

Security and Access Control

- Case Studies

Finnish Defense

- network security using myNetSecurA

Challenge: Finnish defense uses SAP.
4500+ SAP users.

- Providing Strong Authentication
- Securing high sensitive information.
- Complete protection to SAP's client – server network communications.

Solution:

- Public Key Infrastructures (PKI)
 - Digital Certificates (X509) and Digital Signatures
 - Certificate Revocation List (CRL).
- Smartcards or Soft-tokens.
- Hashing (HMAC and SHA-1) methods for message protections

Benefits:

- PKI and Smartcard/soft-token based solution
- Strong Authentication & Data Protection
- Single Sign On
- Active Directory / LDAP enabled
- Can work with any Smartcard with PKCS#11 interface
- Support for Windows and Sun Solaris



Global BPO



- data center security using SimBioLock and SecuraA+

Challenge:

- To protect the customer information
- Authentication of the users at data center
- Centralized visitor management system for all the world wide offices of the BPO
- Single user credentials for all applications

Solution:

- A smart card and biometrics based access for users of the data room - **SimBioLock**.
- A web based visitor management **SecuraA+** system deployed globally in all offices integrated with MS Outlook
- MS-Active directory integration for user credential authentication.

Benefits:

- Secured the BPO data rooms with strong authentication
- A globally uniform Visitor Management system for all offices world wide.
- Single credential authentication for all applications
- Ensured protection of customers data



Indian Defense



- biometric authentication for high security application

Challenge: Biometric authentication of operators for a mission critical application

- The application was running on a RTOS Lynx Operating System
- Standard biometric solutions do not support Lynx Operating System

Solution:

- Developed an embedded system (fingerprint scanner and smart card reader) and integrated into customer's kiosk
- Ported a smart card and fingerprint library on Linux onto Lynx. Integrated the library with application, provided an API interface.
- Authenticated the operators using fingerprint and smart cards.

Benefits:

- Secured login authentication of the operators using smart cards and biometrics
- Strong audit of important operations, through biometric verification



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Indian Government - access control and attendance system



Challenge:

- Remote locations, environmental factors
- Wide area coverage for access control (approximately 146 Km)
- A high security island under army control where access is strictly controlled
- Integration of multiple access control software and hardware
- Earlier solutions had failed

Solution:

- Development and Integration of Visitor Management, Vehicle Management, Identity Management, Remote monitoring, Time & Attendance and Access control system
- Usage of multiple biometrics

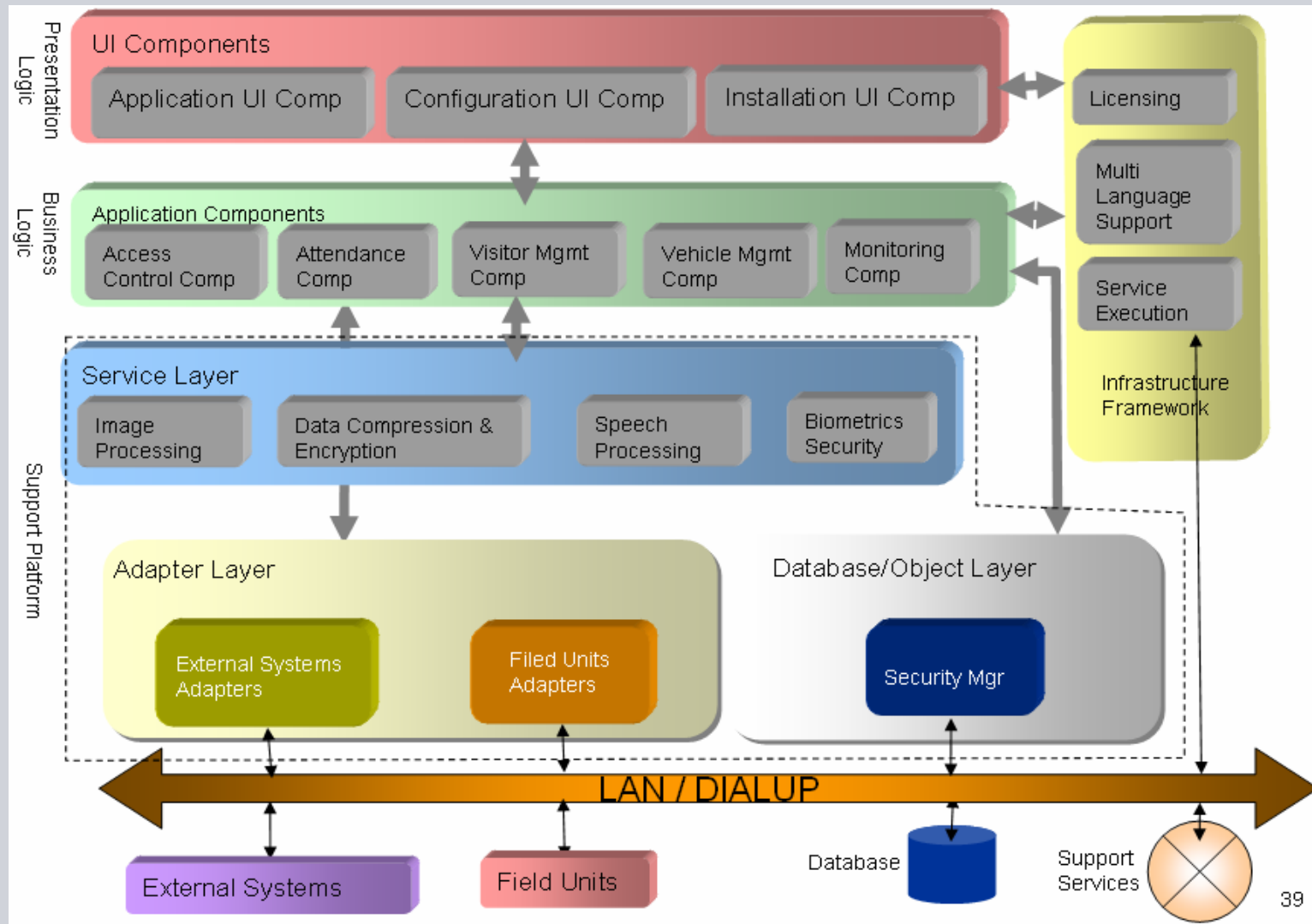
Solution (contd):

