





NEXT GENERATION IDENTIFICATION

BIGGER – BETTER – FASTER

RAP BACK

RAPID MOBILE ID

IRIS

FACIAL

LATENTS

PALMS



5 6 " 7 8



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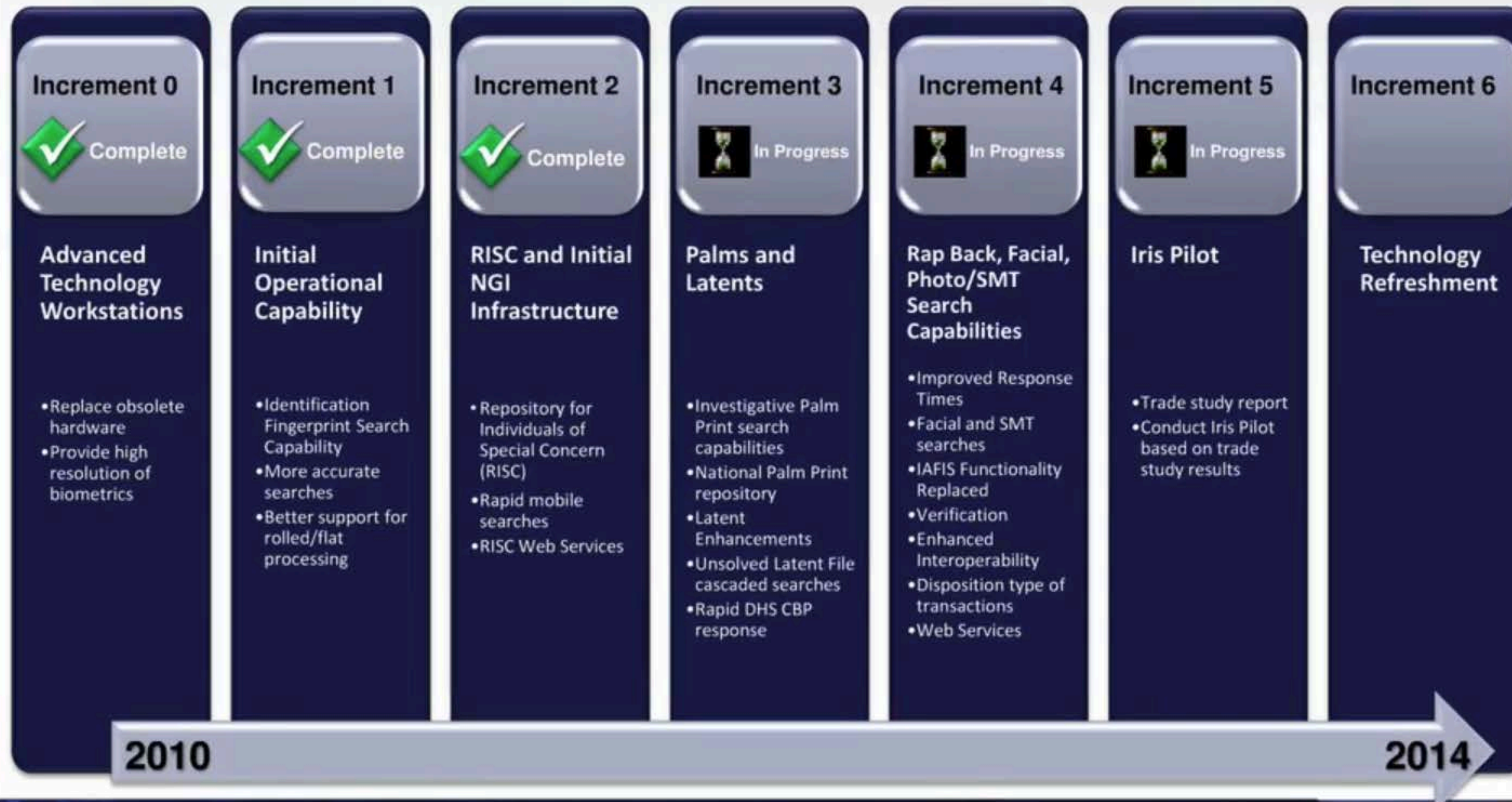
LATENTS

