

Semantics WG Weekly Meeting

1 December 2020

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Agenda

- 1. Welcome (Paul—2.5 mins) >
- 2. Newcomer Introductions (Paul—2.5 mins) >
- 3. Proposal for a new Privacy & Risk Task Force (Jan—15 mins) >
- 4. Digital resource identifiers white paper (Carly—10 mins) >
- 5. Overlays 101: Review of current and future overlay types (Robert—20 mins) >
- 6. Logistics and miscellaneous (Paul—5 mins) >
 - a. News from the Operations Team >
 - b. Leadership positions >
 - c. Meeting schedule



Newcomer Introductions (30 seconds!)

- 1. Name
- 2. Location / time zone
- 3. Affiliation(s)
- 4. One-sentence summary of your interest in Semantics (or one particular semantics-related issue you personally want to see solved)

Task Force/Focus Group Updates (5 mins)

- Imaging TF (Scott)
- Medical Information TF (Scott)
- ✓ OCA-FHIR FG (John/Mukund)
- Notice & Consent TF (Mark)

Proposal for a new Privacy & Risk Task Force (15 mins)

Convener: J.Lindquist

https://docs.google.com/document/d/1BRirVhztyyII0djzS96GLntfJQZH2W28CSaXGmApNQU/edit#

Proposal: Privacy & Risk TF

Privacy & Risk TF

Overview

The Semantics Domain Working Group (SDWG) continues to define a data capture architecture consisting of immutable schema bases and interoperable overlays for Internet-scale deployment. The work being covered by the SDWG relates to all aspects of data harmonisation and data capture. This also includes the integration of all work being undertaken by the various Task Forces (TFs) and Focus Groups (FGs) housed under the SDWG, including the consent notice for purpose and jurisdictional privacy regulation work being undertaken by the Notice & Consent TF (NCTF). The assessment and risk analysis associated with data capture, data storage, data access and data sharing is not currently covered by any of the other TFs or FGs. The purpose of the Privacy & Risk Task Force (PRTF) is to bring recommendations on how OCA objects and other components can enhance necessary safety measures for privacy-friendly data usage.

Here is a quote to bring context to the proposed work of the PRTF from the recently published "Regulation of the European Parliament and of the Council on European data governance (Data Governance Act)":

"There are techniques enabling privacy-friendly analyses on database that contain personal data, such as anonymisation, pseudonymisation, differential privacy, generalisation, or suppression and randomisation."

NIST 800-122: Guide to Protecting the Confidentiality of Personally Identifiable Information (PII)



Special Publication 800-122

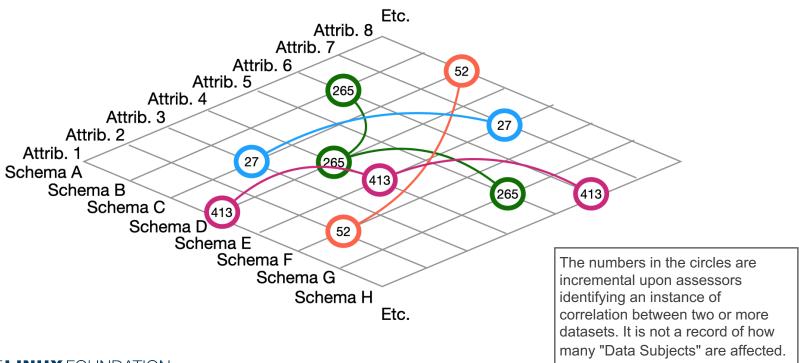
National Institute of Standards and Technology U.S. Department of Commerce

Guide to Protecting the Confidentiality of Personally Identifiable Information (PII)

Recommendations of the National Institute of Standards and Technology

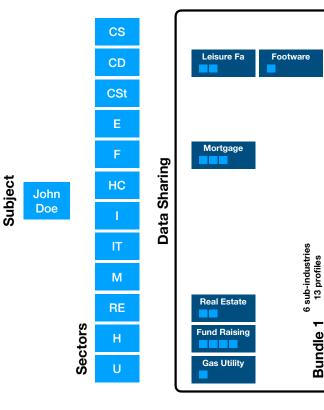
Building an *Identity Correlation Bitmap*

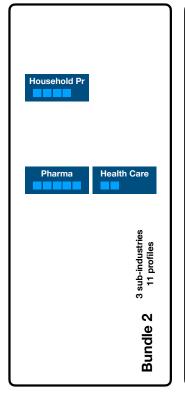
The creation of a dynamic bitmap that constantly evolves each time an assessor identifies a correlation risk between attributes that could potentially unblind the identity of a governing entity. The numbers in the circles are incremental upon assessors identifying an instance of correlation.

