PIV II Smart ID Card Migration with ACI Smart Chip Manager™

NIST FIPS 201 Workshop

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TSA

- ACI Worldwide, a subsidiary of TSA
- $295m revenue
- Over $175m cash, minimal debt
- Profitable
- Continued commitment to product R&D
- Positioned for growth and profitability, and here for the long term

Our business

- **Managing smart card infrastructures**

migration from paper to chip

- **In different markets**
  - Finance (EMV)
  - Government (ID)
  - Healthcare
  - Public transport

migration from magnetic stripe to chip

Smart Card Infrastructure Management Challenges - 1

- Many different card products, which evolve over time (FIPS-201 Sec 5.3)
  - Supporting various PIV cardholders, who may be full-time, part-time, foreign, domestic, military member, temporary, visitor, agency affiliates, ...
  - Keeping track of product definitions (keys, default parameter values, …)
  - Keeping track of associated lifecycle mgt business rules

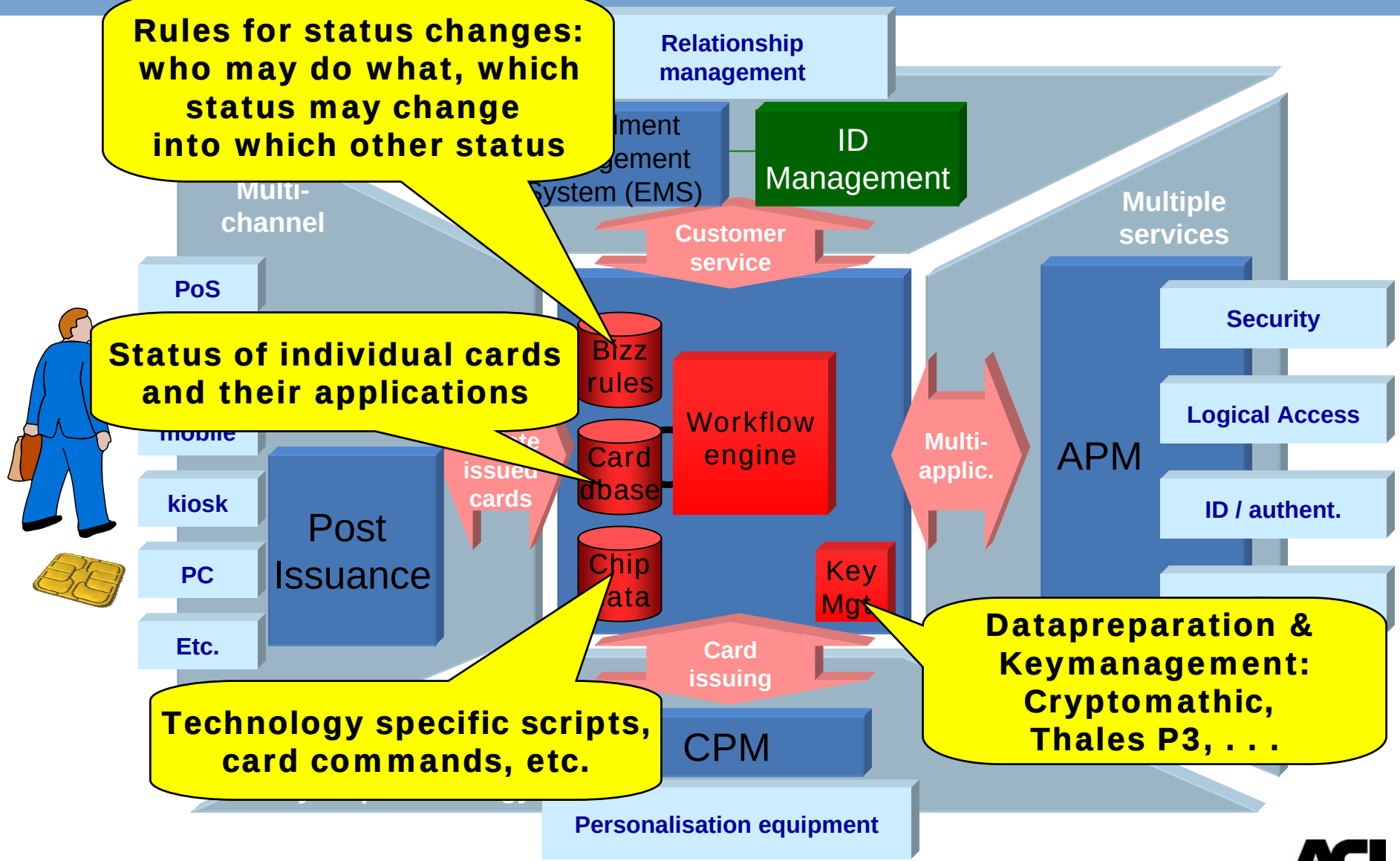
Smart Card Infrastructure Management Challenges - 2

