

Chicago Summits Technology Plan

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(Forensics Removed)

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Facts First

What Joint summit meeting for G-8 and NATO When Saturday, May 19, to Monday, May 21, 2012

Where Location not disclosed, presumably area of McCormick Place

Who Various factions of Chicago and Cook County security organizations

US Secret Service (President Obama will speak)

International security agencies

Budget \$20,000,000 for additional surveillance capabilities

Direct orders placed (no lengthy bid process)

Presumed Requirements

Facial Gather enrollment from multiple local, national, and international databases. **Enrollment**

Mobile Facial enrollment searching from mobile devices. (Take one to three photos of a POI, email them to a specified address, and receive a reply email with search results.)

Choke- Monitor a limited number of choke-points with human verification and e-mail notification to mobile devices.

POI Search Ability to search a number of ground-level live cameras For a POI (not necessarily enrolled) by personal characteristics.

"The Cloud" We will need to provide the network and infrastructure necessary to support the facial recognition portion of the enhanced surveillance capabilities and not rely on any existing Cook County facilities.

EIRC Considerations

Nothing Due to the short lead time we need to concentrate on solutions that already exist that can be quickly adapted and deployed.

The exception to this rule is developing an e-mail interface to receive an e-mail with face photos attached, search the database for those faces, and compose an e-mail reply with results. Also an ability to take an alert from MatchPoint and e-mail to specified persons. I am hoping that Ted will be able to find someone to accomplish this without too much difficulty.

Enrollment If at all possible we need to limit total enrollment in the 50 to 100,000 face range. With the current standalone PC infrastructure it will greatly increase the complexity of the project to have enrollment spread across multiple PCs unless they are truly separate databases that would be searched for different needs. It seems that the databases will

be basically fixed at the beginning of the event was possible overnight updates with new POIs.

We will have to enroll into our INDIbase from multiple sources likely to include at minimum Chicago police, Cook County, and US Secret Service. We will charge a fee for each different database that we have to import from (To cover costs of programming import export routines.) as well as a per record fee for enrollment storage and management of those faces. We will mirror the database off-site in California.

Match Point Each Match Point can monitor for choke-point cameras and generate alerts that can be e-mailed to mobile devices.

Search Search Point in its N:1 mode can be used to search multiple cameras to find a person of immediate interest.

Resolver IR Resolver can be used to detect personal characteristics from multiple cameras also to find a person of immediate interest.

Fusion IR There may also be cases where the INDIface SDK can be used in a standalone fashion to generate directories of detected faces and casual matches.

Personnel

TNP On-site technology czar

TNP Delegate E-mail interface

TNT friends On-site technical talent **TRam** Training and operators

VSS (DFerg) On-site hardware (PCs and network infrastructure)

DeltaCode Out-of-state backup
AGC Database czar

AGC friends

Cone per database import

Import and quality control

Ahand iPhone Applications

Ahand friends
Ahand headhunter

SDM

Other mobile applications
Other technologists as needed
Tweaks to Java applications

AHO Tweaks to SDK. On site parameter guru.

RL Liaison with local officials.
CS Communications director.
McB Administrative support.

Bottom Line

This can be the ultimate make or break project. We *have* to get it right. Companies that start to believe their own publicity are doomed. We need to set expectations appropriately. It is a good thing to have exceeded expectations when this is all over.

- While we have a pretty graph for N:1 in an uncontrolled but consistent environment and token authentication is getting spectacular results in controlled environments, let's not pretend we are going to positively identify a person from a single frame in the wild against 50,000 mugshot enrollments.
- 2. Our best play, if Ted can help us pull off the e-mail interface, is the mobile application. As good as Animetrics' technology was, when I developed a mobile application for them, we encouraged the user to take three probe images.
- 3. Monitoring checkpoints is going to require an engaged operator; we should not rely on a red box match to automatically wake up the Sheriff. Perhaps we should build in the cost of training and staffing those stations during the event.