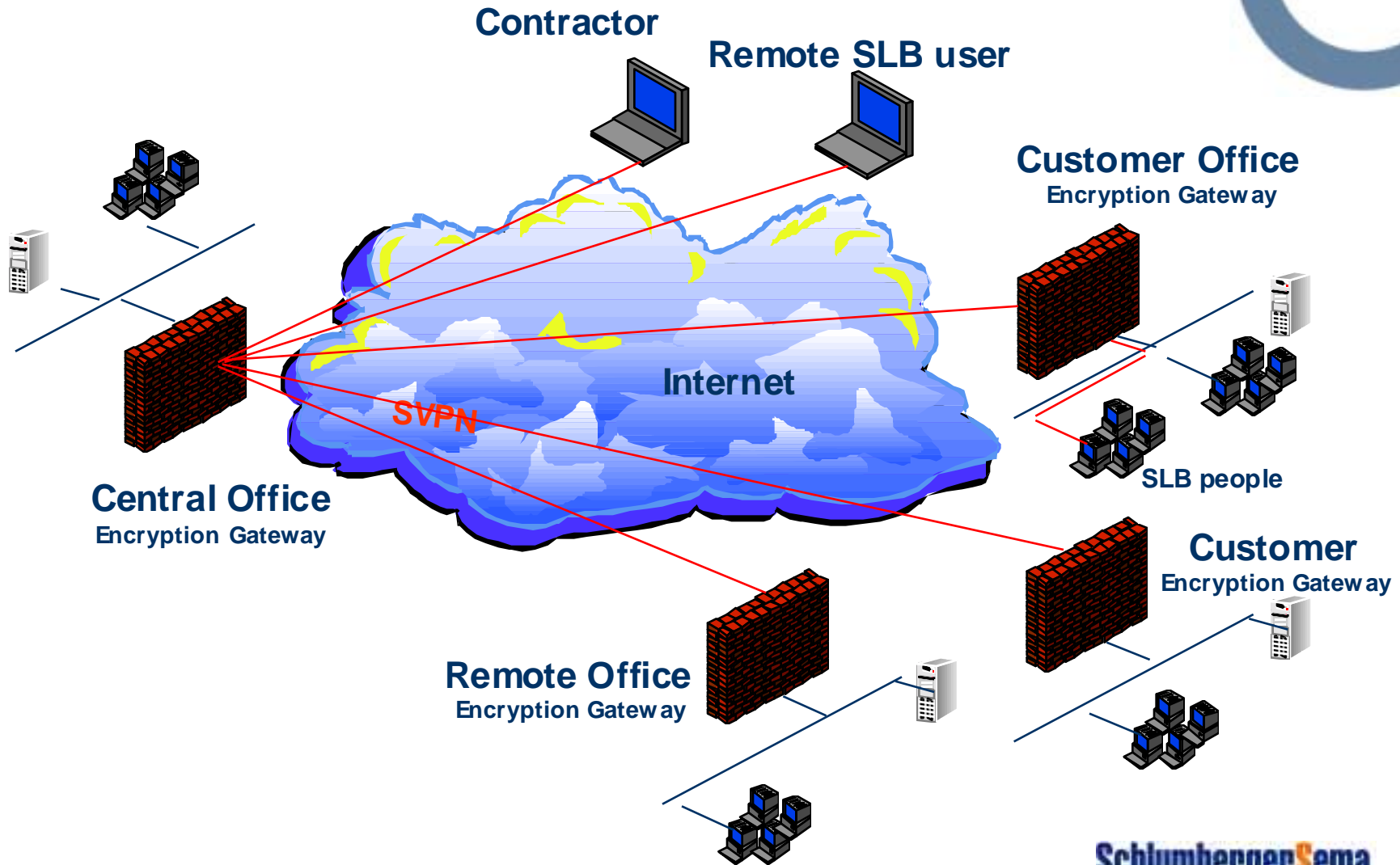
PC Client Architecture



Certificate Creation Process



Application: Virtual Private Networking

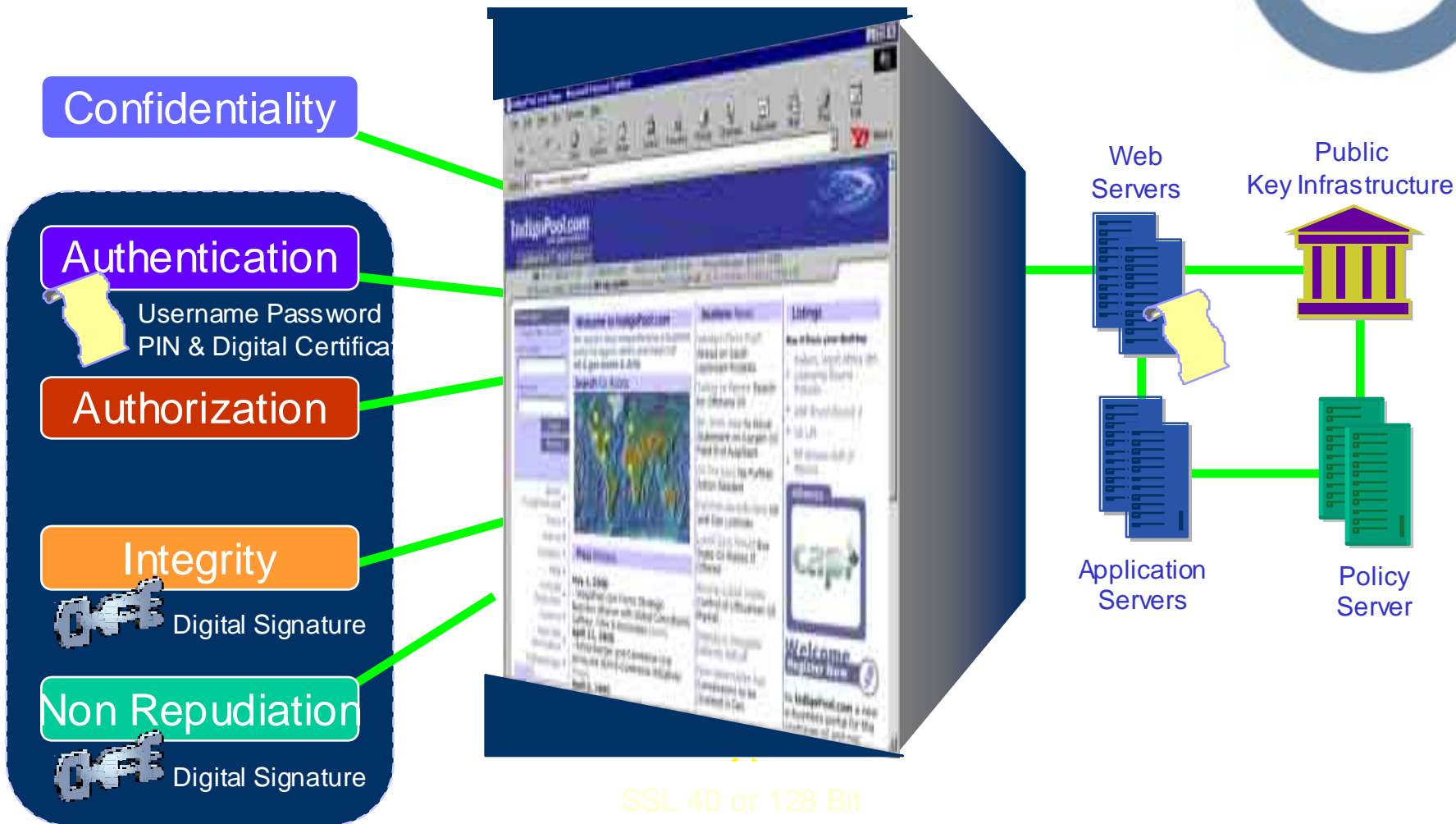


Application: Secure Dial-up Access

- Provides Smart Card based PKI authentication via dial-up connection
- Secure Communication between Network Access Point (NAS) and RADIUS
- Uses industry standards to facilitate transition from existing methods
- Performs Certificate Revocation List (CRL) checking



Application: Secure Web Access



General PKI Application Issues



- What to do while not all users of an application are deployed with PKI ?
- Information Security Policy is key to guide efforts and spending
- Transition Rules are required..
- Some applications are difficult/costly to upgrade
- Budget Allocation Issues – who pays for what ?
 - Infrastructure, cards, applications, physical access,...



Physical Access Control

- One badge to access any facility or building worldwide
 - Mifare contactless technology
 - Compatible with most Physical Access Control vendors
 - Global “roaming”
 - Card issuance System plays a key role
- Today almost 100 facilities support the technology
- Capital Intensive – you cannot replace everything
- Globalization of the solution in progress

Schlumberger Deployment Status

- About 35,000 Cyberflex Access cards issued
- 21,000 + Active certificates
- Users in 300+ locations worldwide
- Target is between 25,000 and 30,000 **PKI users** by year end
- 30 pki enabled web applications by end of July, 80 by EOY
- 4,000 + VPN Users
- Daily encrypted e-mail to top 1000 managers



What is Next ?

- PKI Corporate Badge is a “Living System”
- Our IT Environment Evolves...
 - Example: Windows 2000 Integration (Active Directory)
- Optimize the registration processes
- Focus on ease of use...
- Continue Integration in Business Applications
 - Secure offline content delivery
 - Electronic Signatures
- Moving towards Single Sign On



Lessons Learned




- A PKI/Corporate Badge solution is a multi-year project which requires strong top Management Support
- Deploying PKI and Corporate Badge requires a thorough understanding of the business IT and platform strategy.
 - Directory, PC platform, Operating Systems, e-mail
 - Networking
- Logistics are important !
- Training, Training, Training...

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Thank You

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