- The PIV token and application needs to be adaptable to reflect changes in environment (FIPS201 Sec 5.3.2.4)
  - An individual may take maternity leave
  - A PIV card may be used suspiciously
- The lifecycle of the card + apps needs to be managed (FIPS201 Sec 5.3.2.1)
- Parameter values / logical data elements on the card are dynamic
  - Manage parameter values on the cards

Smart Card Infrastructure Management Challenges - 3

- E-Government is integral part of the President's Management Agenda (HSPD-12)
  - improve effectiveness, efficiency + service delivery
- Today: a single PIV application
- Tomorrow: multiple cross agency applications on the cards
  - Evolve over time (some to be replaced urgently)
  - Some mandatory, others optional
  - Dynamic situation through post-issuance
  - Data to be collected from external systems

How does it work?

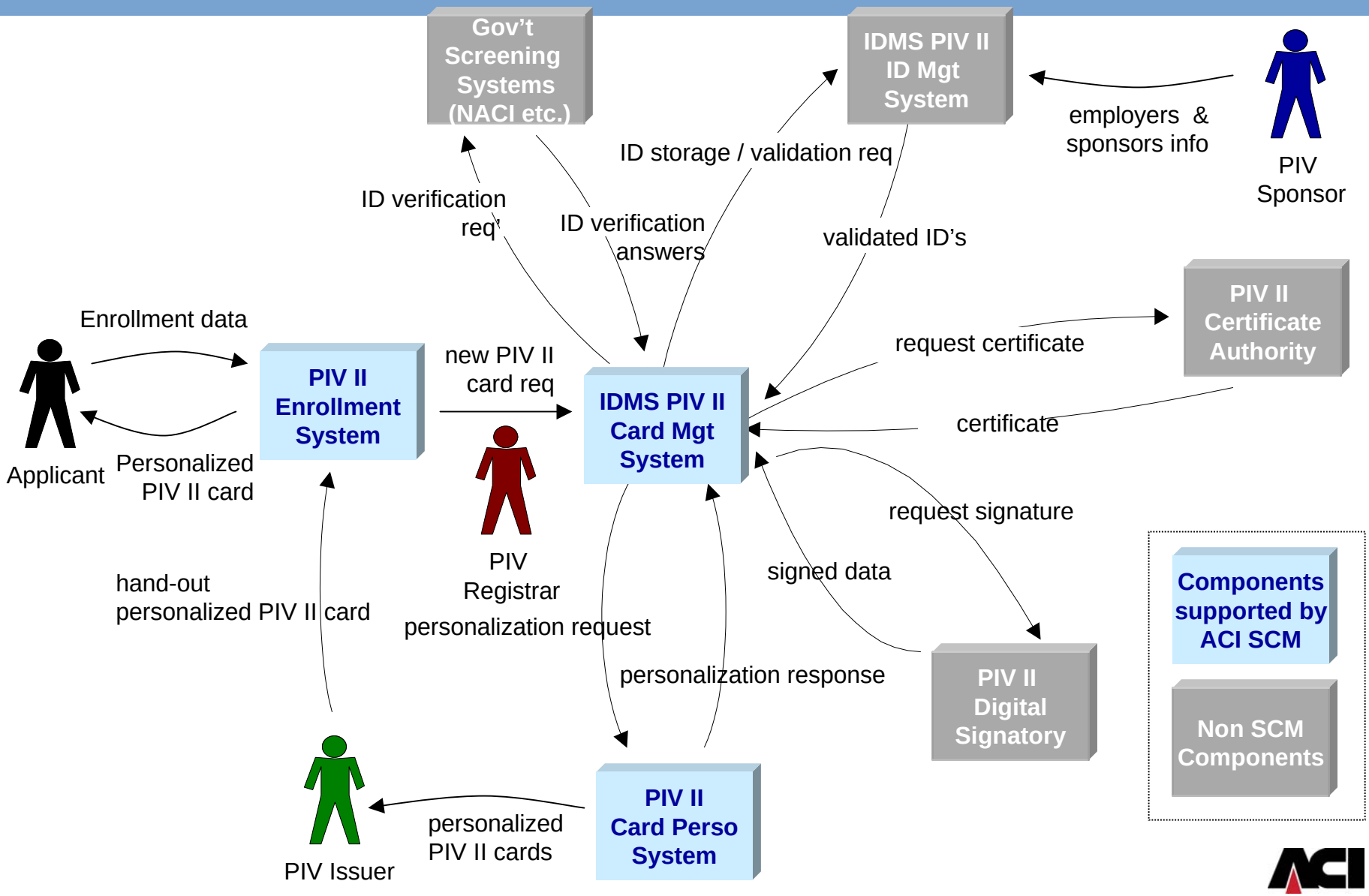


ACI Smart Chip Manager™ support for FIPS201

- FIPS 201 addresses smart card mgt as a fundamental element of a secure **ID**entity **M**anagement **S**ystem (**IDMS**)
- FIPS 201 does not stipulate specific smart card mgt requirements but provides a set of requirements based on industry best practices
- ACI Smart Chip Manager™ provides full support for PIV II Card Product and Lifecycle Management requirements as documented in different FIPS 201 specifications + handbooks

PIV II Card Issuance and Management

[Essential flows only]



SCM support for PIV II Enrollment System

- ES provides the required infrastructure to support PIV II Cardholder enrollment
  - multi-role enrollment model with separation of rules + responsibilities to create a secure process
- PIV II Workflow configurable for these work steps:
  - PIV II Cardholder information capturing (name, address, biometrics like photo)
  - Cardholder validation (validity check on ID document(s))
  - Request approval (an authorized employee must approve the request)