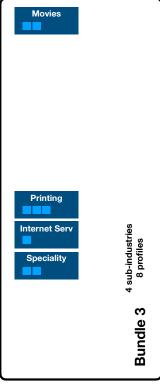




Linking identifiers







A visual on what a linking identifier needs to achieve. In the diagram, there is one subject ('John Doe') with three consented data bundles. Each bundle includes a number of profiles. For each bundle, a linking identifier is needed as a thread to knit the profiles together. One linking identifier per consented bundle.



Digital resource identifiers white paper (10 mins)

Presented by: C.Huitema

https://docs.google.com/document/d/1Qiv-wPD6t6UferE2IJNTUYC1ZeoEBAUznEWOZHt7Zs0/edit

NDRIO: New Digital Research Infrastructure Organization

NDRIO: Call for White Papers on Canada's Future DRI **Ecosystem**

- Madeleine Lemaire October 22, 2020

The New Digital Research Infrastructure Organization (NDRIO) is pleased to announce its first Call for White Papers as part of a nation-wide exercise to assess the needs of Canada's Digital Research Infrastructure (DRI) community.

Leading the Government of Canada's vision for a cohesive national DRI ecosystem, NDRIO is leveraging the extensive advanced computing infrastructure to transform how research data and its associated research software are managed, organized and (re)used across disciplines, while ensuring that Canadian researchers have access to cutting-edge resources and technologies for their research. In keeping with its values of being a researcher-focused, accountable and agile organization, NDRIO is seeking input from the Canadian digital research community to inform its Strategic Plan, a single and unified vision of the highest DRI priorities for 2021-2024.

In order to provide informed service delivery, NDRIO encourages feedback from all researchers and research organizations across Canada, especially those in disciplines, geographical regions, or minority groups that has been traditionally under-represented in the Canadian DRI ecosystem.

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Ref.: https://engagedri.ca/#

Digital resource identifiers white paper

Deadline for submissions is on 17:00 PST December 14, 2020. (NOTE CHANGED)

Call: https://engagedri.ca/ndrio-call-for-white-papers-on-canadas-future-dri-ecosystem/

Goals: Convince NDRIO to implement Digital Resource Identifiers, socialize the identifiers, introduce ToIP.

Document goals:

- Easily readable
- Presents opportunity without diving into technical details
- Include a cut-and-pastable action section (list?) for NDRIO
 - Actionable in next few years
- Emphasize alignment with any existing standards

(background music: https://www.youtube.com/watch?v=BHrQNVTcdPg. Too early or screw it, it's 2020? - CH:-)

The opportunities of Digital Resource Identifiers in the research landscape

Authors: Carly Huitema (Manager, WCMR, University of Waterloo and ToIP), please add names and affiliations

Ref.: https://docs.google.com/document/d/1Qiv-wPD6t6UferE2IJNTUYC1ZeoEBAUznEWOZHt7Zs0/edit

Overlays 101: Review of current and future overlay types (20 mins)

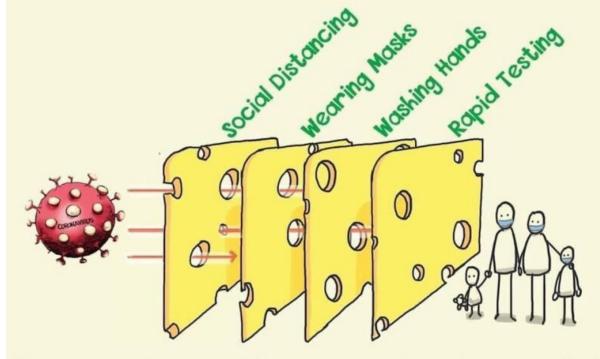
Presented by: R.Mitwicki

https://humancolossus.foundation/blog/cjzegoi58xgpfzwxyrqlroy48dihwz

What is an Overlay?

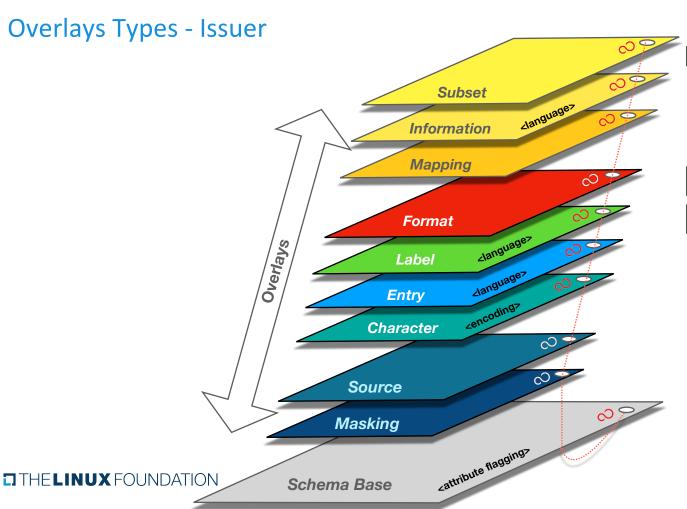
A linked object that provides an extra layer of contextual and/or conditional information to a Schema Base. This extra context can be used by an issuer to transform how information is displayed to a viewer or to guide a verifier or holder in how to apply a custom process to schema data.

