

Semantic Domain (ISWG-S)
Weekly Meeting

6 April 2021

Antitrust Policy & Member Participation

- Attendees are reminded to adhere to the meeting agenda and not participate in activities prohibited under antitrust and competition laws.*
- Only members of Trust over IP who have signed the necessary agreements and charters are permitted to participate in this activity beyond an observer role.



^{*} Examples of types of actions that are prohibited at Linux Foundation meetings and in connection with Linux Foundation activities are described in the Linux Foundation Antitrust Policy available at http://www.linuxfoundation.org/antitrust-policy.

Agenda

- 1. Welcome (Paul—2.5 mins) >
- 2. Newcomer Introductions (Paul—2.5 mins) >
- 3. Task Force Updates (WG—5 mins) >
- 4. Proposed OCA attribute name syntax (Paul—10 mins) >
- 5. Update: Good Health Pass WG / Standard Data Models and Elements DG (Paul—10 mins) >
- 6. Update: COVID-19 test, vaccination, and recovery reports and certificates (Paul—10 mins) >
- 7. Update: MMM white paper (Neil/Paul—10 mins) >
- 8. 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)

- Medical Information TF (Scott)
- ✓ FHIR FG (John/Mukund)
- Notice & Consent TF (Mark)
- Privacy & Risk TF (Jan)
- Storage & Portability TF (Christoph)



Proposed OCA attribute name syntax (10 mins)

Presented by: P.Knowles

Zoom discussion from Inputs Domain call on March 31 ... https://zoom.us/rec/share/8htYxWiH8egmuozRacu6uNqr-zuJyq9lEu8xluw6Z7m3wV7k KJ--jUi6T3cgRpB.P6bxKa18cv72m-Ne

Proposed OCA attribute name syntax



Zoom discussion from Inputs call on March 31st: https://zoom.us/rec/share/8htYxWiH8egmuozRacu6uNqr-zuJyg9lEu8xluw6Z7m3wV7k KJ--jUi6T3cgRpB.P6bxKa18cv72m-Ne

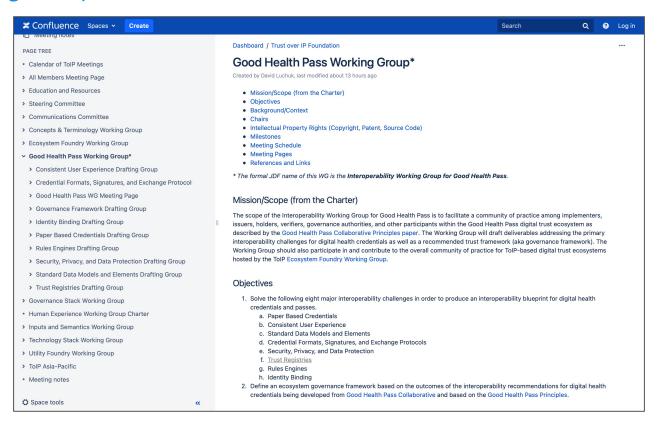


Update: Good Health Pass WG / Standard Data Models and Elements DG (10 mins)

Presented by: P.Knowles

Ref.: https://wiki.trustoverip.org/pages/viewpage.action?pageId=73790

New Working Group: Good Health Pass WG



New Working Group: Good Health Pass WG

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---- Good Health Pass WG
----- Data Principles + Framing Narrative DG
----- Consistent User Experience DG
----- Paper-Based Credentials DG
----- Standard Data Models and Elements DG (Semantic Domain Group (ISWG-S) / #iswg-health-care-tf / #iswg-fhir-fg)
----- Credential Formats, Signatures, and Exchange Protocols DG (#iswg-storage-and-portability-tf)
----- Security, Privacy, and Data Protection DG (#iswg-privacy-and-risk-tf)
----- Trust Registries DG
----- Rules Engines DG (#iswg-notice-and-consent-tf)
----- Identity Binding DG (Inputs Domain Group (ISWG-I))
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Update: Good Health Pass WG / Standard Data Models and Elements DG

Standard Data Models and Elements Drafting Group

Created by David Luchuk, last modified by Paul Knowles 22 minutes ago

Objective

Good Health Pass compliant implementations must collect, process, and transmit a standard set of data elements.