  - Requesting new PIV II Card from IDMS / smart card mgt system
  - Card distribution and activation to PIV II Cardholder
- EMS with PIV II support is scheduled for Q4 2005

SCM support for IDMS PIV II Card Management System

- SCM provides full support for the initial issuance, personalization and lifecycle management of a PIV II smart card
  - I.e. the card, the application and the PIV II appl parameters
  - configurable workflow for card issuance (data preparation / personalization), activation, renewal, reissuance, suspension, termination etc.
  - open industry (ASN.1 / XML) batch and message based interfaces with Gov't systems like for NACI etc.
  - support for VeriSign and Entrust (scheduled Q4 2005) CA
  - Proof of Concept data prep + card perso scripts available for DAL C3 applet on Axalto JavaCard with Gemplus, Oberthur and others following
- SCM (CAM + APM) provide support for PIV II smart card management requirements today

ACI Smart Chip Manager™ support for FIPS201

- Proof of Concept PIV data preparation + card personalisation scripts are developed
  - using DAL's C3 Applet
  - initially tested on Axalto Java cards with Gemplus, Oberthur and others following
  - specific PIV implementation ('content of containers') is dependent on actual requirements of Gov't Agency
- FIPS 201 card products - with associated scripts - can be configured in ACI Smart Chip Manager™

SCM support for IDMS PIV II Card Personalization

- SCM provides full support for the personalization of a PIV II smart card
  - Centrally, at a card personalization bureau
  - Remotely, at a Gov't Agency
- SCM provides support for PIV II smart card personalization requirements today

- ACI is not in the business of supplying
  - PIV II cards / applets / terminals / biometrics software

ACI is in the business of supplying the pivotal PIV II smart card infrastructure management software