PALMS





NGI Implementation Schedule



Repository for Individuals of Special Concern



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CJIS RISC Summary

- Number of Submissions processed – over 515,000
- Overall Red rate: 6.42%
- Average Response Time = 6.34 seconds
- Over 400 Agencies Participating

,000



RISC Summary

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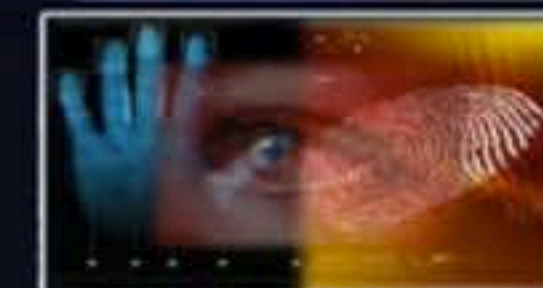
RISC

➤ Resulting Benefits

- Provides a rapid mobile fingerprint identification search using 2-10 rolled or flat fingerprint images
 - Available nationwide as of August 25, 2011
- Expands identification capabilities from the booking environment to a mobile environment
- Biometric searches of “high value” subjects (IAFIS subset)
- Provides the “Street Cop” the ability to quickly assess subject’s threat level

➤ Datasets Searched

- Wanted Persons with FBI Numbers in the NCIC Entry
- Sexual Offender Registry subjects
- Known or Appropriately Suspected Terrorists
- Other Persons of Special Interest

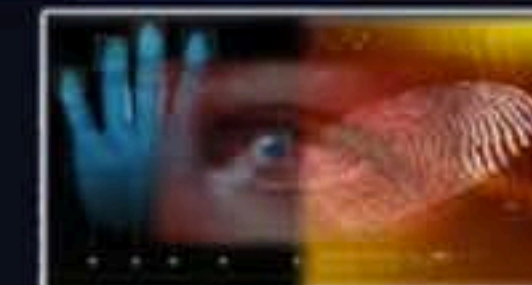




RISC

Response Content

- Returns a Red-Yellow-or Green response
 - Red – Highly Probable Candidate (s)
 - Yellow – Possible Candidate (s)
 - Green – No Hit in RISC
- Category of Hit (WW/NSOR/KST/Other)
- Red/Yellow response includes: Master Name, FBI Number, and Limited NCIC Fields (WW and KST)
 - Offense Field
 - Original Offense Code Field
 - Caution and Medical Conditions Field
 - Subgroup Field (SGP) Handling Code Caveat





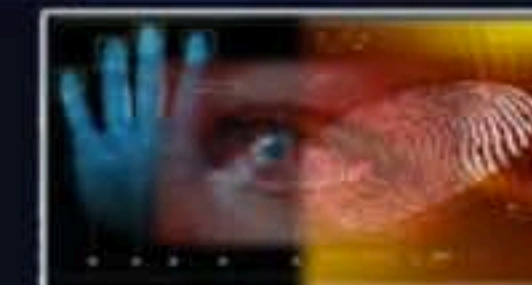
Path to Mobile ID

<https://www.fbibiospecs.org> links to:

- Electronic Biometric Transmission Specifications
 - Version 9.1 for support of Increment 2
 - Version 9.3 published
- NIST Special Publication 500-280
 - Mobile ID Device Best Practice Recommendation

Additional Resources

- CJIS Security Policy
 - Version 5.0
- NGI User Guide (in development)



