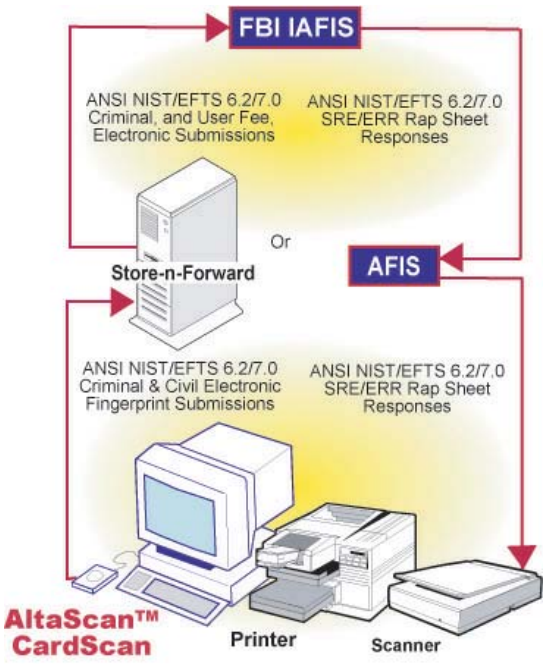
NORTHROP GRUMMAN
Information Technology

Cornerstones for Keeping America Safe!

Scan with Ease and Accuracy

AltaScan™ CardScan Fingerprint Processing

The AltaScan™ CardScan is an easy-to-use solution for scanning fingerprints. Like all Northrop Grumman AltaScan solutions, CardScan is cost effective and based on FBI standards. CardScan complies with ANSI NIST/EFTS 6.2/7.0 established standards for fingerprint and demographic information interchange.



AltaScan™ CardScan can be used to communicate with any standards-compliant system. This allows fingerprint images and demographic data to be easily shared in both criminal and civil environments. For those agencies with modest processing needs and limited budgets, CardScan represents a robust and proven alternative to expensive scanning units that use proprietary formats and unnecessary "bells and whistles." In an 8-hour shift, typical output is 120 Criminal submissions or 135 applicant submissions. The CardScan converts rolled fingerprint images and associated demographic data into electronic records. The EFTS records are transmitted via email for automated processing by Store n Forward and AFIS systems.

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Built On FBI Standards

CardScan embodies the same standards established by the FBI and represents an ideal opportunity for agencies to participate in the fingerprint-based identification process at an exceptionally low cost.

CardScan processes criminal and civil fingerprint cards in support of the ten-print transactions defined in the FBI's Electronic Fingerprint Transmission Specification (EFTS) 7.0.

Built-in Quality Control

Using the same fingerprint card stock you use today, fingerprints transactions—and starts the scanning process. Fingerprints are rolled, and the fingerprint card is placed on the CardScan scanner. The operator selects the Type of Transaction (TOT)—there are 10 standard ten-print transactions - and starts the scanning process. Fingerprints are captured using an Appendix F-certified scanner.

After the fingerprint images are scanned, they are displayed on-screen for operator verification. The operator can use the "Finger Chasing" feature to manually reposition individual fingers to reduce rejects based on image quality.

Once the card is scanned and checked for quality, the image data is compressed in accordance with the Wavelet Scalar Quantization (WSQ) standard to reduce image size, yet retain the mandatory image characteristics necessary for subsequent processing. Compression reduces transmission time, network traffic, and storage requirements.

Validate Data in Real-Time

CardScan provides two methods of data entry for demographic data: manual and optional file import. For manual entry, the operator types all known information into discrete data fields using a data-entry screen. (Data field edits adhere to National Institute of Standards and Technology (NIST) Type 2 standards and can support user defined modifications.) For optional file import, the operator imports data from a data file containing all the known demographic data. No need to retype existing information. Regardless of the input method, prior to submission, all data elements are checked for accuracy and completeness in accordance with established EFTS Type 2 standards.

Transmit Data Electronically

The CardScan uses standard Simple Mail Transfer Protocol (SMTP) with Multipurpose Internet Mail Extension (MIME) e-mail to transmit the compressed fingerprint images and demographic data. This standards-based transmission method ensures the CardScan output is compatible to any system capable of receiving standard e-mail.

Receive Electronic Results

Following the electronic submission of a fingerprint card, a response message (SRE or ERR) can be returned to CardScan. The SRE contains the Ident/Non-Ident results and can include an electronic RAP sheet (if requested by the user). An ERR response indicates that an error was encountered in processing a transaction and requires some error processing before a transaction may be resubmitted. Resubmissions can be sent electronically using the CardScan workstation. CardScan stores copies of each response in a POP3 mailbox, which is accessible by the operator for future processing.

Automated Administration

CardScan provides common system administration functions

- Automated Application Maintenance
- Administration of User Accounts (Windows 2000-based user name and password logon)
- System Backup capability

CardScan is Affordable

AltaScan™ CardScan offers major cost benefits to any agency that needs to process a modest number of fingerprint cards. AltaScan™ CardScan is simply the least expensive card scanning solution available on the market. It represents a tremendous cost advantage over LiveScan products.

Commercial Hardware and Software Components

The AltaScan™ CardScan system is comprised of the following:

Hardware

- Compaq D530 series desktop PC, P4 2.6GHz (or faster), 256MB RAM, 40GB hard disk, CD-R/RW drive, 10/100/1000 Ethernet Adapter
- Compaq 17” LCD Color Panel display
- Epson Expression 1680 flatbed scanner
- HP LaserJet Printer
- Optional Portable Laptop System

Software

- Microsoft Windows 2000 Professional
- Gordano GMS Mail Server
- Aware WSQ Compression
- AltaScan CardScan Application includes: Developed GUI and Certified Scanner Driver
- Optional Image Quality Check Software
- Optional Data Import from DataBase, File or Legacy System

Documentation

- Users Guide and System Administration Manual

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