

ANSI/NIST XML
Post-March 08 Draft
Meeting

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Scope of A/N XML Part 2

- Discussed at Workshops in April and December 2005 and September 2007
 - Agreed to making Part 2 an XML version of Part 1
 - Part 1 is not open for amendments
 - Agreed to proposed structure by XML Work Group Chair (Gerry Coleman), utilizing NIEM ansi-nist namespace proposed by NIEM A/N Liaison (Patrice Yuh)

Expanded Use of NIST Standard

- Standard created originally for law enforcement purposes and used chiefly for law enforcement
- A/N-I 1-2007 reflected expanding role of the NIST standard to exchange biometric data
- Today, comments from the Department of Homeland Security (DHS) and the Terrorist Screening Center (TSC) request changes for their needs to exchange biometric data

Summary of DHS comments from DHS-OCIO 3

- “The paradigm created here is that the Part 1 identifies certain logical requirements and the Part 2 is simply the XML-ization of that exact same set of requirements. This approach is probably the cleanest approach in terms of honouring consistency between the different parts of the standard,”
- “...but there should be a case made that XML-zing Part 1 in-and-of-itself does not deliver significant value to the existing or future user base.”
 - “The value of Part 2 is also enabling the future user base to move toward a modern messaging framework that is not entangled with the legacy design of Part 1.”
 - “...should be likened to the move between EDI and XML.”
 - “...decouple data from the envelope/message, transaction and command layers of the stack.”

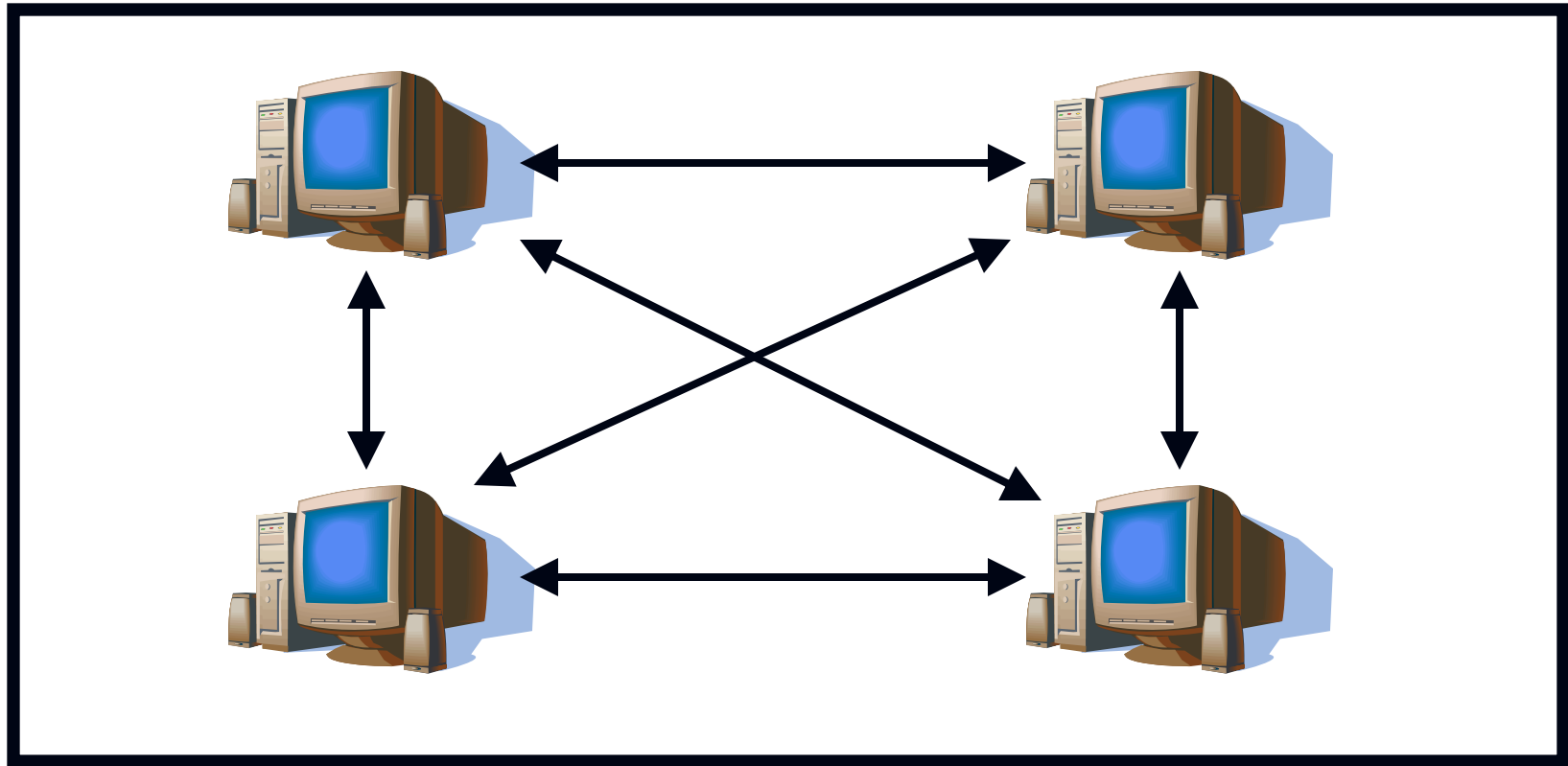
202.3 Conformance (1 of 3)