Palm & Latents



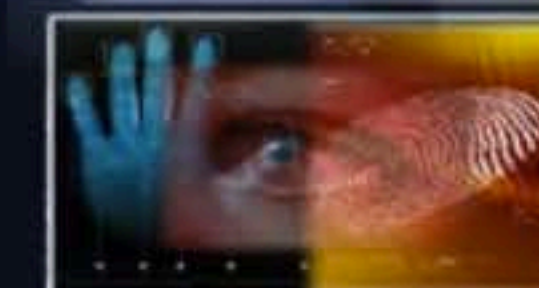
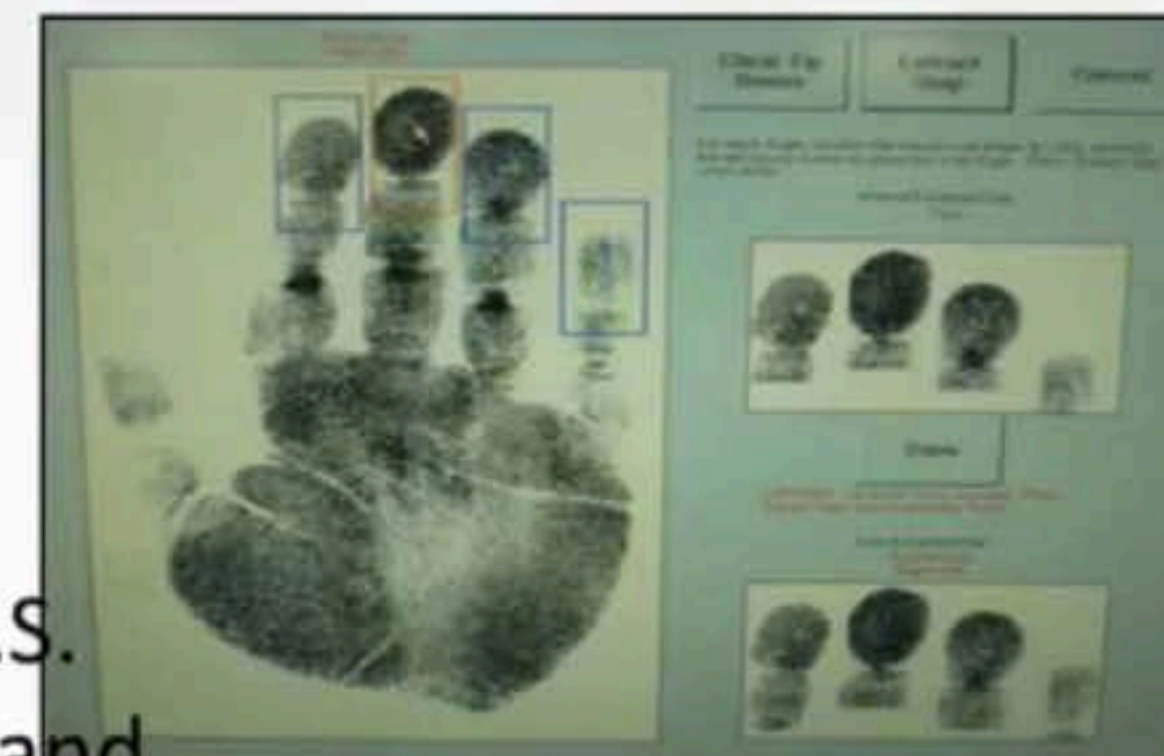
Palm Prints and Latents (Increment 3)

➤ Status

- Collected over 3 million palm prints to date
- EBTS 9.3 – Approved and Published

➤ Resulting Benefits

- Enable palm prints to be searched across the U.S.
- More latent identifications to support terrorist and violent crime investigations
- Upgraded Universal Latent Workstation Software
- Provides rapid response for DHS Customs and Border Protection transactions



Photo



Increment Four

➤ Status

- Facial Search
- Text based scars, marks, and tattoo (SMT) searches
- Rap Back
- Enhanced Interoperability
- Fingerprint verification services
- Improved response times

➤ Resulting Benefits

- Enhance public safety
- National level investigative searches of photos/SMTs
- More accurate and complete criminal history records
- Flexible and scalable architecture for future needs





Face Pilot Objectives

- Assess face search capabilities
 - Suitability to support Government requirements
- Working Face Pilot
 - Demonstrates reference implementation on real data
 - Exercises government technical specifications for face search
 - Establishes system metrics and refines business processes
 - Early design reference for NGI Increment 4
 - Demonstrates modular and scalable design for plugging in different potential vendor solutions
 - Demonstrates end-to-end face recognition capability





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Interstate Photo System Facial Recognition Pilot (IPSFRP)



- External user access to the pilot is currently available
 - MOU's with three agencies
- Users will submit searches against a National repository of photos
 - Gallery will contain booking images collected at the arrest event (along with Ten Print submission to the FBI)
- Law Enforcement Users will receive a ranked investigative candidate list
 - Minimum - 2, default - 20, maximum – 50
 - Access within CJIS Security Policies