Terms of Reference

As with passports and payment cards, fully interoperable digital health pass systems need a common data model, specifying standard data elements and supported by specific data schemas in specific implementations. Work in this area is currently ongoing across several cross-industry efforts.

One such effort is the Linux Foundation Public Health (LFPH) COVID-19 Credentials Initiative (CCI), which has established a task force to develop **schema specifications**, **Codes of Practice**, **technical quidelines**. **JavaScript Object Notation (JSON) code**, and related components. This includes the eHealth Network's Vaccination Proof Interoperability Guidelines.

The CCI task force is also seeking to collaborate with others in this space, including the CDC, the W3C Credentials Community Group, the EU vaccination group, C4 Credentials, IATA, ICAO, public health authorities, private health vendors and consortiums, electronic health record (EHR) providers, the UK National Health Service, pharma companies, major pharmacy chains (US), the FHIR Focus Group at the Toll Foundation, and the Vaccination Credentials Initiative (VCI).

One example of a data model that enables efficient information exchange across diverse public and private organizations is the U.S. National Information Exchange Model (NIEM), NIEM provides rules and methodologies around the use of the model as well as a standardized Information Exchange Development Lifecycle that can be reused by everyone. NIEM also offers governance, training, tools, technical assistance, and an engaged community to support users and organizations in adopting NIEM.

To emphasize, this is just one example of the kind of approach that the Good Health Pass Collaborative could take to accommodate data requirements of different countries and jurisdictions around the world.

Responsibilities and Deliverables

Key Interoperability Questions (from GHPC Blueprint Outline v2)

- 1. What are the minimal required elements for Good Health Pass schemas?
- 2. What are the optional, country-specific elements for Good Health Pass schemas?
- 3. Is there a data model that will enable both interoperability and adaptability of data elements to different implementations, jurisdictions, and governance authorities?
- 4. How does the data model support identity binding (e.g., describing levels of assurance)? (See Challenge #8)

Chairs/Conveners

- . Co-Chair: Brian Plew (Thermo Fisher)
- . Co-Chair: Paul Knowles (Human Colossus Foundation)
- Project Manager: Rebecca Distler (ID2020)

Meeting every Tuesday 12 PM PT / 9 PM CET



https://wiki.trustoverip.org/display/HOME/Standard+Data+Models+and+Elements+Drafting+Group

COVID-19 Test Report

Schema Base [SB]	SB: Description	SB: Classification	SB: Attribute Name	SB: Attribute Type	SB: Blinding Identity	Format Overlay	Label Overlay	Label Overlay	Label Overlay
							en-GB	de-DE	fr-FR
COVID-19 Test Report	A schema to be used for COVID-19	GICS:35102020	testEvent	Text			Personal/Operational Test event ID	Persönliche/betriebliche Testereignis-ID	Personnel/Opérationne
	test reporting for basic interoperability								
COVID-19 Test Report	A schema to be used for COVID-19	GICS:35102020	linkedTestEvent	Text			Personal/Operational Linked test event ID	Persönliche/betriebliche Verknüpfte	Personnel/Opérationne
	test reporting for basic interoperability							Testereignis-ID	test lié
COVID-19 Test Report	A schema to be used for COVID-19	GICS:35102020	uniqueNumericID	Text	Υ		Personal/Operational Unique Numeric Identifier	Persönliche/betriebliche eindeutige	Personnel/Opérationnel
	test reporting for basic interoperability						(UNID)	numerische Kennung (UNiD)	numérique unique (UN
COVID-19 Test Report	A schema to be used for COVID-19 test reporting for basic interoperability	GICS:35102020	recipient	Text	Y		Person identification Person identifier	Personenidentifikation Personenidentifikation	Identification de la pers personne
COVID-19 Test Report	A schema to be used for COVID-19 test reporting for basic interoperability	GICS:35102020	givenName	Text	Υ		Person identification Person name First name	Personenidentifikation Personenname Vomame	Identification de la pers personne Prénom
COVID-19 Test Report	A schema to be used for COVID-19 test reporting for basic interoperability	GICS:35102020	middleName	Text	Y		Person identification Person name Middle name(s)	Personenidentifikation Personenname Zweiter Vorname(n)	Identification de la pers personne deuxième pre
COVID-19 Test Report	A schema to be used for COVID-19 test reporting for basic interoperability	GICS:35102020	familyName	Text	Y		Person identification Person name Last name	Personenidentifikation Personenname Nachname	Identification de la pers personne Nom de fami
COVID-19 Test Report	A schema to be used for COVID-19 test reporting for basic interoperability	GICS:35102020	birthDate	Date	Υ	YYYY-MM-DD	Person identification Person date of birth	Personenidentifikation Geburtsdatum der Person	Identification de la pers naissance de la person
COVID-19 Test Report	A schema to be used for COVID-19 test reporting for basic interoperability	GICS:35102020	gender	Text			Person identification Sex	Personenidentifikation Geschlecht	Identification de la pers
COVID-19 Test Report	A schema to be used for COVID-19 test reporting for basic interoperability	GICS:35102020	dateOfSample	Date			Test information Date and time of the test sample collection	Testinformationen Datum und Uhrzeit der Testprobenentnahme	Informations sur le test collecte de l'échantillon
COVID-19 Test Report	A schema to be used for COVID-19 test reporting for basic interoperability	GICS:35102020	testCommercialName	Text		JRC COVID-19 In Vitro Diagnostic Devices and Test Methods Database	Test information Test commercial name	Testinformationen Handelsname testen	Informations sur le test
COVID-19 Test Report	A schema to be used for COVID-19 test reporting for basic interoperability	GICS:35102020	testManufacturer	Text		JRC COVID-19 In Vitro Diagnostic Devices and Test Methods Database	Test information Test manufacturer	Testinformationen Testhersteller	Informations sur le tes
EU	US Canada UAE	+					,		



