

Summary of ANSI/NIST XML Meeting, May 8, 2008 –

Discussion of Major Issues in Comments Received in Response to the March 2008 draft of ANSI/NIST-ITL 2-200X, Part 2: XML Version

In Attendance...

At NIST

Organization	Name
BAH/US Army BTF	Dale Hapeman
DHS-OCIO	Anthony Hoang
DHS-TSA	Matthew O'Neill
FBI	Patrice Yuh
FBI	Tom Hopper
FBI	Sandy McCay
FBI	Jodie Linger
FBI	Cathy Wimer
IDTP/FBI	Michael McCabe
NIST	Michael Garris
NIST	Elaine Newton
NIST	Shahram Orandi
NIST	Michael Hogan
Noblis/DHS US-VISIT	John Mayer-Splain
SAIC/TSC	CJ Lee
State Dept.	John McInerney
The Analysis Corp./TSC	Chris Holmes
The Analysis Corp./TSC	Stan Larmee
TSC	Neal Latta
US DOJ	Sudhi Umarji
WI DOJ/A/N XML WG Chair	Gerry Coleman

On the phone

Organization	Name
Aware	Eric Sharpe
CA DOJ	Rochelle Dann
CA DOJ	Scott Lorrigan
CA DOJ	Suzanne Martin
CA DOJ	Rick McFarland
CA DOJ	David Woo
Comnetix, Inc.	Henri Schueler
Cross Match Technologies	Greg Cannon
Daon	Matt Swayze
Daon	Catherine Tilton
Dept. of State	Ben Alexander
Dept. of State	Joe Arrington
Dept. of State	Greg Gates
FBI	Cindy Nielson
Florida Department of Law Enforcement	Charles Schaeffer
Florida Department of Law Enforcement	Tanya Gold
Higgins-Hermansen-Banikas, LLC	Peter Higgins
IAI AFIS Committee, Chair	Peter Komarinski
Los Angeles Co. Sheriff's Dept.	T.J. Smith
Mentalix	Dale Remmers
Motorola	John Bredehoft
Motorola	Mitch Higashi
Nebraska State Patrol	Bruce Luhr
NYS Div. of Criminal Justice Services	Joyce Bellinghausen
Raytheon	Teddy Ko
Texas Department of Public Safety	Mike Lesko

Background

At the December 2005 ANSI/NIST workshop, it was unanimously agreed upon by the participants that a Part 2 XML version of the forthcoming ANSI/NIST standard (now known as ANSI/NIST-ITL 1-2007, or Part 1) would be developed. The XML version would maintain a one-to-one correspondence with the conventional Part 1 version of the standard. This required the inclusion of a Type 1 logical record with both mandatory and optional fields. This one-to-one correspondence with Part 1 was reaffirmed at an ANSI/NIST XML workshop held in September 2007.

A draft XML standard document was issued last March with a call for comments. DHS-OCIO and TSC submitted comments requesting primarily the elimination of the mandatory requirement for a Type-1 record, or alternatively, to relax the mandatory nature of the fields included in the Type 1 record. The changes requested would mean breaking the one-to-one correspondence with Part 1.

A meeting/teleconference was held Thursday, May 8th at 10 AM EDT to resolve comments requesting this change of scope of the XML standard. Specific comments that prompted the meeting are noted in the list of all received comments here:

<http://fingerprint.nist.gov/standard/xml/Comments_Received_ANX_Mar08_Draft.pdf>.

About half of the (60+) comments ask for the scope of the XML standard to change in order to make the XML standard more efficient and accessible for non-law-enforcement applications (such as intelligence gathering or anti-terrorism screening). These requests are motivated by the needs of the intelligence community's use of biometric data, where biometric data is part of a larger data package and where some mandatory fields in Part 1 are missing or can not be shared.

Discussion

Slides are available online so of the presentation that kicked off the meeting:

<<http://fingerprint.nist.gov/standard/xml/IntroPresentationY080426.pdf>>.

This was followed immediately by discussion.