The Swiss Cheese Model



All layers are important because each layer is not perfect.

Created with sketchplanations.com



A Subset Overlay is used to create a schema subset.

An **Information Overlay** is used to add instructional, informational or legal prose to assist the data entry process.

A **Mapping Overlay** is used to map schema attributes to internal system identifiers.

A Format Overlay is used to add formats to schema attributes (incl. field lengths).

A Label Overlay is used to add labels to schema attributes (incl. category labels).

An **Entry Overlay** is used to add predefined field values to schema attributes.

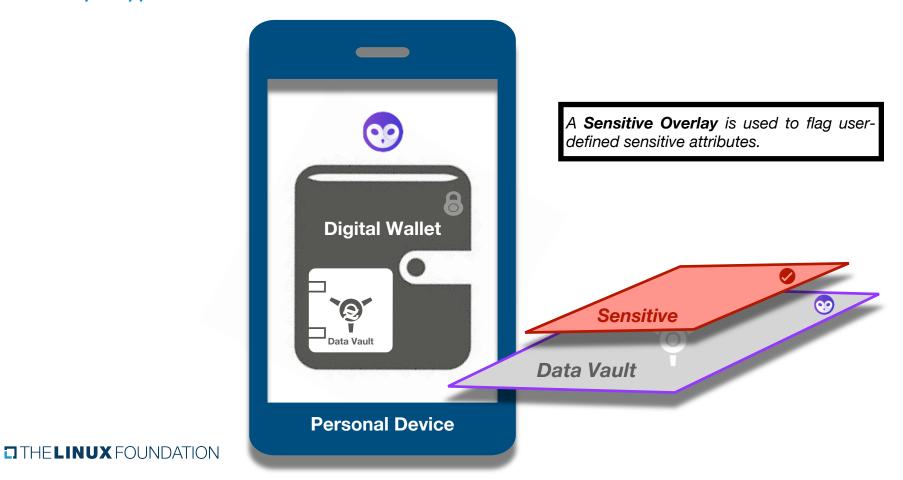
A **Character Overlay** is used to define character set encoding (e.g. UTF-8, ISO-8859-1, Windows-1251, Base58Check, etc.).

A **Source Overlay** is used to specify endpoints where dynamic data or linked attachments can be located.

A **Masking Overlay** is used to add data masks to schema attributes that have been flagged in the Schema Base.

A stable base object that defines a single set of data in its purest form thus providing a standard base from which to decentralize data. A **Schema Base** facilitates a "Blinding" schema object which allows the issuer to flag attributes that could potentially unblind the identity of a governing entity.

Overlays Types - Holder



Logistics and miscellaneous (5 mins)

https://wiki.trustoverip.org/display/HOME/2020-12-01+Weekly+Meeting

News from the Operations Team

Nick Hayfack

(Semantics WG representative on the ToIP Operations Team)

The purpose of the Operations Team is to create a small group of ToIP members who will share information on the workplans of our WGs, help ensure that draft deliverables are advancing as intended through the stages of the ToIP workflow, resolve any bottlenecking that arise around decision-making/approvals and discuss issues such as (for example) introducing firmer parameters for the creation of Taskforces under all WGs.

The Operations Team will not be directing or otherwise interfering with the development of content and deliverables in the WGs themselves.



Leadership positions

- Semantics WG Chair
 - Paul Knowles (Human Colossus Foundation)
- Semantics WG Vice-chair
 - John Wunderlich (JLINC Labs)
- Operations Team Group Representative
 - Nick Nayfack (Team Ikigai)
- We can periodically rotate chairs as needed
- Volunteer via the meeting page at ...
 - https://wiki.trustoverip.org/display/HOME/2020-12-01+Weekly+Meeting



Meeting schedule

- OCA-FHIR FG bi-weekly meeting
 - > Thursday, **December 3rd** @ 08:00 US PT / 17.00 CET
 - Zoom link: https://zoom.us/j/93406719136?pwd=SUozZHBQM0N5TUhYMHJqL0ZQM3l3Zz09
- Semantics Domain WG weekly meeting
 - > Tuesday, **December 8th** @ 09:00 US PT / 18.00 CET
 - > Zoom link: https://zoom.us/j/93406719136?pwd=SUozZHBQM0N5TUhYMHJqL0ZQM3I3Zz
- Notice & Consent TF bi-weekly meeting
 - Thursday, December 10th @ 08:30 US PT / 17.30 CET
 - Zoom link: https://zoom.us/j/92346573961?pwd=RmZHNnQxS2lya3NCMHZTVXYra3Rrdz09





Closing Q & A

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