



Tactical Identification System (TACIDS)
Award #: 2007-RG-CX-K001

Automated Regional Justice Information System
ARJIS

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Public Safety Problem

- **Uncooperative Persons Are Not Easily Identified**
- **Wanted And Persons Of Interest Evade Detection**
- **Outstanding Warrants Remain Unexecuted**

Product Description

- **Facial Recognition Identity Establishment**
- **Query Initiator**

Planned Demos/Deliverables/Field Tests

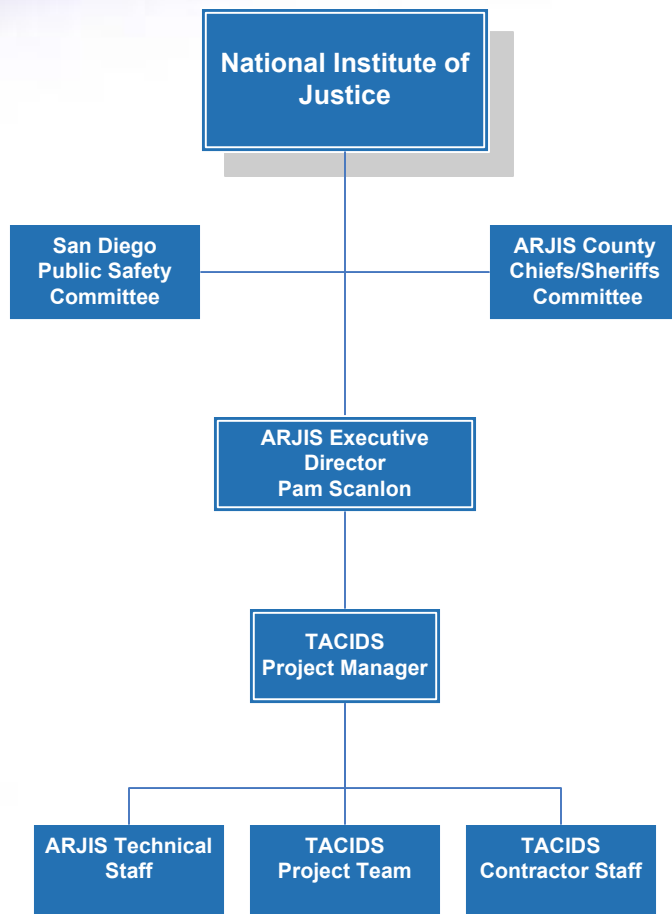
- **Technical Design 2008**
- **Application Development 2008**
 - **System Integration**
 - **Metrics Definitions**
- **Field Test 2008/2009**
- **Statistical Analysis And Reporting 2009**

Criminal Justice Payoff

- **Improved Positive Identification For Field Agents**
- **Increased Resolution of Outstanding Wants/Warrants**



Project Team



- ARJIS
 - Project Management
 - 500+ Current PDA Users
 - Federal, State and Local
 - Existing Regional Data Sharing Initiative





ARJIS – Automated Regional Justice Information System

- What is ARJIS?
 - Joint Powers Agency
 - 6500 California Gov't Code makes it a gov't entity
 - Serves primarily San Diego & Imperial Counties
 - Completely self sustaining and owned by the 75 member agencies





Project Participants: ARJIS Member Agencies

Carlsbad Police Department
Chula Vista Police Department
Coronado Police Department
El Cajon Police Department
Escondido Police Department
La Mesa Police Department
National City Police Department
Oceanside Police Department
San Diego County Sheriff
San Diego Police Department