The options initially presented included:

- 1 – Part 2 is an XML version of Part 1
- 2 – Part 2 differs from Part 1 by removing Record Type-1
- 3 – Part 2 differs from Part 1 by making Part 1 requirements optional, such as Type-1 records and mandatory fields
- 4 – Multiple levels of conformance
- 5 – If meta-data not needed, use ANSI INCITS and/or ISO/IEC standards for exchanging data

TSC and DHS-OCIO asked for a relaxation of the requirements of the Type-1 record because the data may be redundant, classified, or missing for their applications. They further argued that some of the mandatory data in Type-1 records should not be part of the biometric payload and will be included in header information in another layer. TSC also asked that the date and source fields in the Type-10 record be made optional because the data might be missing or classified.

FBI, state and local law enforcement representatives (e.g. Texas, Florida), and DoD argued that there are greater than 10,000 U.S. legacy systems that would be hurt by a change that abandoned the one-to-one correspondence to Part 1 and that the data in Type-1 records is necessary information that is part of the payload data and not just header data for transmitting records. Further the FBI argued that missing data is a problem for them, too, and that they have ways of dealing with that. The XML Work Group Chair from WI

DOJ pointed out that the ANSI/NIST standard provides a format for the interchange of data and should not be viewed as a standard simply for biometric content.

After some discussion in the morning, two conclusions were made:

- (1) Options 2 and 5 were not supported by any of the canvasees and
- (2) The legacy users of the standard must have at a minimum a conformance clause that requires one-to-one correspondence with Part 1.

The group was asked the following: given the need for a conformance clause for one-to-one correspondence with Part 1, would you allow for one or more alternative conformance levels? In order to answer that question, the group wanted to know what the alternative conformance level would look like. So the comments regarding the change in scope were reviewed, and the following conclusions were made:

- (1) The draft standard will be augmented so that every record type has a unique name so that the type of data contained within each tag will be immediately recognized. (Action Item 1)
- (2) The XML standard could offer some sort of guidance on how to handle mandatory fields when data is missing (regardless of conformance level). The Type-10 date field/element is an example of the type of field/element that could use this guidance. (Action Item 2)¹
- (3) The requirements of the Type-1 record are then the only real sticking point for those looking for an alternative conformance level.
- (4) DHS withdrew comment 15 regarding scenarios when fingerprint resolution is unknown.
- (5) TSC withdrew comment 20 regarding MIME.

So the following options were produced, discussed, and voted on:

Options:

- A. Option 1 from above where Part 2 is an XML version of Part 1
- B. Option 1 from above (Part 2=1) but nullability guidance is included for all mandatory fields. (This option has only one conformance level, the same as presented in the March 2008 draft.)
- C. Option 4 from above with an additional alternate conformance clause where Type-1 is optional. (This option has two conformance clauses.)
- D. Option 4 from above with an additional alternate conformance clause where nullability guidance is offered on all mandatory fields in the Type-1 record. (This option has two conformance clauses.) The alternative conformance clause would include the following text:
“Some or all of the mandatory elements in the Type-1 record may be nilled by mutual agreement of the sender and receiver.”

¹ At a minimum, guidance can be made available for 10.004 (Capture Organization) and 10.005(Date). CJIS may look into other date fields, e.g. Type-13.

Conclusions

The consensus of those present was to go with Option D, i.e. have two conformance levels in the standard – (1) the stricter conformance level that is currently in the draft standard and (2) an alternative level allowing for 'nullability' (or options for null entries) of mandatory fields in the Type-1 record (while still requiring the Type-1 record). Two objections were voiced by Patrice Yuh at the FBI and Mike McCabe at IDTP who preferred Option A (or 1) – that Part 2 be balloted with one-to-one correspondence with Part 1 (ie one conformance clause only, with no change from the March 08 draft).

Two other changes to the draft were also agreed upon, as noted above: (1) every record type will have a unique name, and (2) some guidance may be offered or cited on how to handle some mandatory fields when data is missing (regardless of conformance level).

The meeting was adjourned by 4:30 pm.

The meeting was followed-up with an email to canvasees requesting their feedback on the consensus reached at the end of the meeting since those present at the end of the day on May 8th were a small subset of the voting body.