- Vehicle monitoring to keep records of all the vehicles that enter / exit the premises
- Door locks, turnstiles, barriers etc. integrated with access rights

Benefits:

- Centralized control of all locations
- Easy to configure by administrator
- Secure access, personalization
- Data security using different encryption techniques
- Hardware sharing among different access control systems

System architecture of the access control and attendance system for Indian government



Media company - time and attendance system

Challenge:

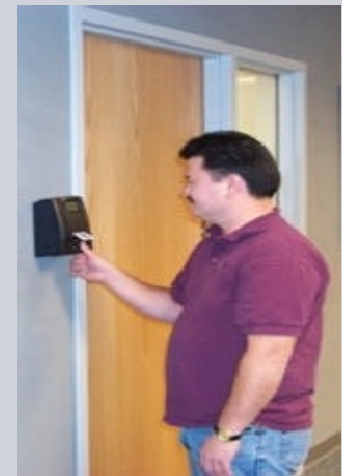
- Offices in 11 different cities in India
- 49 shifts including night and split shifts
- Eliminating proxy attendance
- Complex leave rules for leave management
- Interface with payroll system
- Online transactions with the DB at the central location

Solution:

- Smart card and biometric based time and attendance system
- Efficient biometric verification engine
- Workflow for leave and overtime
- Web based system for facilitating multi-location management

Benefits:

- Centralized control of attendance data processing.
- Elimination of buddy punching
- Paper-less leave management
- Faster payroll processing
- Cost saving and increase in efficiency



Coca Cola, India

- visitor management system

Challenge:

- Limit unauthorized access to premise
- Pre-booking of visit and sending visitor information including photograph
- Keeping log of visits and visitors
- Provision for integration with turnstiles and barriers

Solution:

Issues color photo badge
Biometric integration
Web pre-booking for fixing up appointments
On line acceptance, rejection or postponement of visits
Albums for VIPs and Black listed visitors
Extensive query support

Benefits:

- Fix up appointments from anywhere on the Web
- Easy tracking of visit and visitor
- Uses features of Microsoft Outlook
- Cost effective solution



Northam Platinum Mines, South Africa

- security and access control consulting



Challenge:

- Current system was 10 years old and could not support the 8000 staff strength
- Around 5 different vendor systems involved in the integration
- Strict access control
- Required a URS for a customized system specific to the mining industry

Solution:

- Onsite study: interviewed employees and studied the various vendor systems
- Drafted the functionality for the new Time Attendance and Access control system
- Set specifications for integrating the various vendor systems

Benefits:

- Helped the customer in identifying the problem areas of the current system
- Helped the customer in identifying the specific functionality needed for their new system
- Customer was in position to tender a Request for proposal (RFP)



Smart Card solution - for Healthcare industry

Challenge:

- No available mechanism to share information with the healthcare institutions not connected by a common network and patient information



Smart Card solution - for Healthcare industry (contd.)



Solution:

Improving patient care by using smart cards

- Make medical records and prescriptions easily portable and accessible
- Secure medical data since it is confidential
- Make financial data unalterable by unauthorized personnel
- Optimize Work Process in a hospital
- Provide interoperability with Existing Services and systems

Benefits:

- Helping the healthcare providers to register patients in a quick and reliable manner
- Sharing information with the healthcare institutions not connected by a common network and patient information - unnecessary duplicate tests can be avoided
- Patients can conveniently view and print their own medical data stored on the smart card
- In case of medical emergencies healthcare workers can quickly access the important medical data (allergies, medications, history) stored on the smart card and give appropriate treatment to the patient.

Smart Card solution - for Healthcare industry (contd.)



Demographics Information
(Name, DOB, Gender)

Insurance Details (Payer,
Subscriber, Subscriber ID)

Medications, Problems,
Encounters

Lab Results, EKG's

Allergies

Immunizations

Consultation

The health card editor and viewer

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Thank You!

Finally ...

... it's all about customer delight!

