

2020-11-24 Meeting

Send an email to semantic-domain-wg@lists.trustoverip.org to request a calendar invite (you can subscribe to the mailing list at lists.trustoverip.org).

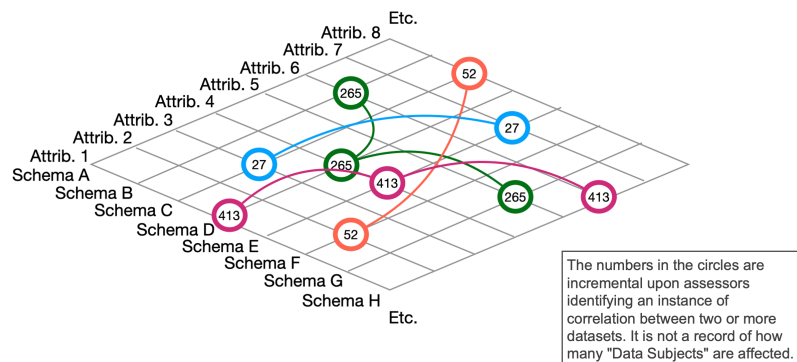
Agenda

Guiding Goal: Mitigating correlation attacks which might unblind the identity of a governing entity.

- Welcome (Paul—2.5 mins)
- Newcomer Introductions (WG—2.5 mins)
- Task Force Updates (WG, 5 mins)
 - [Imaging TF](#) (Scott)
 - [Medical Information TF](#) (Scott)
 - [OCA-FHIR FG](#) (John)
 - The OCA-FHIR FG are WIP with the Base Schema transformation and addressing the rich schema processing per the examples from last week.
 - Investigating and documenting a potential RFC. Hope to have something to share with the SDWG next week.
 - Meetings: Switching to bi-weekly every other Thursday at 08:00am PT. The next meeting will be Thursday, December 3rd.
- This will allow team members to attend the Notice and Consent bi-weekly meetings in the off weeks.
- [Notice & Consent TF](#) (Mark)
- Update: Industry Sector Classification at ToIP (Paul—10 mins)
 - Direct relationship between the stacks
 - Industry Sector Classification
 - Ref.: <https://wiki.trustoverip.org/display/HOME/Industry+Sector+Classification>
 - To be discussed in the next Steering Committee meeting on Wednesday, December 9th.
- Identity Correlation Bitmap: An object for mitigating against attribute correlation patterns (Paul—35 mins)
 - What is Personally Identifiable Information?
 - Ref.: <https://www.csoonline.com/article/3215864/how-to-protect-personally-identifiable-information-pii-under-gdpr.html>
 - NIST 800-122: Guide to Protecting the Confidentiality of Personally Identifiable Information (PII)
 - Ref.: <https://nvlpubs.nist.gov/nistpubs/Legacy/SP/nistspecialpublication800-122.pdf>
 - Blinding Identity Taxonomy (BIT)
 - Ref.: <https://kantarainitiative.org/download/blinding-identity-taxonomy-pdf/>
 - Blinding attributes in a schema base
 - Mitigation against privacy attacks
 - Attribute-correlation attacks
 - Inference attacks
 - Ref.: <https://www.ijert.org/privacy-preserving-and-information-security-forensics-brokering>
 - *Identity Correlation Bitmap*: Preparing a Schema Base
 - Building an *Identity Correlation Bitmap*

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.



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Correlation coefficients

- Ref.: <https://www.statisticshowto.com/probability-and-statistics/correlation-coefficient-formula/>
- Posted by [John Wunderlich](#) ...

Technique name	Data truthfulness at record level	Applicable to types of values	Applicable to types of attributes	Reduces the risk of		
				Singling out	Linking	Inference
<i>Permutation</i>	No	All	Identifying attributes	Partially	Partially	Partially
<i>Micro aggregation</i>	No	Continuous	Indirect identifiers, and all attributes	No	Partially	Partially
<i>Differential privacy</i>	No	All	Identifying attributes	Yes	Yes	Partially
<i>K-anonymity</i>	Yes ^b	All	Quasi identifiers	Yes	Partially	No
^a If the data principal record is not included in the sample.						
^b Unless <i>K</i> -anonymity is implemented using microaggregation.						
N/A Not applicable.						