COVID-19 Test Certificate

COVID-19 Test Certificate	A schema to be used for proof of COVID-19 test for basic interoperability	GICS:35102020	associatedReportID	Text		DRI	Personal/Operational Associated Test Report ID	Persönliche/betriebliche zugeordnete Testbericht-ID	Personnel/Opérationne associé
COVID-19 Test Certificate	A schema to be used for proof of COVID-19 test for basic interoperability	GICS:35102020	uniqueNumericIDHash	Text	Y	DRI	Personal/Operational Hash of Unique Numeric Identifier (UNID)	Persönliche/betriebliche/Hash der eindeutigen numerischen Kennung (UNiD)	Personnel/Opérationne numérique unique (UN
COVID-19 Test Certificate	A schema to be used for proof of COVID-19 test for basic interoperability	GICS:35102020	disease	Text		ICD-10	Test information Disease or agent targeted Classification of Disease	Testinformationen Krankheit oder Erreger Klassifizierung der Krankheit	Informations sur le tes ciblé Classification de l
COVID-19 Test Certificate	A schema to be used for proof of COVID-19 test for basic interoperability	GICS:35102020	testDescription	Text		SNOMED CT	Test information Test \$NOMED CT Identifier	Testinformationen Test \$NOMED CT- Kennung	Informations sur le tes SNOMED CT
COVID-19 Test Certificate	A schema to be used for proof of COVID-19 test for basic interoperability	GICS:35102020	testType	Text		LOINC	Test information[Test Test type	Testinformationen Test Testtyp	Informations sur le test
► EU	US Canada UAE	+							