Systems claiming conformance with this standard shall implement the transmitting and/or receiving of record types as defined by this standard. Systems claiming conformance are not required to implement every record type specified herein. **At a minimum, they must be capable of transmitting and receiving Type-1 records.** However, in order for a transaction to be meaningful, there must be at least one additional type of record included. The implementer must document the record types supported in terms of transmitting and/or receiving. Those record types not implemented shall be ignored by the conforming system receiving a transaction.

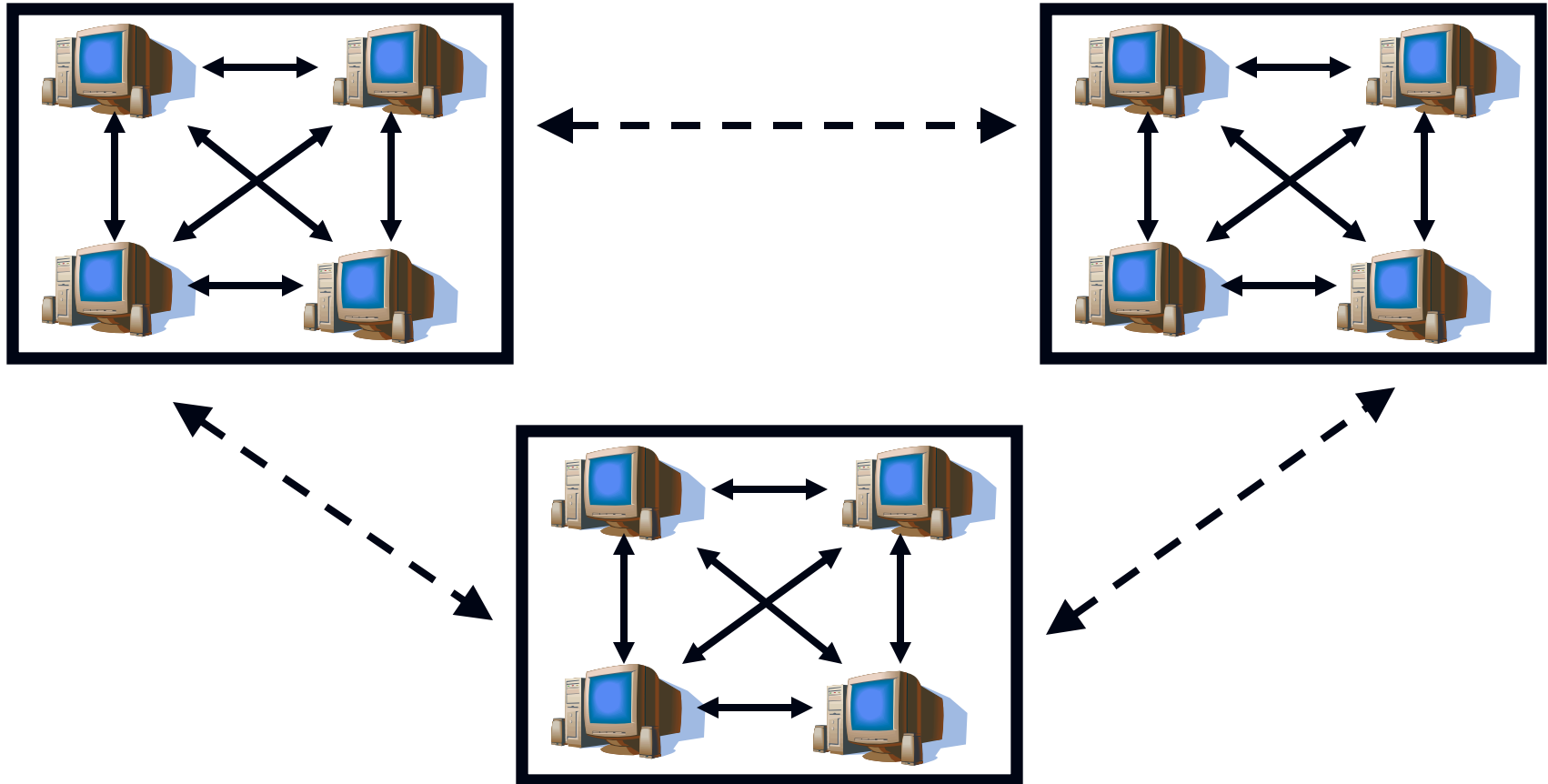
202.3 Conformance (2 of 3)