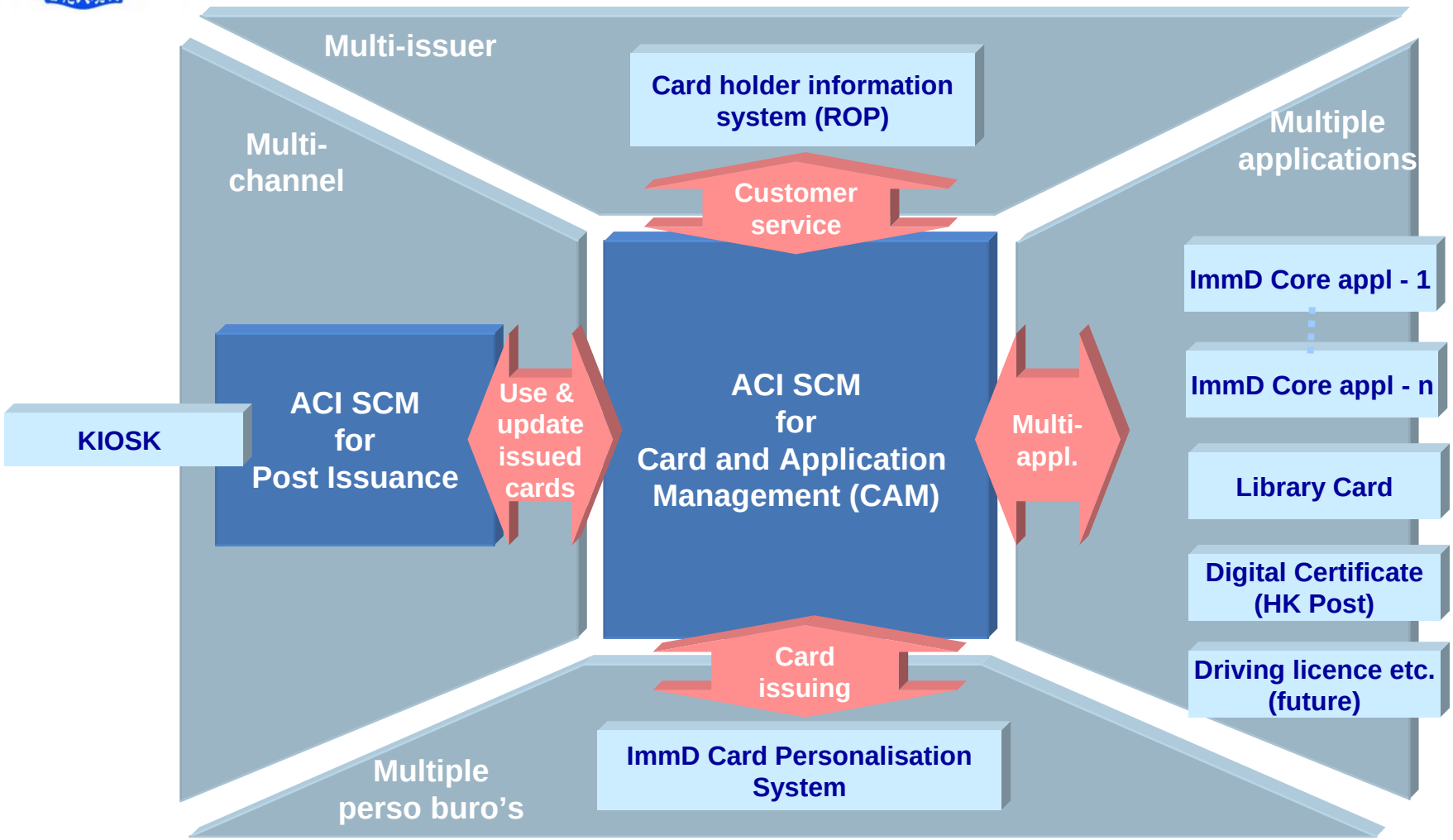
Hong Kong Smart ID Card

- 23 June ‘03 - First cards issued
- 18 August ‘03 - Territory-wide replacement
- Replacement exercise
  - 4 years from Aug 2003 to mid 2007
  - 7 million Hong Kong Residents
  - 8000 cards per day

Primary Functions of the System

- Registration Of Persons (ROP)
- Issuing of Hong Kong Smart ID Cards
- Identification and Authentication
  - photograph, digital fingerprint, PIN
- Update Condition of Stay and Limit of Stay for temporary residents
- Digital Certificate (issued by Hong Kong Post)
- Post issuance card update; application push & pull

ACI SCM Solution for Hong Kong ImmD



Want to know more?

Please contact our U.S. Smart ID Card Business Development Team

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