Department of Homeland Security

Biometrics Overview

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Importance of Biometric Standards in Post 9/11 Environment

- Dramatic Increase in Utilization of Biometric Data
  - US-VISIT Registration and Watchlist
  - Enforcement
  - e-Passport
  - Registered Traveler Programs
- Increased Sharing of Data Between Applications and Agencies
- Increased Civil Submissions
- Deployment of Mobile, Rapid Identification Systems
- New Technologies
  - “Slap” Scanners
  - “Fast Scan”
- Improved Algorithms and Analysis
  - NIST FpVTE, SDK Tests, SlapSeg 04
DHS Biometrics Applications

- Biometrics Study Group Chartered to Assess DHS Use of Biometrics
- Identified Over 60 Biometrics Initiatives Across 10 DHS Organizations
- Provided Recommendations for Developing Coordinated DHS Approach

Key Recommendations/Strategy

- **Common standards, unified processes, one identity** should characterize the Department’s biometrics strategy.

A **common set of standards** will enable greatly enhanced interoperability among systems and processes, increased coordination among stakeholders, and more targeted research and development.

**Unified processes** will enable the Department to realize greater efficiencies and cost savings through the consolidation of like activities, and will facilitate the sharing of knowledge and resources.

Establishing and confirming **one identity** for each individual that crosses all business processes across the Department will greatly improve the Department’s ability to perform its mission.
DHS Utilization of ANSI/NIST (EFTS) Fingerprint Standard

Criminal: >2.4M IAFIS EFTS Transactions/Yr

ENFORCE/IDENT - 10-Print Used to Simultaneously search & enroll into IAFIS and IDENT

Civilian: >3M IAFIS EFTS Transactions/Yr

Criminal Background Checks of IAFIS

- TSA – Credentialing Programs Such As HazMat Driver, Foreign Flight Student, Screeners, etc.
- CIS – Applicants for DHS Benefits
- CBP – International Registered Travelers, Truckers (FAST)
- DHS – Employee Criminal Background Checks
- US-VISIT - Uses EFTS format for transmission of 2-P EXIT Transactions
DHS Utilization of ANSI/NIST Fingerprint Standard

Submissions to IAFIS (2004)

- ENFORCE
- CIS
- TSA
- CBP
DHS Utilization of ANSI/NIST Fingerprint Standard

External Receipt of ANSI/NIST (EFTS) Records

- FBI IAFIS
  - Wanted (Daily Updates) (>500K)
  - Terrorists (>10K)
  - Aliens with Criminal History (310,000)
  - Sexual Registrants (13,000)
- California Department of Justice (10,128)
- Los Angeles County (33,449)
- Interpol (1,699)
- Department of Defense (85,486)
DHS IDENT Overview

**IDENT:** Biometric processing system for rapid identification and verification utilizing fingerprints

**Highlights**
- 35 Million People (FINS)
- 45 Million Transactions (Encounters) Processed
- 125,000 Transactions/Day
- Over 9 Million Identifications
- Over 15,000 Wanted Criminals Identified (Including DC Snipers)
- NIST Certified Accuracy*
- Matcher Power of 50 Million Matches/Sec
- Inputs From Over:
  - 15,000 Users
  - 5,000 Clients
  - 180 Countries
- Automated Synchronization with FBI IAFIS

*96.7% TAR, 0.01% FAR*
US-VISIT: Continuum of Security Measures – Current Status

Pre-entry:
- More than 211 Department of State visa-issuing posts collect biographic and biometric data

Process:
• Visitors place the left, then the right index finger on the fingerscanner
• Photograph is scanned into the system
• Fingerscans are checked against watchlists and are linked to the travel document
• Travel document is not issued until biometrics are verified
US-VISIT: A Continuum of Security Measures – Current Status

Entry:
Digital fingerscans are checked against a database of known and suspected terrorists and criminals to determine the person applying for entry into the U.S. is the same person issued the visa.

Process:
• Visitors place the left, then the right index finger on the fingerscanner
• A digital photograph is taken
US-VISIT: A Continuum of Security Measures

Status Management:

• Should the traveler seek to adjust status or extend his/her stay, US-VISIT would be updated with any modifications to the individual’s status.

• Arrival and departure records are reconciled, and any inconsistency allows US-VISIT to determine when a visitor has overstayed.
US-VISIT: Continuum of Security Measures – Exit

Exit:
In August 2004, the exit pilot program was expanded to various airports and seaports.

Visitors may experience the following:

1. A self-service exit station, supported by a contracted US-VISIT Workstation Attendant (WSA).

2. A mobile device operated at the gate area by a WSA.

or

3. A self-service exit station and a WSA who will confirm the visitor’s receipt at the gate of departure.
ENFORCE/IDENT

Parallel 10-P, 2-P Processing

- Deployed at:
  - 113 Border Patrol Stations
  - 103 POEs (All by 8/2005)
  - 31 District Offices
- In 2004:
  - 1.1M IAFIS Hits
  - 1.8M IDENT Hits
- 43K IDENT/IAFIS Transactions Per Week Average
ENFORCE/IDENT

[Image of a fingerprint scanner interface with a person's image and a table showing transaction IDs, FINS, submit time, type, and status.


US-VISIT
Keeping America's Doors Open and Our Nation Secure
IDENT Latent Capability
DHS Perspective: What’s Next?

- Increased Need to Share Linked Biometric and Biographical Information (XML, CBEFF, BioAPI)
- Multiple Biometric Types (Fingerprint, IRIS, Facial, etc.)
- Need for Open, Non-proprietary Systems
- Emphasis on Data Quality to Enhance Match Accuracies
- Need Standards for Less Than 10-P Systems