COVID-19 Vaccination Report

	A schema to be used for COVID-19 vaccination reporting for basic interoperability	GICS:35102020	vaccineEvent	Text			Personal/Operational Vaccination event ID	Persönliche/betriebliche Impfereignis-ID	Personnel/Opérationn vaccination
	A schema to be used for COVID-19 vaccination reporting for basic interoperability	GICS:35102020	linkedVaccineEvent	Text			Personal/Operational Linked vaccination event ID	Persönliche/betriebliche Verknüpfte Impfereignis-ID	Personnel/Opérationn vaccination lié
COVID-19 Vaccination Report	A schema to be used for COVID-19 vaccination reporting for basic interoperability	GICS:35102020	uniqueNumericID	Text	Y		Personal/Operational Unique Numeric Identifier (UNiD)	Persönliche/betriebliche eindeutige numerische Kennung (UNiD)	Personnel/Opérationn numérique unique (U
COVID-19 Vaccination Report	A schema to be used for COVID-19 vaccination reporting for basic interoperability	GICS:35102020	recipient	Text	Y		Person identification Person identifier	Personenidentifikation Personenidentifikation	Identification de la per personne
	A schema to be used for COVID-19 vaccination reporting for basic interoperability	GICS:35102020	givenName	Text	Y		Person identification Person name First name	Personenidentifikation Personenname Vomame	Identification de la per personne Prénom
	A schema to be used for COVID-19 vaccination reporting for basic interoperability	GICS:35102020	middleName	Text	Y		Person identification Person name Middle name(s)	Personenidentifikation Personenname Zweiter Vorname(n)	Identification de la per personne deuxième pr
•	A schema to be used for COVID-19 vaccination reporting for basic interoperability	GICS:35102020	familyName	Text	Y		Person identification Person name Last name	Personenidentifikation Personenname Na chname	Identification de la per personne Nom de fam
	A schema to be used for COVID-19 vaccination reporting for basic interoperability	GICS:35102020	birthDate	Date	Y	YYYY-MM-DD	Person identification Person date of birth	Personenidentifikation Geburtsdatum der Person	Identification de la per naissance de la persor
	A schema to be used for COVID-19 vaccination reporting for basic interoperability	GICS:35102020	gender	Text			Person identification Sex	Personenidentifikation Geschlecht	Identification de la per
•	A schema to be used for COVID-19 vaccination reporting for basic interoperability	GICS:35102020	dateOfVaccination	Date		YYYY-MM-DD	Vaccination/prophylaxis information Date of vaccination	Informationen zur Impfung/Prophylaxe Datum der Impfung	Informations sur la vaccination/prophylax
COVID-19 Vaccination Report	A schema to be used for COVID-19 vaccination reporting for basic interoperability	GICS:35102020	medicinalProductName	Text			Vaccination/prophylaxis information Vaccine medicinal product	Informationen zur Impfung/Prophylaxe Impfstoff- Arzneimittel	Informations sur la vaccination/prophylaxi
COVID-19 Vaccination Report	A schema to be used for COVID-19 vaccination reporting for basic interoperability	GICS:35102020	marketingAuthorizationHolder	Text			Vaccination/prophylaxis information Marketing Authorisation Holder	Informationen zur Impfung/Prophylaxe Inhaber einer Genehmigung für das Inverkehrbringen	Informations sur la vaccination/prophylax l'autorisation du servic
	A schema to be used for COVID-19 vaccination reporting for basic interoperability	GICS:35102020	batchNumber	Text			Vaccination/prophylaxis information Batch/lot number	Informationen zur Impfung/Prophylaxe Chargen- /Chargennummer	Informations sur la vaccination/prophylax
COVID-19 Vaccination Report	A schema to be used for COVID-19 vaccination reporting for basic interoperability	GICS:35102020	nextVaccinationDate	Date		YYYY-MM-DD	Vaccination/prophylaxis information Next vaccination date	Informationen zur Impfung/Prophylaxe Nächstes Impfdatum	Informations sur la vaccination/prophylax vaccination