ARJIS MEMBER AGENCIES – 11,000 users

- CAL State University – San Marcos Police Department
- California Department of Health Services/Medical Fraud
- California Department of Insurance
- California Department of Justice BNE (Bureau of Narcotic Enforcement)
- California Highway Patrol
- DA CATCH (San Diego District Attorney-Computer & Technology Crime High-Tech Response Team)
- DHS: INS (Department of Homeland Security-Immigration & Naturalization Service)
- DHS:OIG (Department of Homeland Security- Office of Inspector General)
- DHS: USBP (Department of Homeland Security-United States Border Patrol)
- DHS:USC (Department of Homeland Security –(U.S. Customs)
- DHS-USCG (Department of Homeland Security - United States Coast Guard)
- Donovan Correctional-R.J. Donovan Correctional Facility
- Grossmont-Cuyamaca College Police Department
- Imperial County Law Enforcement Coordination Center (LECC)
- Mira Costa College Police Department
- Palomar College Police Department
- Regional Auto Theft Task Force (RATT)
- San Diego City Schools Police Department
- San Diego Community College Police Department
- San Diego Harbor Police Department
- San Diego State University (SDSU) Department of Public Safety
- SDSC at UCSD (San Diego Super Computer Center)
- San Diego Court Services/San Diego County Sheriff
- County of San Diego/District Attorney's Office
- Southwestern College Police Department
- United States Attorney
- United States Bureau of ATF (U.S. Bureau of Alcohol, Tobacco, Firearms)
- United States Department of Justice Drug Enforcement Administration
- United States DEA (Narcotics Information Network Drug Enforcement)
- United States Department of Justice Drug Enforcement Agency Taskforce (San Diego Airport)
- United States Department of State
- United States Federal Bureau of Investigation (FBI)
- United States Federal Probation
- United States Forest Service
- United States Internal Revenue Service (IRS)
- United States Marine Corps-Camp Pendleton Provost Marshal
- United States Marine Corps-MCAS Miramar Provost Marshal
- United States Marshals Service
- United States Naval Commander Southwest Region
- United States Naval Consolidated Brig – Miramar
- United States Naval Criminal Investigative Service (NCIS Camp Pendleton)
- United States Naval Criminal Investigative Service (NCIS-32nd Street-San Diego)
- United States Postal Service
- United States Pretrial
- United States Secret Service
- University of California, San Diego (UCSD) Police Department
- San Diego County Probation Department
- San Diego County Medical Examiner
- San Diego City Attorney



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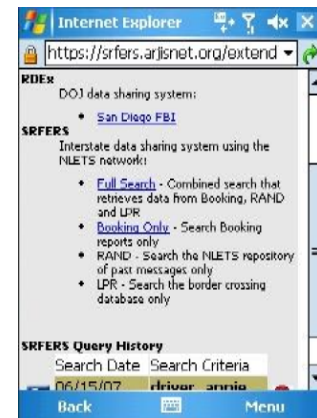
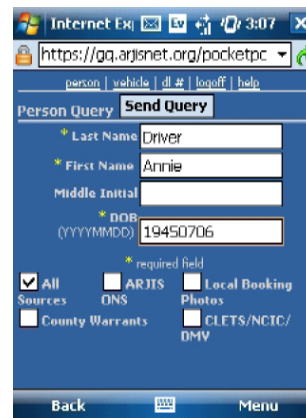
Public Safety Problem

Often as law enforcement entities work in a tactical environment they encounter individuals unwilling to cooperate and give accurate information. Sometimes, this lack of cooperation renders it impossible to positively identify the individual. With limited cause agents may be unable to detain these persons long enough to confirm their identity and thus miss an opportunity to detain a wanted person. This solution seeks to remedy this problem by giving agents additional positive identification tools in the field.



Public Safety Problem

- Often times criminals lie about their identification
- Agent/Officer Must Use Multiple Tools To Positively ID Individuals
- Tools Are Often Silo Applications
 - May Not Be Clear Which Tool To Use
 - Different Access Rules
 - Different Username and Password
- Accessing Multiple Tools Is Time Consuming
- Agent/Officer Cannot Always Detain An Individual Indefinitely