NGI Photo Repository

- Interstate Photo System Repository
 - All 50 states have data available for searching
 - IAFIS Interstate Identification Index photo updates
 - 6.75 million Identities
 - More than 18 million photos (Mug Shots)
 - NGI staff working with contributors to increase gallery images
 - Leverage for face pilot opportunities
- Expansion of the Repository
 - Bulk Photo Submissions
 - Criminal Answer Required (CAR) type of transaction electronic submissions





UFW Objectives

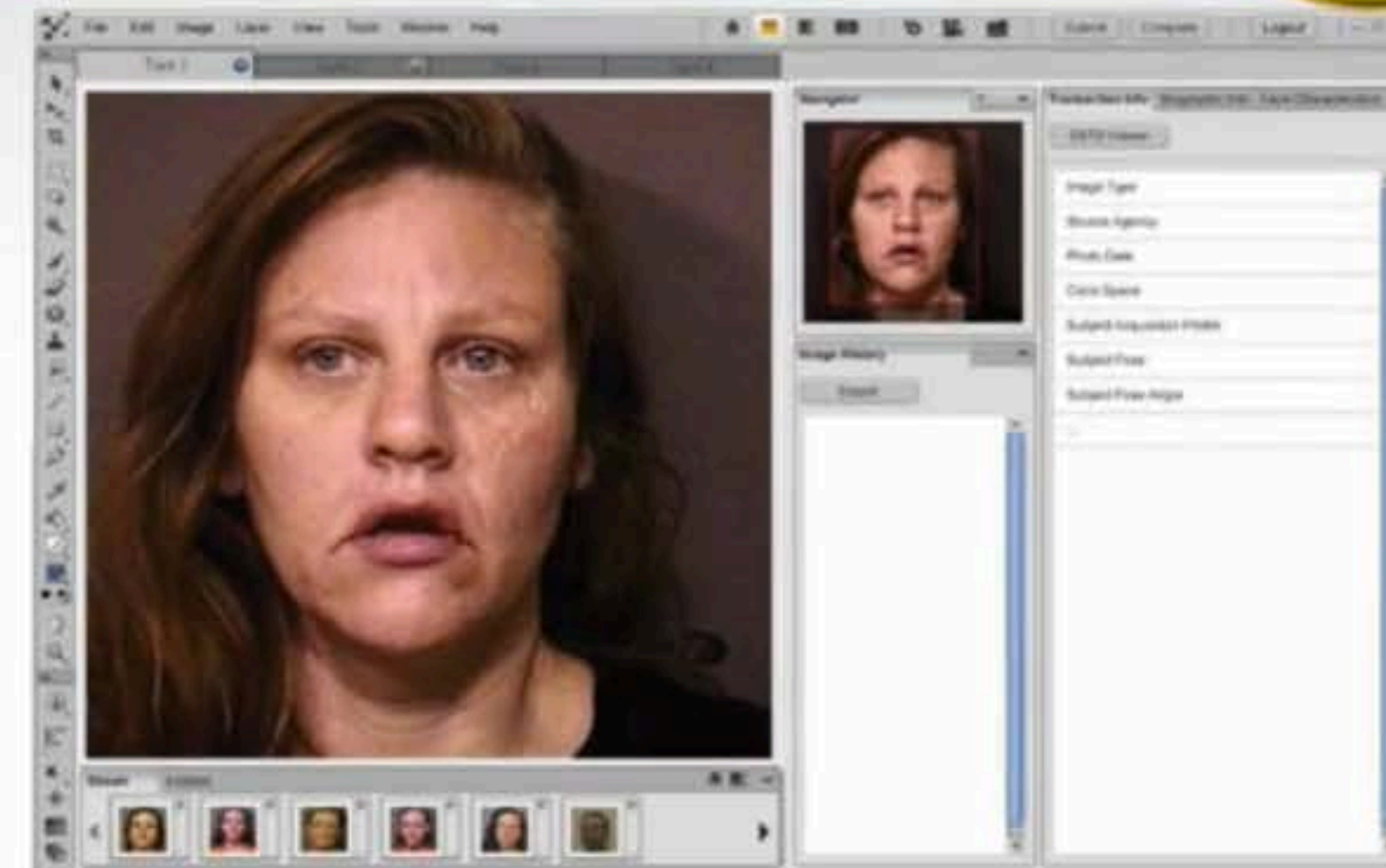
- Plan, design, prototype and demonstrate a face workstation which can be freely deployed by the FBI
- Develop services which can be carried over to NGI for biometric processing
- Employ a user experience design philosophy to develop UFW specifically for face examiners
- Permit examiners to:
 - Ingest, analyze and enhance images
 - Select sub-frames or sub-images areas for further analysis
 - Submit files to local and remote matching systems
 - Review, store and match search results