COVID-19 Vaccination Certificate

A schema to be used for proof of COVID-19 vaccination for basic interoperability	GICS:35102020	associatedReportID	Text		DRI	Personal/Operational Associated Vaccination Report ID	Persönliche/betriebliche ID des zugehörigen Impfberichts	Personnel/Opérationne de vaccination associé
A schema to be used for proof of COVID-19 vaccination for basic interoperability	GICS:35102020	uniqueNumericIDHash	Text	Y	DRI	Personal/Operational Hash of Unique Numeric Identifier (UNID)	Persönliche/betriebliche Hash der eindeutigen numerischen Kennung (UNiD)	Personnel/Opérationne numérique unique (UN
A schema to be used for proof of COVID-19 vaccination for basic interoperability	GICS:35102020	disease	Text		ICD-10	Vaccination/prophylaxis information Disease or agent targeted Classification of Disease	Informationen zur Impfung/Prophylaxe Krankheit oder Erreger Klassifizierung der Krankheit	Informations sur la vaccination/prophylaxie ciblé Classification des
A schema to be used for proof of COVID-19 vaccination for basic interoperability	GICS:35102020	vaccineDescription	Text		SNOMED CT	Vaccination/prophylaxis information Vaccine/prophylaxis SNOMED CT Identifier	Informationen zur Impfung/Prophylaxe Impfstoff/Prophylax e SNOMED CT-Kennung	Informations sur la vaccination/prophylaxie tificateur SNOMED CT
A schema to be used for proof of COVID-19 vaccination for basic interoperability	GICS:35102020	vaccineType	Text		ATC Classification (J07BX03)	Vaccination/prophylaxis information Vaccine/prophylaxis Vaccine type	Informationen zur Impfung/Prophylaxe Impfstoff/Prophylax e Impfstoffart	Informations sur la vaccination/prophylaxie e de vaccin
A schema to be used for proof of COVID-19 vaccination for basic interoperability	GICS:35102020	certificatelssuer	Text			Certificate metadata Certificate issuer	Zertifikatsmetadaten Zertifikatsaussteller	Métadonnées du certifi
A schema to be used for proof of COVID-19 vaccination for basic interoperability	GICS:35102020	certificateNumber	Text			Certificate metadata Certificate Identifier	Zertifikat-Metadaten Zertifikat-ID	Métadonnées du certifi certificat
A schema to be used for proof of COVID-19 vaccination for basic interoperability	GICS:35102020	certificateValidFrom	Date		YYYY-MM-DD	Certificate metadata Certificate valid from	Zertifikatsmetadaten Zertifikat gültig ab	Métadonnées du certifi
A schema to be used for proof of COVID-19 vaccination for basic interoperability	GICS:35102020	certificateValidTo	Date		YYYY-MM-DD	Certificate metadata Certificate valid until	Zertifikatsmetadaten Zertifikat gültig bis	Métadonnées du certifi jusqu'au
A schema to be used for proof of COVID-19 vaccination for basic interoperability	GICS:35102020	formVersion	Text		Semantic versioning 2.0.0	Certificate metadata Certificate schema version	Zertifikat-Metadaten Version des Zertifikatschemas	Métadonnées du certifi de certificat

COVID-19 Recovery Certificate

COVID-19 Recovery Certificate	A schema to be used for proof of COVID-19 recovery for basic interoperability	GICS:35102020	associatedReportID	Text		DRI	Personal/Operational Associated Test Report ID	Persönliche/betriebliche zugeordnete Testbericht-ID	Personnel/Opérationne associé
COVID-19 Recovery Certificate	A schema to be used for proof of COVID-19 recovery for basic interoperability	GICS:35102020	uniqueNumericIDHash	Text	Y	DRI	Personal/Operational Hash of Unique Numeric Identifier (UNiD)	Persönliche/betriebliche Hash der eindeutigen numerischen Kennung (UNiD)	Personnel/Opérationne numérique unique (UN
COVID-19 Recovery Certificate	A schema to be used for proof of COVID-19 recovery for basic interoperability	GICS:35102020	disease	Text		ICD-10	Information about past infection Disease or agent Classification of Disease	Informationen über frühere Infektionen Krankheit oder Erreger Klassifizierung der Krankheit	Informations sur l'infec agent Classification de
COVID-19 Recovery Certificate	A schema to be used for proof of COVID-19 recovery for basic interoperability	GICS:35102020	dateOfFirstPositiveResult	Text		YYYY-MM-DD	Information about past infection Date of first positive test result	Informationen über frühere Infektionen Datum des ersten positiven Testergebnisses	Informations sur l'infec premier résultat de test
COVID-19 Recovery Certificate	A schema to be used for proof of COVID-19 recovery for basic interoperability	GICS:35102020	countryOfTest	Text		ISO 3166-1 alpha-2	Information about past infection Country where the test was performed	Informationen über frühere Infektionen[Land, in dem der Test durchgeführt wurde	Informations sur l'infec test a été effectué
COVID-19 Recovery Certificate	A schema to be used for proof of COVID-19 recovery for basic interoperability	GICS:35102020	certificatelssuer	Text			Certificate metadata Certificate issuer	Zertifikatsmetadaten Zertifikatsaussteller	Métadonnées du certifi
COVID-19 Recovery Certificate	A schema to be used for proof of COVID-19 recovery for basic interoperability	GICS:35102020	certificateNumber	Text			Certificate metadata Certificate Identifier	Zertifikat-Metadaten Zertifikat-ID	Métadonnées du certifi certificat
COVID-19 Recovery Certificate	A schema to be used for proof of COVID-19 recovery for basic interoperability	GICS:35102020	certificateValidFrom	Date		YYYY-MM-DD	Certificate metadata Certificate valid from	Zertifikatsmetadaten Zertifikat gültig ab	Métadonnées du certifi
COVID-19 Recovery Certificate	A schema to be used for proof of COVID-19 recovery for basic interoperability	GICS:35102020	certificateValidTo	Date		YYYY-MM-DD	Certificate metadata Certificate valid until	Zertifikatsmetadaten Zertifikat gültig bis	Métadonnées du certifi jusqu'au
COVID-19 Recovery Certificate	A schema to be used for proof of COVID-19 recovery for basic interoperability	GICS:35102020	formVersion	Text		Semantic versioning 2.0.0	Certificate metadata Certificate schema version	Zertifikat-Metadaten Version des Zertifikatschemas	Métadonnées du certifi de certificat