Implementers are expected to extend this standard by supplying substitution elements for the abstract elements <itl:UserDefinedFields>, <itl:RecordImage>, <itl:RecordMinutiae>, <itl:DomainDefinedDescriptiveText>, and/or <itl:OtherDescriptiveText>. The substitution elements must be created in a separate user-declared namespace. The content of the substitution elements must be well-formed XML and should follow NIEM rules for extending the National Information Exchange Model. Implementers may modify the xmlns: and import attributes to reference user-defined namespaces and extension schema. The minOccurs and maxOccurs attributes in the ITL constraint schema version of ansi-nist.xsd may be modified to facilitate use of NIEM ansi-nist elements in user-defined blocks.

Internal Data Exchange



Internal v. External Data Exchange



Options

- 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

Options

- 1 – Part 2 is an XML version of Part 1
 - Pro: Assists a large number of legacy users of the NIST standard convert between formats
 - Con: Creates some extra overhead for new and future users of the XML version of the NIST standard
 - But users such as DHS & TSC will still be able to use the standard with some redundancy and use of bogus data where meta-data is missing or classified
 - Comment sections can also be used to explain this

Options

2 – Part 2 differs from Part 1 by removing Record Type-1

- Pro: Efficient design – Data is redundant for some new users' applications where biometric data is part of larger package
- Con: Problematic for Part 1 conversion and users who are using both formats

Options

- 3 – Part 2 differs from Part 1 by making Part 1 requirements optional, such as Type-1 records and mandatory fields
 - Pro: More flexible for different users needs
 - Users such as FBI can more heavily rely on their profile (e.g. EBTS) to make optional A/N XML fields or Type-1 mandatory
 - Con: Lack of interoperability – May be problematic if users conforming to different profiles wish to exchange data
 - May decide to make all or some mandatory fields optional

Options

- 4 – Multiple levels of conformance
 - Pro: More flexible for different users needs
 - Users such as FBI can specify in their profile (e.g. EBTS) which level of conformance is required
 - Con: Lack of interoperability – May be problematic if users conforming to different levels wish to exchange data
 - Could address different levels of conformance in a separate document

Options

- 5 – If meta-data not needed, use ANSI INCITS and/or ISO/IEC standards for exchanging data
 - Pro: Fits needs of some users while not making changes that negatively impact legacy users of the NIST standard
 - Con: Lack of interoperability –May be problematic if users of different standards wish to exchange data

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