# Scanner Relevant Standards 

## 10-Print Scanner Technology Workshop

October 14, 2005

Michael McCabe

## Standards \& Specifications

$\square$ EFTS FBI CJIS-RS-0010(V7.1) 2005

- Specification for doing business with FBI
$\square$ Requires equipment certification with requirements documented in the IQS EFTS/App F
$\square$ Requires WSQ certified image CODEC
$\square$ Requires the use of ANSI/NIST-ITL 1-2000
$\square$ NIST Fingerprint Image Quality:
ftp://sequoyah.nist.gov/pub/nist_internal_reports/ir_7151/ir_7151.pdf


## ANSI/NIST-ITL 1-2000

$\square$ Standard Data Format for the Interchange of Fingerprint, Facial, \& Scar Mark \& Tattoo (SMT) Information
$\square$ It describes the Fingerprint Data Interchange Format Used by Law Enforcement agencies

- Federal, state, and local agencies
- International organizations
$\square$ Format similar to commercial M1 standards
$\square$ Chosen for its long term compatibility with FBI processing


## Structure of Standard

$\square$ Sixteen record types - ASCII, binary, or combination
$\square$ Used for exchanging information describing:

- Transaction itself
- Descriptive, demographic, and rap sheet information
- Finger and palm print image and minutiae information
- Facial image
- Scar mark and tattoo image and descriptive information
- User defined type record.
$\square$ In the flat application a type 14 (tagged field) record is used to transmit the flat images from the scanner.


## Left Slap 3" x 3.2"



# NTTT 

## Segment \& Assign NFIQ



Back Up Slides

## Type 14 Record Example

| Field <br> ID | Field \# | Data <br> Type | Example |
| :--- | :--- | :--- | :--- |
| LEN | 14.001 | N | $14.001: 40164$ <GS> |
| IDC | 14.002 | N | $14.002: 01<$ GS $>$ |
| IMP | 14.003 | A | $14.003: 0<$ GS $>$ |
| SRC | 14.004 | AN | $14.004:$ CA0000001<GS> |
| TCD | 14.005 | N | $14.005: 20040227<$ GS $>$ |
| HLL | 14.006 | N | $14.006: 1600<$ GS $>$ |
| VLL | 14.007 | N | $14.007: 1450<$ GS $>$ |
| SLC | 14.008 | N | $14.008: 1<$ GS $>$ |
| HPS | 14.009 | N | $14: 009: 500<$ GS $>$ |

## Type 14 Record Example (continued)

| Field <br> ID | Field \# | Data <br> Type | Example |
| :--- | :--- | :--- | :--- |
| VPS | 14.010 | N | $14.010: 500<G S>$ |
| CGA | 14.011 | A | $14.011: 1<G S>$ |
| BPX | 14.012 | N | $14.012: 8<G S>$ |
| FGP | 14.013 | N | $14.013: 14<G S>$ |
| SEG | 14.021 | N | $14.021: 10<U S>3<U S>352<U S>725<U S>126$ <br> $5<R S>9<U S>375<U S>750<U S>175<U S>76$ <br> $5<R S>8<U S>800<U S>1150<U S>5<U S>581$ <br> $<R S>7<U S>1200<U S>1598<U S>274<U S>8$ <br> $01<G S>$ |
| IQM | 14.022 | $N$ | $14.022: 10<U S>3<R S>9<U S>2<R S>8<U S>1$ <br> $<R S>7<U S>2<G S>$ |

