

Editor's Note

Welcome to your NIEM newsletter. The purpose of this newsletter is to enable Domain members to be situationally aware of the latest features and related news of the Biometrics Domain, as well as enhance the need to exchange intelligence and share information across the Domains. Domain members represent the full range of operations that deal with the gathering, analysis, fusion, and dissemination of biometrics intelligence. NIEM Newsreaders represent a broad audience of decision makers, stakeholders, practitioners, and users of the NIEM Biometric Domain. This newsletter offers an overview of notable changes and work currently being done in the Biometrics domain. This issue will specifically cover topics that include the NIEM 4.1 Release, the Current NTAC Activities, Information Exchange Package Definition (IEPD) Registry Interview and the DHS's DNA Store, Match, and Share Prototype.



About the NIEM Biometrics Domain:

The NIEM Biometrics domain supports information sharing and promotes interoperability between mission-based organizations engaged in activities such as homeland security, national defense, border management, immigration benefits and global law enforcement through the joint development and alignment of XML Biometric Standards. The NIEM Biometrics domain was launched in July 2012 under the stewardship of the Office of Biometric Identity Management (OBIM) within the Department of Homeland Security (DHS) National Protection and Programs Directorate (NPPD).

About the NIEM 4.1 Release:

NIEM 4.1 is a minor release and incorporates updates to domains, including Biometrics, Emergency Management, Human Services, Justice, and Military Operations with Core Supplement 4.0.1 to address Core-related issues before the next major release. As of 08/01/2018, NIEM version 4.1 is available at <http://niem.github.io/niem-releases/>.

Q3/Q4 2018 issue

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The Biometrics domain operates under the oversight of its executive committee, which includes:

Chair: John Boyd (OBIM)
Co-Chair: Justin Smith (DOJ/FBI)
Co-Chair: William Graves (DoD)

NBAC & NTAC

NIEM has two Committees, NTAC (NIEM Technical Architecture Committee) and NBAC (NIEM Business Architecture Committee). While NBAC membership is representative of all participating NIEM domains, NTAC is representative of smaller population of technical experts consisting of approximately 8-20 voting members. Current NTAC Activities are listed on

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**Biometric Domain
Release 4.1:
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Biometric Domain Release 4.1

NIEM version 4.1 and its associated products are now available for download and use at <http://niem.github.io/niem-releases/>. Products include NIEM XML Schema Definition (XSD), Excel spreadsheet of all data components of the model. This release is the latest version of the NIEM common vocabulary that enables efficient information exchange across diverse public and private organizations. NIEM 4.1 incorporates content identified since NIEM 4.0 was released in July 2017. The NIEM PMO, NBAC, and the NTAC collaborated closely with community subject matter experts to develop, review, and enhance reusable content in the model for this release. The NIEM release cycle allows the PMO to make NIEM model updates on a predictable and sustainable schedule that best meets NIEM users' evolving needs. As those needs evolve, NIEM allows for flexibility and growth. The changes involved in NIEM 4.1 will continue to advance information exchange across all levels of government and various organizations. Contact us at for any assistance, questions, comments, or suggestions at <https://www.niem.gov/contact-us>.

Current NTAC Activities:

NTAC is currently hard at work on below items.

NIEM Model Viewer:

NIEM model viewer is accessible at <https://niem.github.io/model/> to browse name spaces and specific model content. NTAC is requesting for community feedback via github to improve the functionality and usability. The JSON component is still under development.

Javascript Object Notation (JSON):

NIEM and JSON information is available at <http://niem.github.io/json/> to provide an easy introduction to the purpose of NIEM, the reasons to use NIEM with JSON data, and the developer knowledge needed to put NIEM JSON into practice. The NTAC is requesting community feedback via github.

NIEM MPD:

The NIEM Model Package Description (MPD) Specification is being updated and will be a priority discussion topic at the upcoming NTAC F2F. The NTAC is requesting community recommendations to improve the clarity and usability of the MPD specification.

NIEM 5.0:

The NTAC is starting to look at NIEM 5.0 requirements to improve NIEM adoption and implementation including support for structured and unstructured content combined.

Domain SME's:

The NTAC is seeking domain subject matter experts to support their internal technical efforts. NTAC requests that domain leads send in any interested candidates from your domain to Webb.Roberts@gttri.gatech.edu for NTAC membership consideration.

NIEM Best Practices:

NTAC is developing NIEM best practices for systems implementing IEPDs with conflicting type definitions. This topic was originated at a North Atlantic Treaty Organization (NATO) XML Naming and Design Rules (NDR) meeting. NIEM provides guidance for implementers at <http://niem.github.io/training/iepd-implementer/>.

IEPD Registry Interview:

NBAC is currently doing stakeholder interviews to understand usage of the IEP Registry. NIEM stakeholder feedback is essential for determining the IEPD Registry in advance and requested participants provide answers to the interview questions. The goal is to have community consensus and support for the IEPD Registry solution at the upcoming Face To Face (F2F). Mr. O'Connell from NBAC Support, will also contact domain representatives for their guidance and input.