Universal Face Workstation (UFW)

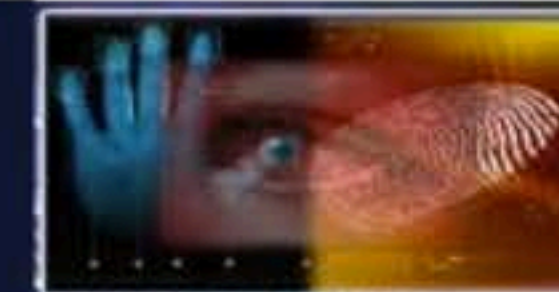
- FBI user software to support access to NGI Face Pilot and NGI System face search capabilities
- Cross Platform (Windows, OSX, Linux)
- Built upon a Biometric Integration Platform
- Built on open source frameworks
- Extensive support for plugins
- Will be available for Law Enforcement use free of charge





Rap Back Activities

- Reviewing Best Practices and Lessons Learned
 - CJIS hosted first Rap Back Focus Group meeting
 - Strategic discussions to align with a national implementation
- Identifying Policy Focus Areas
 - Federal Privacy Laws differ from State
- Going Forward
 - Engage Law Enforcement Partners
 - Continue working with Subject Matter Experts



Iris Pilot and Full Operational Capability



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Iris Pilot & Technology Refreshment (Increments 5 & 6)

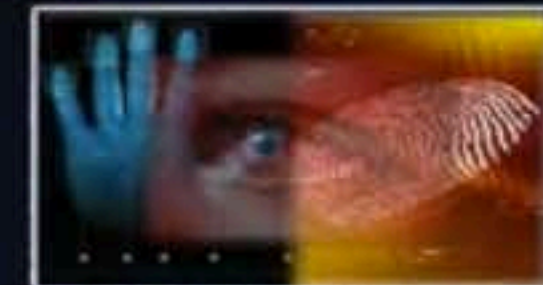


Iris Pilot

- Enhanced correctional officer safety
- Less interaction
- Quicker acquisition
- Reliable
- Business value

Technology Refreshment

- Additional system tuning to meet non-functional requirements
- Review hardware and software to ensure the deployed versions are the latest available





FBI

INFORMATION SERVICES DIVISION

DEPARTMENT OF JUSTICE
FEDERAL BUREAU OF INVESTIGATION



Contact Information

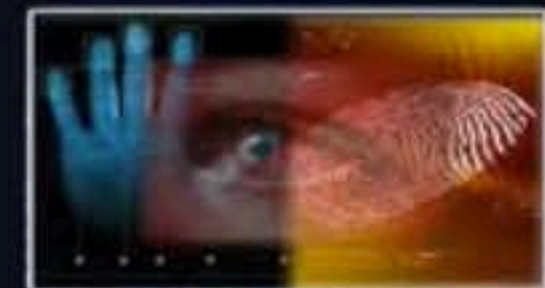
**Federal Bureau of Investigation
Criminal Justice Information Services Division**

**Next Generation Identification Program Office
Implementation and Transition Unit**

Telephone: (304) 625-3437

NGI Web Page: <http://www.fbi.gov/hq/cjisd/ngi.htm>

Email NGI: FBINGI@leo.gov





Future Capabilities

- Ability to include additional datasets
 - IVF dataset
- Perform a Cascaded Unsolved Latent File (ULF) Search
 - Unsolicited response to the record owner of the latent image
- Provide Photos with a RISC Response
 - Users may request return of a photo (if available) with a Red or Yellow Response





Full Operating Capability

- Scheduled for 2014 as an NGI Increment 4 initiative.
- National implementation of Interstate Photo System enhancements.
 - New search functionality
 - Special Population Cognizant Files
 - Enhance photo enrollment
 - Enhance photo retrieval
 - Record biometric decisions