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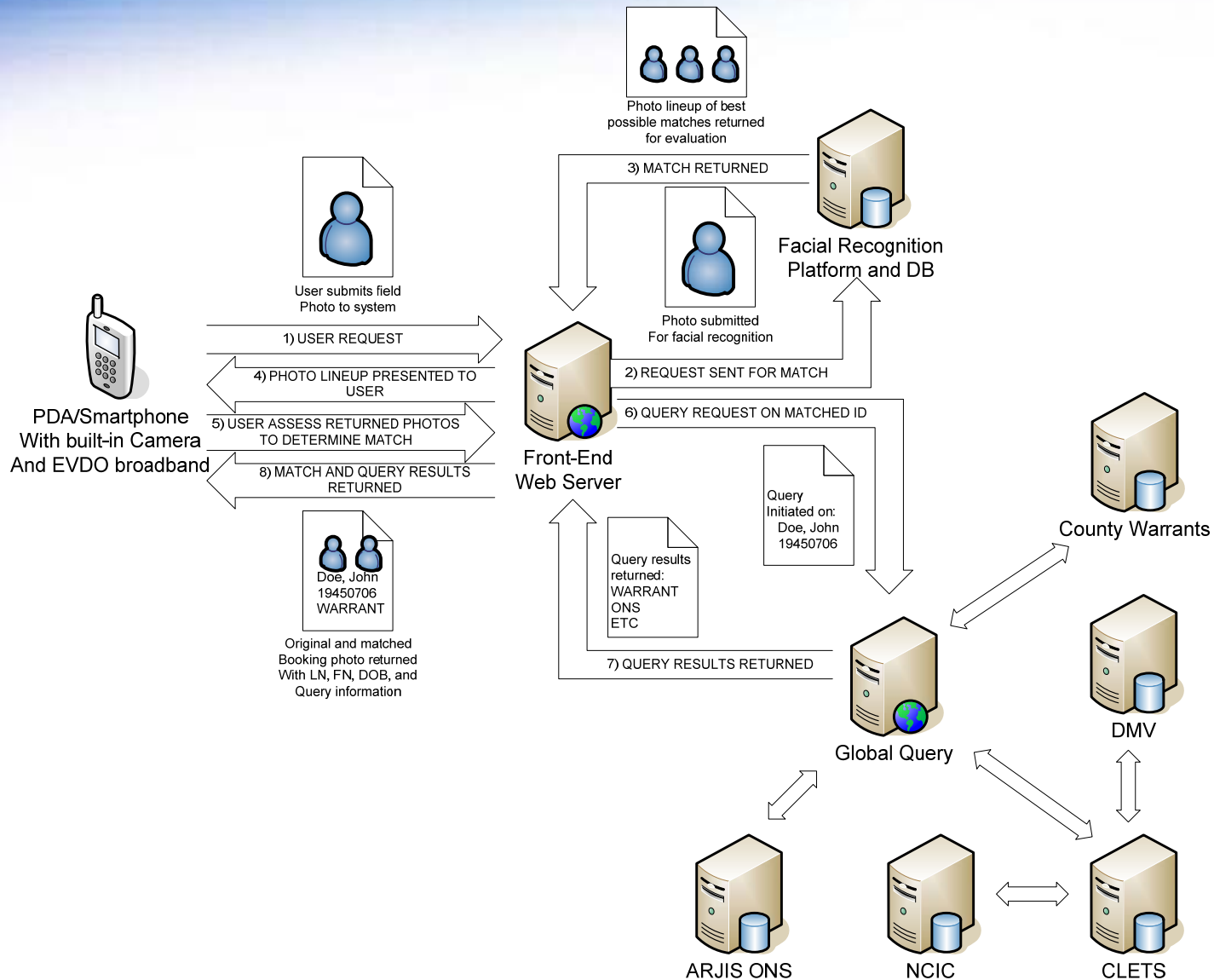
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Product Description

ARJIS will add a web services component in its existing suite of law enforcement tools which will allow a user in the field to take a photo and upload it to a server-side component which will match it against the over 800,000 booking photos in the San Diego County. Positive matches will then be processed on the server side and sent back out to the requestor as a photo lineup for positive identification. If a positive ID is found, the system will interface with other tools to initiate a queries and field interviews without additional login.