Sample Questionnaire:

- Are there benefits to having a NIEM IEPD Registry? Why or why not?
- Will you advocate for and champion the use of a NIEM IEPD Registry?
- Are you aware of any IEPD registries?
- Should there be other IEPD Registry choices?
- Should credentialing be required to control user access the IEPD Registry?
- Should the NBAC Co-Chairs be responsible for approving IEPD Registry content before postings?
- Are the IEPD Registry metadata fields sufficient to provide meaningful search results?
- Do you have recommendations to change (add/modify/delete) the required metadata fields? Why?
- Do you have a recommendation on where to host the IEPD Registry? (e.g. niem.gov, GitHub, APAN, etc.)
- Do you know why none of the previous registries are still being maintained.
- Do you have any other comments or suggestions?
- Are you aware of any IEPD Registries including:
<https://tools.niem.gov/niemtools/iepd/index.iepd>, <https://it.ojp.gov/NISS/>, <https://www.apan.org>, <http://niem.github.io>.

FYI: Upcoming Face To Face Meetings:

The NIEM NBAC F2F is scheduled for October 29th – 30th. Domain Stewards and Community Adopters will update the NIEM community on their achievements, best practices and recommendations and participate in strategic planning to identify priority NIEM 2019 work activities.

NIEM Project Management Office (PMO) F2F is scheduled for October 31st. Senior leadership will update the NIEM community on transitioning management responsibilities from DHS to DoD and announce the Best of NIEM 2018 award winners.

NTAC F2F is slated for Nov. 1st - 2nd. Enterprise Architects and Implementers will review the state of NIEM technical specifications and formulate necessary changes to the NIEM Technical Architecture. Per NTAC, NIEM JSON guidance is finished as a proof of concept technical specification with high level guidance. NTAC is drafting the NIEM JSON content for the NIEM MPD technical specification to incorporate JSON data as a legitimate NIEM format. The NTAC will provide an update during this F2F meeting. The NTAC is developing a browsable version of NIEM content on niem.github.io where each NIEM component (type, property, definition, etc.) will have a web page to view comprehensive NIEM model content. There will be additional NIEM JSON information to support technical data model viewing.

NIEM Training Update:

New Online Web NIEM Training Site:

New NIEM training has replaced the historical PowerPoint slides with web content is at <https://niem.github.io/training/>. The training and reference sections are also available for community review at the GitHub home page <https://niem.github.io/training/>. The training material has been updated from NIEM 3.0 to 4.0 and fills in some information gaps. The intent is to make finding NIEM resources easier according to a user's role: Domain Modeler, Information Exchange Package Documentation (IEPD) Developer, and IEPD Implementer.

Domain Modeler content includes reference information about NIEM such as the model, IEPDs, tools, specifications, NIEM Domain Onboarding Process on niem.gov and information on Domain Governance committees and domain content management. IEPD Developer content includes IEPD Life Cycle, IEPD Starter Kit and IEPD Resources for IEPD developers on TechHub. IEPD Implementer content includes a catalog of techniques and methods that help implement NIEM, IEPD Resources for developers on TechHub and Model Artifacts that make up NIEM releases and IEPDs.

FYI: OData (Open Data Protocol)

An International Standards Organization (ISO)/International Electrotechnical Commission (IEC) approved, Organization for the advancement of Structured Information Standards (OASIS) standard that defines a set of best practices for building and consuming RESTful APIs. <https://www.odata.org/>. OData helps you focus on your business logic while building RESTful APIs without having to worry about the various approaches to define request and response headers, HTTP methods, URL conventions, media types, payload formats, query options, etc. NTAC is analyzing the feasibility of OData as a standard that should be supported by NIEM Community.

DNA Store, Match, and Share Prototype:

DHS OBIM is working to expand DNA information functionality that advances both NIEM Biometrics domain content and their Futures Identity Tiger Team objectives. DNA information is especially important for border protection and keeping families together. The Rapid DNA prototype is hosted on Amazon Web Services (AWS) and supports business use cases. The plan is to transition to Government Cloud this fall and push the DNA common data model to NIEM GitHub.

The capabilities deployed will result in:

- Timely access to all relevant information on an individual due to the structure and use of person-centric data. Stakeholders will have more information with which to make decisions regarding admissibility, visa issuance, and appropriate law enforcement actions.
- User-friendly system interface enabling stakeholders to use common Web service functions and IT tools to access OBIM system services and data at a lower cost. This will reduce the need to develop more expensive custom system-to-system interfaces.
- OBIM stakeholders fully realizing the benefit of improved accuracy made possible by using additional multimodal biometrics and fusion.

Start your exchange development here:

- <https://niem.github.io/iepd-starter-kit>

Upcoming NBAC Monthly Teleconferences:

- **November 29th, 1:00pm to 2:00pm**
- **December 27th, 1:00pm to 2:00pm**