- How to measure risk or "impact level" on an individual? (Jan Lindquist to discuss)
 - Paul Knowles has reached out to Jim St.Clair to see if the tech team can get hold of ISO/IEC 20889:2018 for development purposes.
- Logistics and miscellaneous (Paul—5 mins)
 - News from the Operations Team
 - Nick Nayfack (Group representative)
 - Leadership positions
 - Paul Knowles (Chair) / John Wunderlich (Vice-chair)
 - Meeting schedule
 - Notice & Consent TF bi-weekly meeting
 - Thursday, November 26th @ 08:30 US PT / 17.30 CET
 - Zoom link: <https://zoom.us/j/92346573961?pwd=RmZHNnQxS2lya3NCMHZTVXYra3Rrdz09>
 - Semantics Domain WG weekly meeting
 - Tuesday, December 1st @ 09:00 US PT / 18.00 CET
 - Zoom link: <https://zoom.us/j/93406719136?pwd=SUozZHBQM0N5TUhYMHJqL0ZQM3I3Zz>
 - OCA-FHIR FG bi-weekly meeting
 - Thursday, December 3rd @ 08:00 US PT / 17.00 CET
 - Zoom link: <https://zoom.us/j/93406719136?pwd=SUozZHBQM0N5TUhYMHJqL0ZQM3I3Zz09>

Meeting Notes

Recording

Participants (Name / Location / Time zone / Affiliation):

- Paul Knowles / Basel, Switzerland / CET / Human Colossus Foundation
- Robert Mitwicki / Graz, Austria / CET / Human Colossus Foundation
- Jan Lindquist / Stockholm, Sweden / EST / Linaltec
- John Wunderlich / Toronto, Canada / EST / JLINC Labs
- Philippe Page / Geneva, Switzerland / CET / Human Colossus Foundation
- Andre Kudra / Frankfurt, Germany / CET / esatus
- Burak Serdar / Denver, CO, USA / MST / Cloud Privacy Labs
- John Walker / Bay Area, CA, USA / PST / SemanticClarity, CCI
- Ken Adler / Oakland, CA, USA / PST / ThoughtWorks
- Mukundan Parthasarathy / Bay Area, USA / PDT / SemanticClarity
- Philippe Métais / Paris, France / CET / evidence.fyi
- Salvatore D'Agostino / Boston, MA, USA / EST / Open Consent Group
- Scott Whitmire / Scottsdale, AZ, USA / MST / Mayo Clinic
- Steven Milstein / Montreal, Canada / EST / Colab Ventures
- Subra Subramaniam / Bay Area, CA, USA / PST / CyberKnowledge
- Wenjing Chu / Bay Area, USA / PDT / Futurewei Technologies
- Carly Huitema / Kitchener, Canada / EDT / University of Guelph, Waterloo Centre of Microbial Research
- David Luchuk / Vancouver, Canada / PDT / Trust over IP Foundation

Leadership positions:

- Semantics WG
 - Chair : Paul Knowles (Human Colossus Foundation)
 - Vice-chair : John Wunderlich (JLINC Labs)
 - Operations Team Group Representative : Nick Nayfack (Team Ikigai)

- Medical Information TF
 - Chair volunteers
 - [Mukundan Parthasarathy](#) (SemanticClarity)
 - [John Walker](#) (SemanticClarity)
 - Vice-chair volunteers
- OCA-FHIR FG
 - Chair volunteers
 - Vice-chair volunteers
- Notice & Consent TF
 - Chair volunteers
 - [Mark Lizar](#) (Open Consent Group)
 - [Salvatore D'Agostino](#) (Open Consent Group)
 - Vice-chair volunteers
- Imaging TF
 - Chair volunteers
 - Vice-chair volunteers



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