Update: MMM white paper (10 mins)

Presented by: N.Thomson/P.Knowles

https://docs.google.com/document/d/11irDi_UnuETDh19gPRxq9yUBu2L2WJ2EQHpmom7f5VA/edit

Master Mouse Model (MMM) white paper

ISWG white paper proposal (draft)

Ref.:

https://docs.google.com/document/d/11irDi_UnuETDh19gPRxq9yUBu2 L2WJ2EQHpmom7f5VA/edit



Master Mouse Model:

A template framework for an open data network

[Inputs and Semantics WG, Trust over IP]

The open data network we propose has to allow digital services to exchange personal data on demand of their users. Following the Separation of Powers Principle (SPP), data transfers require users' permissions through their Personal Data Operators, which never see or access transferred data but rather act as a switch for the transfer. Permissions and transfer work on two separate layers.

Overview

The Master Mouse Model (MMM) is a model architecture representing any economic actor in a dynamic data economy. In a citizen-centric ecosystem, *purpose-based service providers*, *data governance authorities*, and *insights-based service providers* provide a template framework for an open data network.

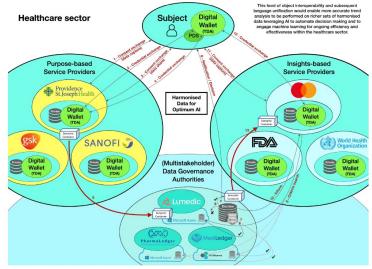


Figure 1: Master Mouse Model, a template framework for an open data network

Logistics and miscellaneous (5 mins)

https://wiki.trustoverip.org/display/HOME/2021-03-30+Meeting

News from the Operations Team

Nick Hayfack

(Inputs and 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.



ISWG Leadership positions

- Inputs Group Chair
 - > Robert Mitwicki
- Inputs Group Vice-chair
 - > Sam Smith
- Semantics Group Chair
 - Paul Knowles (ISWG Lead)
- Semantics Group Vice-chair
 - John Wunderlich
- Volunteer via the meeting page at ...
 - https://wiki.trustoverip.org/display/HOME/2021-04-06+Meeting



Meeting schedule

Inputs Domain Group weekly meeting

- Wednesday, April 7th @ 09:00 US PT / 18.00 CET
- Zoom link: https://zoom.us/j/93406719136?pwd=SUozZHBQM0N5TUhYMHJqL0ZQM3l3Zz
- > FHIR FG bi-weekly meeting
 - > Thursday, **April 8th** @ 08:00 US PT / 17.00 CET
 - Zoom link: https://zoom.us/j/93406719136?pwd=SUozZHBQM0N5TUhYMHJqL0ZQM3l3Zz09
- Storage & Portability TF bi-weekly meeting
 - Monday, April 12th @ 09:00 US PT / 18.00 CET
 - Zoom link: https://zoom.us/j/96177500988?pwd=cDVNS2JzN1YxYXhiUVprWIM0OGQxQT09
- > Semantic Domain Group weekly meeting
 - Tuesday, April 13th @ 09:00 US PT / 18.00 CET
 - Zoom link: https://zoom.us/j/93406719136?pwd=SUozZHBQM0N5TUhYMHJqL0ZQM3l3Zz





Closing Q & A

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