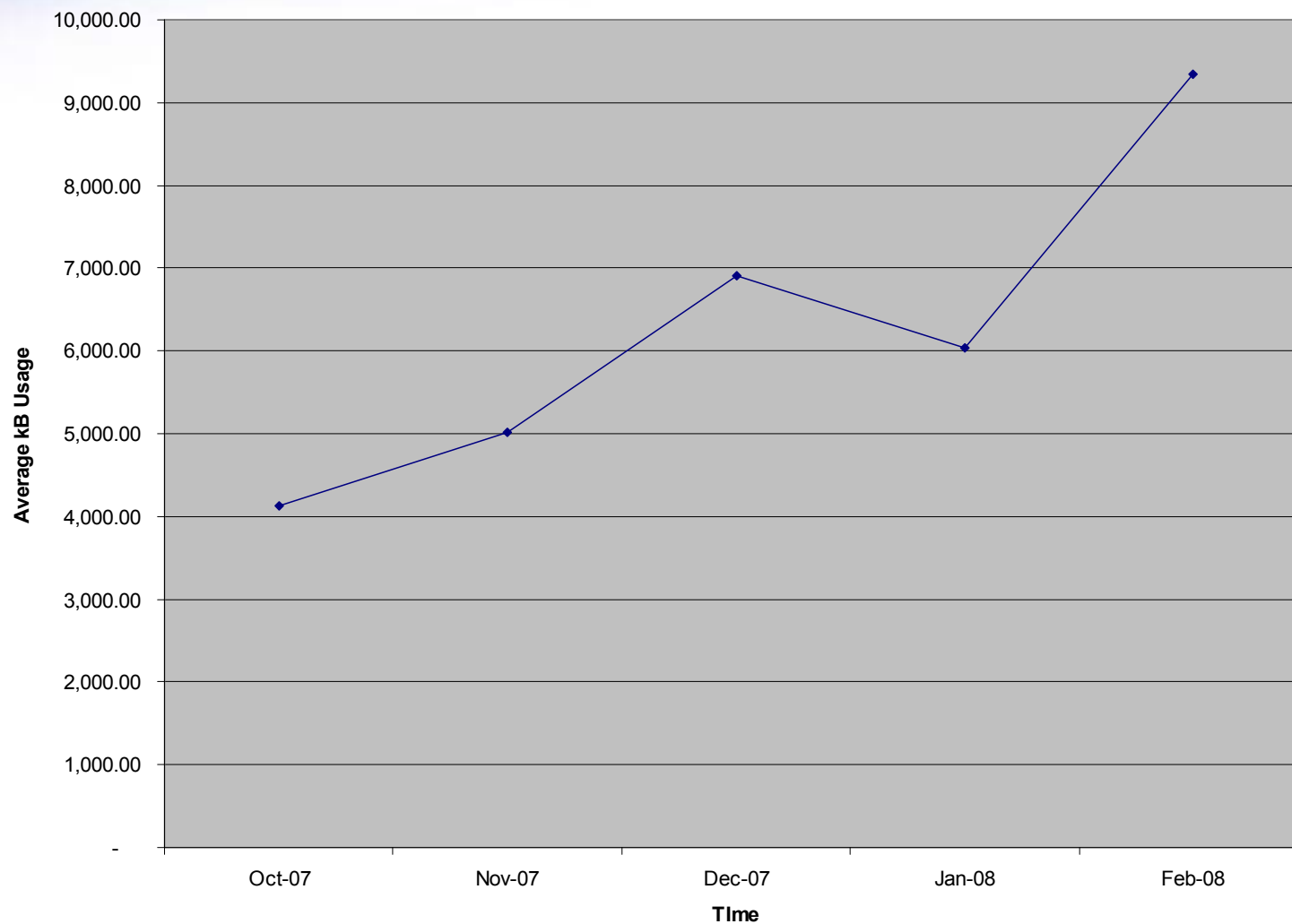
Product Description

- Windows Mobile Compatible
- Web Service Based Architecture
 - NIEM/GJXML Compliant
- Compartmentalized/Reusable
 - Can Be Input Mechanism For Any Web Service Based Search Tool
- ARJIS Has Over 800,000 Booking Photos For Comparison
- COTS Or Open Source Based Facial Recognition Algorithms
- Leverage Existing ARJIS Hardware



Product Description – Existing ARJIS Hardware

ARJIS PDA Usage





Product Description

- Statistics
 - Total Queries Vs. Total Hits
 - Total Hits Vs. Arrests Based on Hit (Harder to Capture)
- Research Topics
 - Exposure Differences
 - Night vs Day
 - Off Axis Effect
 - Aging Effects
 - Minimum Acceptable Resolution
 - ≥ 1.3 Megapixel
 - Multiple Bookings For A Single Individual



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Planned Demos/Deliverables/Field Tests

- Q3 2008
 - Technical Design Specification
 - Research Existing Facial Recognition Platforms
 - Open Source And COTS Solutions
 - Integration Plan With Query Platforms, Global Query, Smart Search
- Q4 2008
 - Develop TACIDS Search Engine
 - Develop TACIDS Database
 - Alpha Test
- Q1 2009
 - Integrate With Query Platform
 - Beta Test
- Q2 2009
 - Initial Rollout
 - Project Statistics Collected
 - Reasearch
 - Documentation
 - Reporting



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Criminal Justice Payoff

- Field Agents Have Additional Tools To ID Individuals
- “A few months ago I was assisting patrol units with a parole search at a residence in Escondido. One of the many people in the house gave a name and a date of birth, but had no ID. The name did not match the name the subject had tattooed on his neck. I took the last name, the tattooed first name, and an approximate date of birth and ran it through Global Query on my PDA. Lo and behold, I got a close hit, with a picture, for a wanted parolee-at-large. I showed the picture to the subject and he said, “That’s my brother.” “Wrong, not with the name tattooed on you,” I replied. Off to jail he went.”
 - Steve Thompson
 - Escondido Police Department
- **What If The Subject Didn’t Have The Tattoo?**



Criminal Justice Payoff

- Increase In Positive Identification For Agents in Field
- Increased Resolution Of Outstanding Wants And Warrants
- Open Source Web Service Suite For Use By Law Enforcement
- Compartmentalized/Reusable For Any Agency Search Tool



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QUESTIONS?

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